



Extension of MSC Certification for Western Australian Fisheries

Western Australian Fishing Industry Council

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Abbreviations

ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
CAB	Conformity Assessment Body
CAP	Certification Advisory Panel
CEO	Chief Executive Officer
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CoC	Chain of Custody
CoOL	Country of Origin Labelling
DPIRD	Department of Primary Industries and Regional Development
FIP	Fishery Improvement Project
FRDC	Fisheries Research and Development Corporation
MLC	Member of the Legislative Council
MSC	Marine Stewardship Council
NGO	Non-Government Organisation
RFA	Rare Foods Australia
SAFS	Status of Australian Fish Stocks
UK	United Kingdom
WA	Western Australia
WAFIC	Western Australian Fishing Industry Council
WRL	Western Rock Lobster
WWF	World Wildlife Fund

Executive Summary

Australia's commercial wild-catch sector operates in a challenging environment that is largely characterised by complex and competing interests of diverse stakeholders interested in the management and/or conservation of aquatic resources. Sustainability remains an ongoing challenge and key area of focus for the Australian fishing industry as it continues to build a 'social licence to operate'. In 2019, a community perception survey on the sustainability of Australia's fishing industry indicated only 46 percent of the Australian public believe the overall fishing industry is sustainable.

The Marine Stewardship Council (MSC) is at the forefront of global seafood sustainability and is the most widely recognised fisheries sustainability certification scheme in the world. The MSC assessment process recognises and rewards sustainable fishing practices. In Western Australia (WA), every commercial fishery has gone through the MSC pre-assessment process and WA now has 12 fisheries MSC certified as sustainable, representing more than 90 percent of fisheries by value and approximately 60 percent of total commercial catch in the state. Ecolabelling of fisheries has rapidly grown internationally, fuelled by the promise of marketing benefits, more sustainable fish stocks, consumer demand and reduced environmental impacts.

Background

Australian consumer surveys have revealed public uncertainty around the sustainability of Australian fisheries, calling into question the Government's management of fisheries resources. This resulted in a call from environmental Non-Government Organisations (NGOs) for the implementation of large marine sanctuaries to ensure fish stocks in Australia are not degraded.

To manage the call for large sanctuary areas, the WA Government aimed to extend the independent verification of sustainability of WA fisheries to balance the debate around the need for conservation and the protection of fish stocks. This independent acknowledgement was aimed at avoiding catastrophic impacts on the survival of important regional commercial fisheries and food security in the state due to the potential loss of access to fishing areas. Further pressure was applied from Australian retailers Coles and Woolworths, who followed the European model, and made commitments around responsibly sourcing sustainable seafood.

MSC was chosen as the provider of third-party certification of WA fisheries following a due diligence process led by the Department of Primary Industries and Regional Development (DPIRD) and Western Australian Fishing Industry Council (WAFIC). This project aimed to provide public confidence in the sustainability of WA's fisheries and support retail and consumer preferences for sustainably sourced seafood through the extension of MSC certification. The project methodology primarily relied on extensive consultation, liaison, and coordination with a large range of stakeholders, at an international, national, state, and local scale. In 2012, the WA Government committed \$14.5 million for third-party certification of the state's fisheries and establishment of a Certification Advisory Panel (CAP). The initiative was led by DPIRD, WAFIC, Recfishwest and MSC's Australian Manager. This committee role was to steer the extension of MSC certification of WA Fisheries.

Key Findings

This project provides learnings of successes and failures/challenges of MSC certification in WA. At the time of this report's publication, 12 WA fisheries representing 90 percent value and approximately 60 percent of the total commercial catch in the state have been awarded MSC certification. The overall aim of this project was to ensure the long-term extension of WA's MSC program, which would be judged on the value and growth of certified fisheries over time, and how well the MSC model is embraced through the supply chain.

Globally, buyers in major markets have made strong commitments to purchase majority of wild-catch seafood from MSC certified fisheries, and these commitments are increasing. These purchasing preferences increase the global demand and market access for certified sustainable seafood, and provide critical incentives needed for fisheries to undergo the rigorous and transparent assessments required in the MSC program.

Through this program, WAFIC aimed to increase consumer awareness and engagement with the MSC brand, its sustainability values and retail appeal as a high-quality, sustainable product. Secondary communications targeted commercial fishers and focused on increasing understanding of third-party certification and analysing the associated cost and logistics, so commercial operators can make informed decisions before joining the program.

The consumer surveys generated valuable insight about the current social acceptability of Australia's fishing industry. There is growing support amongst Australian consumers to make more sustainable food choices, but they are currently limited by knowledge and a lack of information. As sustainable consumption becomes a norm amongst consumers, enabling it needs to become a priority.

To maximise long-term benefits of third-party certification, it is essential the visibility and awareness of sustainable seafood grows in the community and marketplace. Surveys revealed Country of Origin labelling (CoOL) and MSC certification provided a level of comfort and confidence in the origin and overall sustainability of consumer-facing products. This presents an opportunity for the fishing industry to build a public profile that increases community awareness whilst satisfying preferences for Australian-made and sustainable produce.

The MSC-focused event campaign undertaken in parallel with this project resulted in some outstanding achievements, in particular the creation of a seafood ambassador role to promote WA seafood and MSC through cooking demonstrations, distribution of recipe cards and video stories around industry and the concept of fisher-to-plate journey.

Summary of Recommendations

1. Governments globally are increasingly investing in the development of policies, including funding mechanisms, to assist industry to pursue fisheries eco-certification to demonstrate their stewardship credentials and sustainability. Whilst the WA Government had the foresight to invest in a certification program in 2012, the shortfalls in influencing consumer perceptions suggest a need for an updated policy which outlines strategic priorities and communication strategies to expand third-party certification and raise community awareness of sustainable seafood.
2. The 2019 national community perception survey provided the first indication of a significant rise in the perceived sustainability of Australia's fishing industry. This rise coincides with strategic efforts to promote MSC to the broader community as presented in this report. A follow-up survey which explicitly explores the role of ecolabelling on influencing community perceptions of sustainability is recommended. This can help drive future strategic priorities for Government and industry to raise the public profile of Australia's fishing industry.
3. Understanding the cost versus benefit of MSC certification has not yet been fully grasped by industry. Since research was completed on the impacts of sustainable seafood certification in WA, four additional fisheries have achieved MSC certification and were not included in the impact analysis including WA Octopus, WA Sea Cucumber, Abrolhos Island and Mid-West Scallops, and RFA's enhanced Greenlip Abalone. An updated analysis that includes all current certified fisheries would improve the broader understanding of cost versus benefits accruing to WA fisheries.
4. The broader fishing industry could explore and leverage off the learnings from Western Rock Lobster (WRL) back of the boat sales. Selling direct to consumers could act as a solution to improve community

perception on production of safe, environmentally friendly, sustainable, and ethically sourced food and help support the fishing industry social licence to operate.

5. As CoOL in Australia progresses, there is an opportunity to link CoOL and MSC Chain of Custody (CoC) certification. Through this link a new CoC trial group could be developed to progress cost-effective approaches for restaurants, retailers, and supply chains to take up MSC CoC as a potential off the shelf approach to CoOL. This could also leverage off new retail competition which could potentially influence and/or change the market to promote sustainability credentials.
6. All commercial fisheries in WA were subject to MSC preassessments in 2015 under MSC Standards 1.0. Since these preassessments were done, the MSC Standards have been revised significantly and are now at version 3.0. With the support of DPIRD, there is then an opportunity to target select fisheries with a realistic objective in achieving third-party certification and undertake a focused gap analysis to provide a basis for a FIP program, to assist in progressing and expanding certification in WA in line with MSC Standard 3.0.

Keywords

Marine Stewardship Council, Fisheries, Third-Party Certification, Chain of Custody, Community Perception Survey, Cost-Benefit.

1 Introduction

Since the early 1990s, certification programs have been widely employed to demonstrate the sustainability of natural resource management techniques in the fishery and forestry industries (Sutton and Wimpee 2008). Consumers view independent certification programs, particularly third-party programs, and their related ecolabels, as the most reliable indications of sustainability (Chaffee et al. 2003; MRAG 2009; Washington and Ababouch 2011).

MSC was the lead organisation in 1997 that sought to use market processes to enhance fisheries management outcomes globally. A cooperative venture between the World Wildlife Fund (WWF) and Unilever founded MSC. As intended, both organisations withdrew, enabling MSC to establish itself as a stand-alone charity in the United Kingdom (UK). MSC was thus the first significant 'third-party' certifier of sustainable fisheries in the world.

The MSC mission is to use the MSC ecolabel and fishery certification program to contribute to the health of the world's oceans by recognising and rewarding sustainable fishing practices, influencing the choices people make when buying seafood, and working with partners to transform the seafood market to a sustainable basis.

This shift towards third-party certification in the fishing industry, was led by large food retailers in Europe and North America. This was in response to environmental NGOs criticising the condition of the oceans across the world, the effectiveness of fisheries management, and therefore the purchase of seafood from unsustainable sources. Many of these retailers took it one step further and developed policies confirming they will only purchase wild-catch seafood from independently certified sustainable fisheries.

The MSC is now the most widely recognised fisheries sustainability certification scheme in the world. Some alternatives for wild-catch fishery sustainability schemes include Friend of the Sea, Global Trust – FAO-Based Responsible Fisheries Management, and Sustainable Fisheries Partnership, and there are a range of similar sustainability schemes for aquaculture.

The MSC Fisheries Standard is used to assess if a fishery is well-managed and sustainable. The MSC Standard reflects the most up-to-date understanding of internationally accepted fisheries science and management. Information relating to the fishery is reviewed and developed in consultation with scientists, the fishing industry, and conservation groups.

The MSC Fisheries Standard has three core principles that every fishery must meet, they include:

- P1 – Principle 1 – Sustainability of the stock
- P2 – Principle 2 – Ecosystem impacts
- P3 – Principle 3 – Effective management

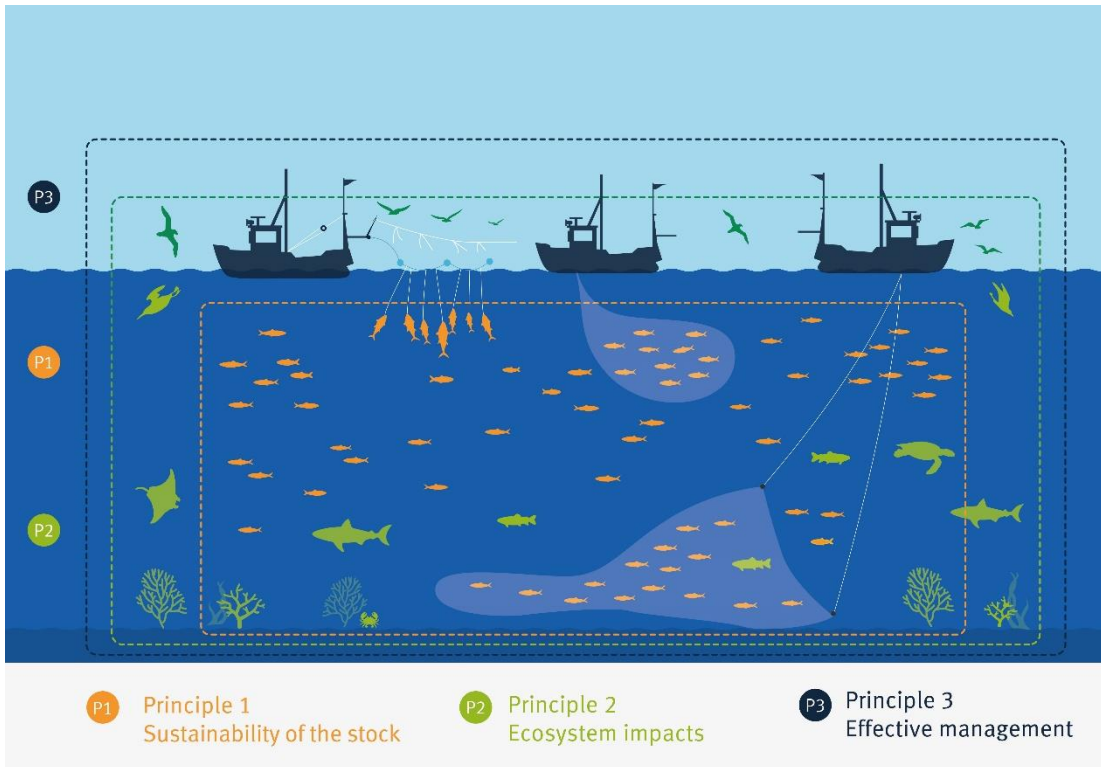


Figure 1. Infographic of the MSC Fisheries Standard ©MSC

Further information on the Principles and MSC Fisheries Standards are available via this [link](#).

Australian consumer surveys have revealed public uncertainty around the sustainability of Australian fisheries, calling into question the Government’s management of fisheries resources (see Chapter 5 for more information). This resulted in a call from environmental NGOs for large marine sanctuaries to be implemented to ensure fish stocks in Australia are not degraded.

In WA, having had the world’s first fishery (WRL Fishery) go through the MSC process, the next steps to manage the call for large sanctuary areas was for independent verification of the sustainability of WA fisheries, to balance the debate around the need for conservation protection of fish stocks. This independent acknowledgement was aimed at avoiding impacts on the survival of important regional commercial fishing and food security in the state that might be challenged through the loss of access to important fishing areas.

To further enhance the movement of recognising a sustainable fishing industry in WA, the Minister for Fisheries in March 2012, announced that the WA Government would provide \$14.5 million for third-party certification of the state’s commercial fisheries. The MSC certification program was chosen as the provider of third-party certification of the state’s fisheries following a due diligence process lead by DPIRD and WAFIC. This announcement aimed to provide public confidence in the sustainability of WA’s commercial fisheries and support retail and consumer preferences for sustainably sourced seafood.

As an outcome of the State Government’s commitment, it was agreed that all WA fisheries would be subject to MSC pre-assessment which was rolled out at a regional basis. This also included:

- Funding for the first full MSC assessment and first year audit for participating fisheries; and
- Seed funding for FIPs for fisheries that wish to proceed into full assessment but require remedial management action.

The WA Government's commitment to expand the MSC program has continued over multiple state elections, indicating its strong worth to the broader community.

2 Need

Public perception surveys completed by the Fisheries Research and Development Corporation (FRDC), WAFIC and MSC indicate Australia's fishing industry has a low level of public support. The public simply do not believe the message given by industry and/or Government. The WA Government recognised that the survival of commercial wild-catch fisheries depends on a paradigm shift in this negative perception. The widespread adoption of a credible, internationally recognised certification scheme for the state's fisheries has the potential to alter community perceptions and provide industry with the level of security to invest in the future.

To fully realise the benefits of the Government's investment, there needed to be parallel investment into community and industry engagement with MSC, and adoption of MSC's CoC certification through post-harvest sectors including retail and food services. Without such engagement the benefits of the certification would not be fully captured and required research and testing of cost-effective mechanisms to effectively engage. This project builds on the substantial investment by FRDC in research for Ecosystem Based Fisheries Management. This project also links with other FRDC actions nationally including the Status of Australian Fish Stocks (SAFS) Report and FRDC Project 2012-746 'Preliminary Investigation of Internationally Recognised Responsible Fisheries Management Certification'.

At the time this project was initiated (2013), some large changes in WA were being implemented at a fishery jurisdiction to improve the outlook for both wild-catch and aquaculture sectors. These changes which support FRDC's marketing functions included the development of a new fisheries legislation (*Aquatic Resources Management Act 2016*) and MSC certification.

3 Objectives

The objectives first developed for this project in 2013 were:

1. To develop and assess communication strategies on how best to obtain commercial fishers' support for implementation of third-party certification in their fisheries, with the focus being on MSC certification.
2. To assess options for promoting MSC to obtain public confidence in the management of WA fisheries.
3. To assess different evaluation methodologies for third-party certification that are cost effective and improve the delivery of the program for both fishers and the community.
4. To trial a range of different chain of custody methodologies for fisheries with different supply chain characteristics and logistics.
5. To work with stakeholders (retail, fisheries management, and environmental agencies) to establish, where possible, equivalence for the third-party certification framework that is being developed for WA fisheries.

In 2014, Objective 4 was modified as MSC was undertaking a systematic review of the CoC program with an aim to improve the accessibility and consistency of the CoC Standard and requirements. The outcome was to ensure the CoC program addressed important sustainable seafood traceability challenges within

the industry and deliver an integrated standard and certification requirements for greater clarity, consistency, and integrity. The revised objective would work in parallel with MSC and potentially form part of the requirements of the new framework.

4. Develop and trial a practical framework that would deliver a more cost-efficient way for a range of smaller, independent, companies in the supply chain to gain MSC CoC to optimise community recognition and appreciation of Australian MSC certified seafood.

4 MSC Approach in WA

The project methodology primarily relied on extensive consultation, liaison, and coordination with a large range of different stakeholders. International, national, state, and local engagement was undertaken in a range of forums including meetings, workshops, briefings, conferences, and events.

Following the WA Government's commitment to third-party certification of the state's commercial fisheries, a Certification Advisory Panel (CAP) was established. The CAP included DPIRD, WAFIC, Recfishwest and the MSC Australian Manager. The CAPs role was to guide the extension of MSC certification of WA Fisheries.

A communication plan was developed in 2014 to assess and implement communication strategies that best obtained commercial fishers' support and promoted MSC to obtain community confidence in third-party certification (Appendix 1). Additional information relating to the methodologies applied to the project are available in these documents and in other sections of the report.

A website – www.wamsc.com.au – was created as a basic communication tool to continuously inform the fishing industry on WA's MSC Plan for fisheries including commercial and recreational sectors. Over time, the website extended its engagement to the wider community, assisting in meeting Objective 2. It was first launched to coincide with the announcement of the Exmouth Gulf and Shark Bay Prawn Fisheries' decision to move to full assessment in August 2014. During this project WAFIC also developed a newsletter that was sent out monthly to industry members and the broader community. This newsletter platform is still used currently, and this tool continues to communicate the sustainability of fisheries in WA along with broader industry information and issues.

The time delay in completing this project has meant some of the earlier developed communication plans and websites are now out-of-date. Given the global recognition of MSC, the most reliable and up-to-date source of information is available via <https://www.msc.org/en-au>.

WAFIC and MSC undertook literature reviews in 2013 (Appendix 2) firstly on the extension of MSC certification and secondly on the benefit of MSC certification. These reviews assisted WAFIC in identifying key principles to ensure strong stakeholder support and long-term commitment. WAFIC also consulted widely with both the wild-catch and post-harvest sectors of the WRL Fishery to determine gaps in understanding that remain despite the fishery being twice MSC certified at the time. The learnings from these reviews were incorporated into the methodologies and outcomes developed for this project to ensure industry was engaged through a bottom-up approach. WAFIC engaged with each industry sector in parallel with DPIRD for MSC pre-assessment and full assessment.

This was undertaken via face-to-face industry meetings, including risk assessments to fully address any uncertainties and concerns on the cost-benefit of MSC certification.

4.1 MSC Pre-assessment

In WA, all commercial fisheries underwent MSC pre-assessment by an independent Conformity Assessment Body (CAB). This pre-assessment provided an indication of how the state's fisheries measured up against MSC's three core principles.

In the pre-assessment stage, the CAB used available information to provide guidance on:

- The status of the fishery against each of the MSC principles and criteria.
- Likely gaps and any improvements that may be needed in the performance of the fishery before it could achieve the full MSC certification Standard; and
- The level of overlap of issues among fisheries within each bioregion, to inform how they should be structured for full assessment.

Pre-assessments were undertaken on a bioregional basis. DPIRD provided the CAB external assessors with an analysis of each fishery or group of related fisheries/species within each bioregion in WA. In some cases, additional information was provided, if required. Assessors also gathered information from commercial fishing licence holders, which is why pre-assessment reports are confidential to the relevant fishery.

4.2 MSC Full Assessment

In WA, the approach taken to determine who went through full assessment, was influenced by the fisheries that had a favourable score following the pre-assessment process, and for those commercial licence holders that opted on a voluntary basis to enter the MSC full assessment process.

During full assessments, the CAB use a team of international experts to undertake a highly detailed examination of a fisheries performance against the MSC Standard across the three principles (sustainable fish stocks, minimising environmental impact, and effective management). These standards are highly precautionary. For example, if any standards score less than 60 the fishery fails certification. Each of the three principles established by the MSC must score an average of at least 80 for the fishery to be certified. Where a score is between 60 and 79 conditions are set to improve performance to the 80 level within an appropriate time. This process can take several months or years to complete. The assessment process is transparent to all those involved and provides opportunities for stakeholder input.

Fisheries achieving certification will have annual audits to ensure their level of performance is maintained and that arising issues are adequately addressed. A full review of the certified fishery against the MSC Standard is required every five years. A fishery that is MSC certified has passed the world's most rigorous, scientific standard for sustainability. The MSC ecolabel empowers seafood consumers, giving them a credible and easy way for consumers to recognise sustainable seafood.

In 2000, WA's WRL Fishery became the first fishery in the world to achieve independent certification for sustainable fishing by the MSC.

This was followed by MSC certification of the Exmouth Gulf and Shark Bay Prawn Fisheries in October 2015. These were the first fisheries to achieve certification through the Government's \$14.5 million MSC initiative.

In June 2016, WA's Peel Harvey Blue Swimmer Crab Fishery became the first dual commercial and recreational fishery in the world to receive joint MSC certification, with the Peel Harvey Mullet also certified as WA's first finfish to achieve MSC certification. This was followed by certification of WA's Deep Sea Crustacean Fishery and Abalone Fishery.

In September 2017, WA's Pearl Oyster Fishery received MSC certification. This is the first wild pearl fishery to be certified, extending the principle of sustainability from harvesting seafood to harvesting pearl oysters and pearls for jewellery.

In October 2019, the WA Octopus Fishery became the first octopus fishery in the southern hemisphere to receive MSC certification. This was closely followed by certification of the WA Sea Cucumber Fishery in December 2019, which was the world's first cucumber fishery to receive MSC certification.

In October 2021, less than five years after reopening following a lengthy closure, the Abrolhos Island and Mid-West Scallop Trawl Fishery achieved MSC certification. Closed from 2012 to 2016 due to low stocks caused by an extreme marine heatwave event, the fishery reopened in 2017 and stocks have since fully recovered and seen the fishery become the first scallop fishery in Australia to be certified.

In June 2022, Rare Foods Australia was awarded MSC certification for its wild-enhanced Greenlip Abalone operation in WA. This is the first Greenlip Abalone fishery to be certified in the world and was WA's twelfth fishery to gain certification.

In November 2022, the WRL Fishery achieved a world-leading fifth MSC recertification. Over its 23 MSC-certified years, the WRL Fishery has shown dedication to the sustainable sourcing of its product and commitment to a path of continual improvement to maintain the health of the rock lobster resource.

At the time of publication of this report, WA has 12 fisheries MSC-certified as sustainable, representing more than 90 percent of fisheries by value and approximately 60 percent of total commercial catch in the state. Figure 2 highlights the cumulative MSC certification of WA fisheries through time.

Western Australia's Marine Stewardship Council (MSC) journey

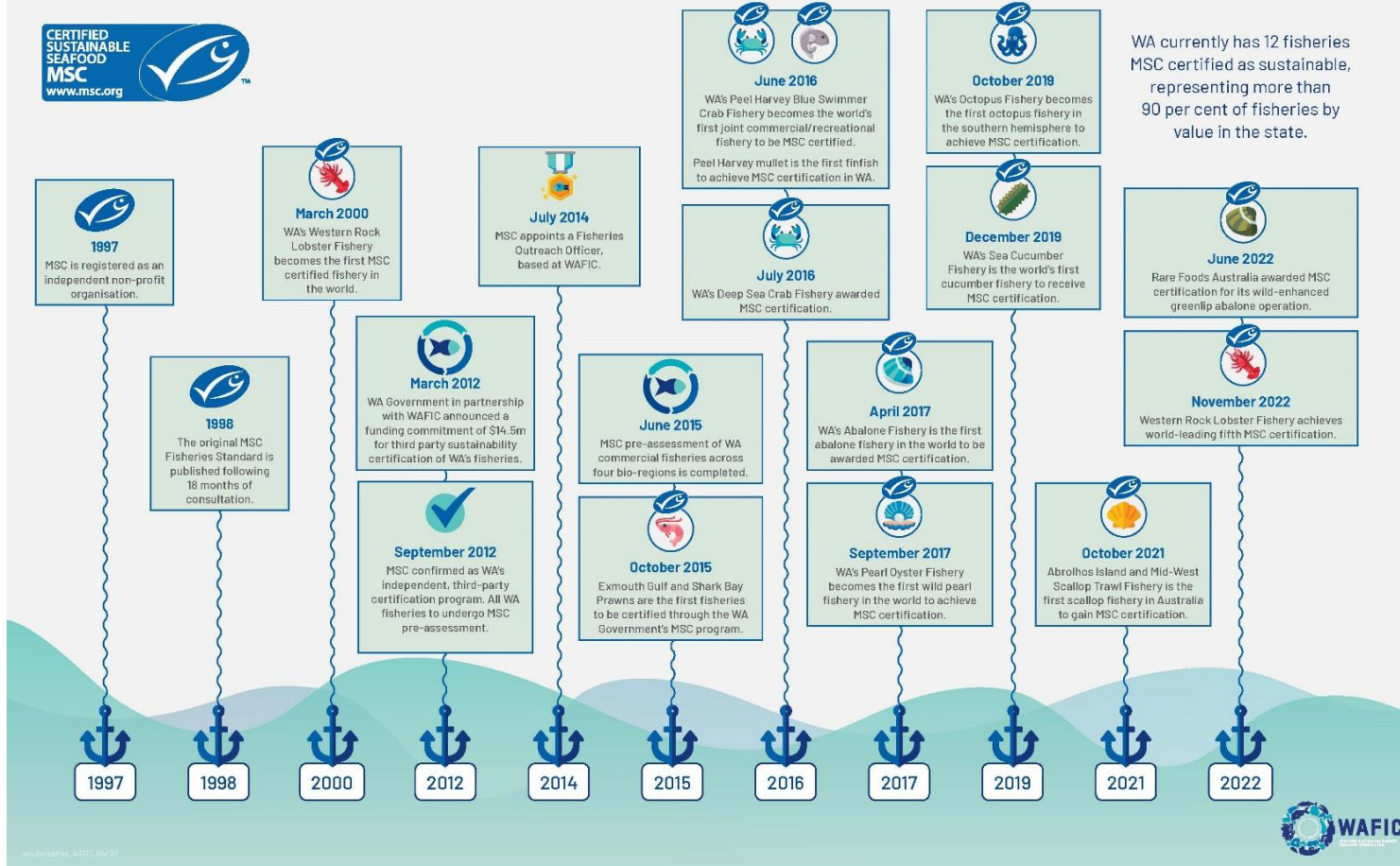


Figure 2. Cumulative MSC certification of WA fisheries through time.

4.3 Fishery Improvement Projects (FIPs)

WA is a leader in fisheries management, each year DPIRD publishes its [Status reports of the fisheries and aquatic resources of Western Australia](#), that delivers a scientific assessment on each fishery. The 2020-21 report concluded that 98 percent of fish stocks were assessed as not being at risk or vulnerable through exploitation. This is an excellent result, however within the community there is significant doubt as to whether fisheries are sustainable. This is revealed in FRDC research into community perceptions of the sustainability of the Australian fishing industry (see Chapter 5 for further assessment).

A fishery that may not have scored well against one or more of the three principles of the MSC Standard in pre-assessment may choose to implement a FIP or introduce other long-term plans in partnership with DPIRD, to get on track to ultimately progress to full assessment in the future.

A portion of the State Government's \$14.5 million pre-assessment funds was utilised to assist with FIPs to help fisheries transition through to full certification. This allocation was available to leverage funding from other sources. The vision was to have every WA commercial fishery MSC certified within the next two decades. DPIRD through the guidance of MSC and WAFIC have implemented a range of FIPs to support commercial fisheries working towards MSC certification.

FIPs are a pragmatic, stepwise approach to enhancing the sustainability of a fishery, encouraging harvesting and supply of seafood to continue, while continual improvements are achieved.

A FIP typically involves a gap analysis to identify areas within a fishery where improvements are needed. It also involves setting out actions, milestones and timelines required to meet these improvements over time. FIPs provide an effective mechanism for fisheries to improve towards sustainability. However, due to wide variations that exist from one FIP to another, there is an identified need for a transparent and comparable way of tracking information about FIPs and how they are progressing towards their end goal.

FIPs often bring together an alliance of seafood buyers, retailers, processors, suppliers, producers, and NGOs with an interest in a specific fishery to encourage improvement in policy and management at Government level.

Sometimes a FIP works toward third-party certification, like MSC, and sometimes it simply addresses priority issues facing the fishery. Whatever the long-term aim, all FIPs follow a structured path that considers the needs of both the fishery and stakeholders involved.

MSC launched a suite of [tools](#), which can be used by FIPs or a fishery that is making improvements towards eventual MSC certification, to enable them to track progress in a consistent and robust way.

4.4 MSC Communication Plan

As detailed in the Communication Plan in Appendix 1, the long-term extension of WA's MSC program will be judged on the value and number of WA fisheries that become MSC certified, and how well the MSC model is embraced through the supply chain. Retailers and restaurateurs/chefs also have high importance as the consumer-facing shopfront for WA's fishing industry. It is essential that MSC's ecolabel is regularly seen on certified seafood, and appreciated by consumers, thus generating community confidence in WA fisheries and how they are managed.

Consumer communications focused on activities that raised awareness and engagement on MSC and the WA fishing industry, including its sustainability values and retail appeal as a high-quality, sustainable product. Communications with commercial fishers focused on increasing awareness of the merits of MSC certification, as well as educating the industry on associated market and non-market benefits. Secondary communications with commercial fishers looked at analysing the cost and logistics of participating in MSC, so commercial fishing operators could make informed decisions before joining the program.

4.5 Events supporting the extension of third-party certification

To raise the sustainability profile of the fishing industry in WA, a series of events designed to extend the benefits of third-party certification through MSC and engage with retailers, community members and restaurateurs/chefs was undertaken. Different forums were trialled to maximise communications and engagement that ensured the objectives were met. Table 1 highlights some of the events which featured MSC extension to the WA community. WAFIC utilises the MSC certification achievements of the WA's fishing industry in communication strategies to champion and raise awareness of our sustainability credentials.

Table 1. Highlight of key events that featured MSC extension

Year	Event
2015	Fremantle Seafood Festival
	Albany Festival of the Sea
	Seafood Directions 2015
	Parliament House Cocktail Function
	WA Seafood Awards
	Margaret River Gourmet Escape (made up of multiple events)
	East Meets West Event
2016	Fremantle Seafood Festival
	Albany Festival of the Sea
	Hospitality Group Training Showcase
	Perth Royal Show
	Parliament House cocktail function
2017	WA Signature Dish corporate
	Albany Festival of the Sea
	Fremantle Seafood Festival
	Parliament House cocktail function
	WA Seafood Awards
2018	Seafood Directions 2017
	Mandurah Crab Fest
	Albany Festival of the Sea
	Hospitality Group Training awards and graduation event

As part of the communication strategy, short videos featuring commercial fishers, chefs, and an overview of MSC certified fisheries were created to educate the consumer on sustainable seafood practises. These videos can be viewed through the YouTube video links provided in Table 2 below:

Table 2. MSC education videos

Announcement	Video Link
Western Rock Lobster Fishery	https://www.youtube.com/watch?v=K_5HBH5IBdw
Exmouth Gulf Prawn Fishery	https://www.youtube.com/watch?v=J0NYuBFPRtU
WA Abalone Fishery	https://www.youtube.com/watch?v=4mkDPoI-_EU
Peel Harvey Blue Swimmer Crab and Mullet Fisheries	https://www.youtube.com/watch?v=IQeK0XD2dBQ

Shark Bay Prawn Fishery	https://www.youtube.com/watch?v=2_VzmB-Dx0A
Glacier 51 Toothfish Fishery	https://www.youtube.com/watch?v=4V3LVWEBZqU
WA seafood chefs Peter Manifis and Don Hancey highlights WA as a world-leader in sustainability	https://www.youtube.com/watch?v=ut9GiG_8RsA
Interview with Rick Stein at the Margaret River Gourmet Escape	https://www.youtube.com/watch?v=M5Pi1Tep1LE
Rupert Howes, CEO of MSC, congratulating WA on its 10-year association with MSC.	https://www.youtube.com/watch?v=rutgS85O_A8

Reaching the audience

WA seafood consumers were engaged through a variety of channels, with a heavy focus on targeted seafood communications and events, as well as gourmet dining, including the Fremantle Seafood Festival, the WA Gourmet Escape, and the WA Signature Dish promotion. Premium-level sponsorships at these events, as well as high quality extension materials and targeted hand-outs, such as recipe cards using MSC certified products, were primarily used to engage with community members. Communication strategies focused on leveraging the influence by world-leading chefs and trend-setting gourmet influencers to highlight the WA fishing industry sustainability credentials. This is showcased in the 2015 Margaret River Gourmet Escape event highlight below.

Communications strategies for the fishing industry targeted individual fishing companies, regional fishing associations, or small sector bodies, to highlight the benefits of certification and how it may not only support the fishery but increase market demand for their product.

Event Highlight – Margaret River Gourmet Escape - November 2015

Based on the marketing profile and objectives, the Margaret River Gourmet Escape was identified as a high-priority target event to showcase WA sustainability credentials and educate the consumer on MSC certification. The (then) annual event was among the highest profile and best attended food festival in WA with an estimated crowd of up to 15,000 foodies filling the grounds of the Leeuwin Estate. The demographic of the event is made up of 85 percent WA residence with an average household income of \$183,000. These events featured premium WA foods and beverages and attracted world-leading chefs, which made it well suited to educating consumers on sustainable fishing and MSC certification.

In line with the high calibre of attendees, WAFIC utilised world-renowned international and domestic chefs including Rick Stein (Figure 3), Marco Pierre White, Shane Osborn, and Guillaume Brahimi to help highlight MSC certified products over the three-day event. The event included several breakout sessions, including a stakeholder tour to Ocean Grown Abalone at Augusta (now trading as Rare Foods Australia) a private luncheon for 50 participating chefs featuring MSC certified produce, and a gourmet seafood barbeque on Meelup Beach. There was large media coverage, as well as social media and other promotional channels.

Sponsorship and food promotions were supported by additional event-within-event activities, such as displays where consumers could learn more about MSC and commercial fishing in WA. MSC-aligned industry members also participated in the displays to talk about their products and encourage other WA fisheries to join the program.



Figure 3. John Harrison (former CEO of WAFIC) and Rick Stein at the Margaret River Gourmet Escape

The event was a major logistical occasion involving a diverse array of seafood harvesters and their products. WAFIC had a stand at the event to provide a mechanism to highlight the fishing industry, including the MSC initiative. A survey was conducted of people who visited the stand to determine attitudes towards MSC certification. The full survey results can be found in Appendix 3. The low response rate of only 49 respondents should be interpreted with caution or is an indicative response in itself, however the success of the MSC sponsorship was viewed as limited, with more than 61 percent respondents not knowing about MSC sustainable seafood ecolabel prior to visiting the Margaret River Gourmet Escape. However, verbal feedback from attendees indicated that their level of education on sustainably certified seafood had improved.

5 Market and non-market benefits accruing to WA MSC certified fisheries

Following the expansion of MSC certification in WA, there was increasing interest in whether certification was effective at driving market and non-market benefits. The MSC's theory of change suggests that as more MSC certified seafood becomes available on the market, consumer awareness and/or retailer demand will increase, driving further growth of WA's MSC program.

Consumer behaviour is integral to the MSC's theory of change. The availability and visibility of MSC certified seafood, and public awareness and confidence in the label allows consumers to preferentially purchase certified seafood. Effective communication to consumers is key to ensuring trust in the MSC ecolabel, thereby unlocking consumer demand. Understanding of consumer trends is also highly valuable in driving communication campaigns that focus on raising awareness of sustainable fishery management. The level of awareness and engagement with the Australian community remains one important 'marker' of success for the industry.

This assessment features several consumer and stakeholder surveys which look at consumer trends and industry experiences from WA MSC certified fisheries (Table 3).

Table 3. Surveys used to assess benefits accruing to WA MSC certified fisheries.

Name	Year	Organisation Responsible
Community perceptions of the sustainability of the Australian fishing industry (Appendix 4)	2011 2013 2015 2017 2018 2019	FRDC
MSC Consumer Insights 2020 Australia (Appendix 5)	2020	GlobeScan
Shifting focus: The impacts of sustainable seafood certification (Appendix 6)	2020	Commonwealth Scientific and Industrial Research Organisation (CSIRO)

5.1 Australian Community Perception Research

FRDC conducted biannual sustainability surveys from 2011 to 2019 to capture community perceptions on the achievements and ongoing investment the fishing industry is making into long-term sustainability (Appendix 4). While there have been some slight changes over time (including a shift to an annual study from 2018), the core design and metrics have remained unchanged. This has provided continuity in the information available as well as trends across several key measures of the industry's social acceptability. Specifically, this research sought to determine community awareness, understanding and attitudes towards the sustainable management of Australia's fishing industry. This will help identify key drivers, motivators, and influences on community perceptions.

5.1.1 Methods

The quantitative research involved an online survey of a nationally representative sample of randomly selected adult Australians (aged 18 and over), which took approximately 10 minutes to complete. Respondent demographics from the survey were representative of Australian Bureau of Statistic population estimates across age, gender, and location to ensure the results appropriately reflected the current size and structure of the Australian population.

This assessment focused on recent surveys from 2018 and 2019, which also incorporated previous survey results from 2011 – 2017. The 2018 survey was the fifth piece of research in this program covering detailed community perceptions of sustainability of the Australian fishing industry. The 2019 survey differed from previous studies whereby it provided an update on separate FRDC research undertaken in 2016 – ‘Unpacking the consumer seafood experience’. Coverage of the 2019 survey included collecting information on consumers’ buying, cooking, and eating experiences with seafood, along with a subsection on consumer perceptions of sustainability. This subsection provided continuity of trends across several key metrics that allowed for comparisons with previous community perception studies.

5.1.2 Results

Sustainability of Australia’s fishing industry

The latest survey (2019) indicates 65 percent of Australians believe the fishing industry (as a whole) is sustainable now or confident it can be (5 percent up from 2011) (Figure 4). Specifically, there has been a strong uplift in the proportion of Australians (46 percent) who believe the fishing industry is currently sustainable (9 percent up from 2011). The improvement over the last 8 years has the level of acceptance within the community at an all-time high and provides the first clear indication community perceptions of the fishing industry are improving.

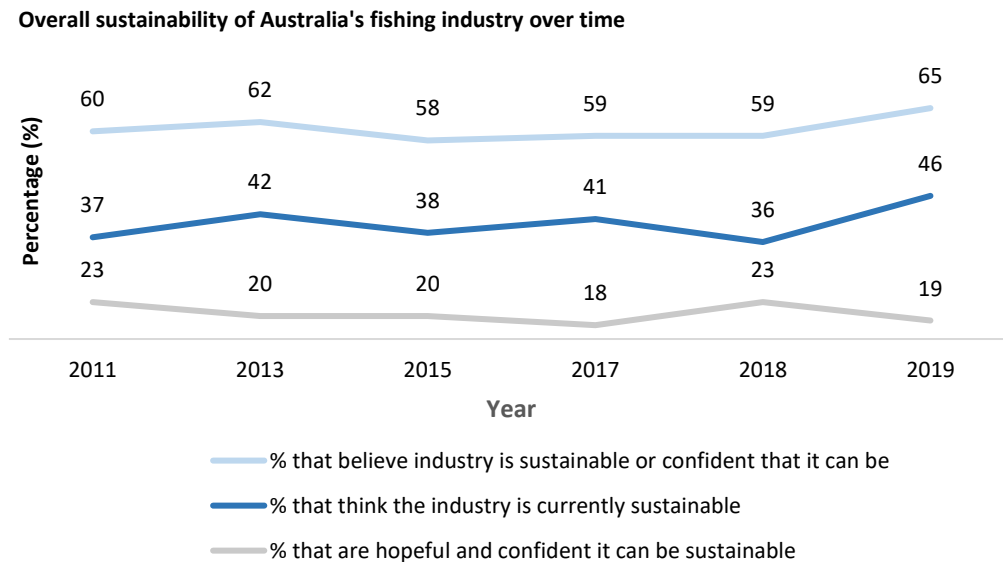


Figure 4. Percentage of Australians over time who believe the fishing industry (as a whole) is currently sustainable or confident that it can be (© 2019 Community Perception Survey – Appendix 4).

Lack of familiarity with the commercial sector impacting perceptions of the overall industry.

Surveys indicate the Australian community is unfamiliar with the commercial fishing sector. Surveys have demonstrated a strong correlation between familiarity with the commercial sector and perceptions of the industry overall, where people more familiar with the commercial sector are more likely to perceive the industry overall as sustainable (Figure 5).

Relationship between sustainability of the overall industry and familiarity/sustainability of the commercial industry

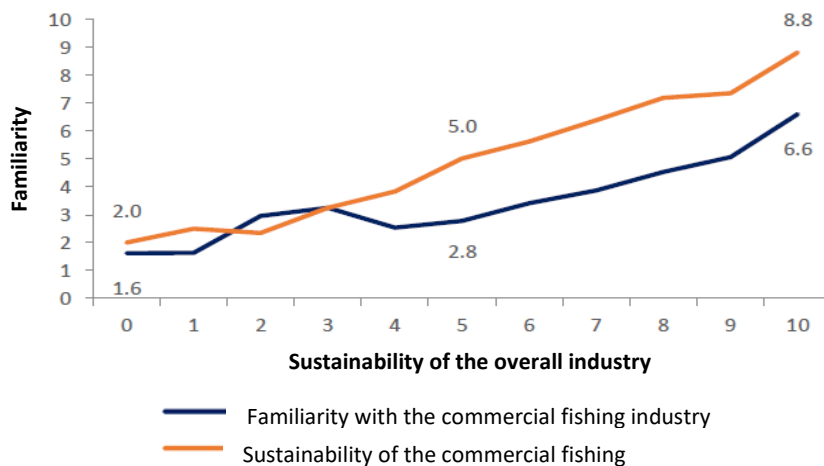


Figure 5. Relationship between sustainability of the overall fishing industry and familiarity/sustainability of the commercial industry (© 2018 Community Perception Survey – Appendix 4).

The influence of the commercial sector is best illustrated when exploring sustainability perceptions across different sectors (Figure 6). There is a stronger level of confidence across the community about the sustainability of farmed (69 percent), traditional (59 percent) and recreational (61 percent) fishing. Whereas there is a comparatively lower level of confidence in the commercial wild-catch sector (37 percent). While this number is up 10 percent from 2011, there remains a huge mismatch in public perceptions which has been consistent over the eight-year research program.

Perceived sustainability of fishing sectors

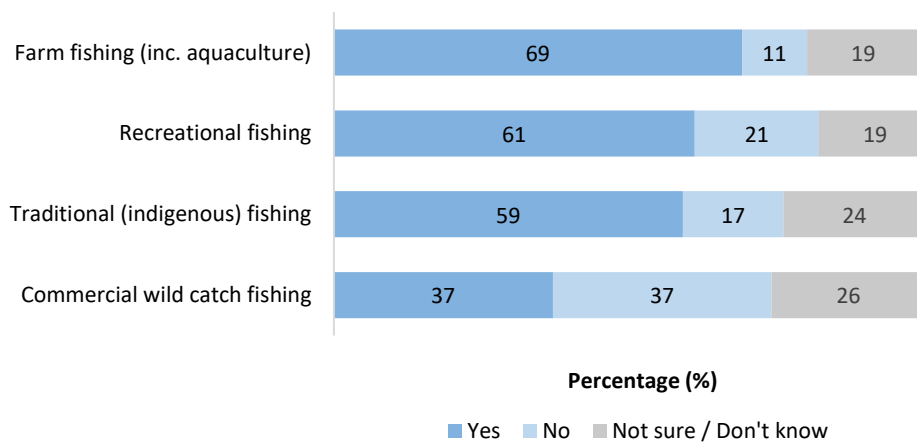


Figure 6. Perceived sustainability of Australia’s fishing sectors – farm fishing, recreational fishing, traditional fishing, and commercial wild-catch fishing (© 2019 Community Perception Survey – Appendix 4).

When asked about the challenges people saw facing the commercial sector, four primary themes emerged:

- If we keep up our current practices, we will run out of fish.
- There are too many people illegally fishing/having no regard for the environment.
- Our current fishing practices are causing damage to the environment.
- Australian commercial fishers are unable to turn over profits.

These themes provide additional insight into the common views and opinions of the Australian community and can direct focus for future communication campaigns and information sharing about the commercial wild-catch sector.

The more engaged or connected with the fishing industry, the more likely people will believe the industry is or could become sustainable.

There is a clear trend where people more engaged with the industry and marketplace (active fishers and consumers of seafood) are more likely to believe the industry is or could become sustainable. Figure 7 illustrates the different perceptions of sustainability across three segments; engaged (80 percent), connected (59 percent), and not engaged (44 percent).

While there are more opportunities to interact with consumers engaged with the industry, the challenge moving forward will be to ensure information and education reaches the broader community, particularly those who are less involved and connected with the fishing industry. Whilst community perceptions are at an all-time high, the slow change over time demonstrates the significance of this challenge.

The segments provide a different perspective and pathway for renewed communication and marketing campaigns to influence community perception with:

- A need to continue and reinforce the success around sustainability across the engaged sector. Given strong engagement with the industry, existing communication channels for information sharing on industry sustainability should be sufficient.
- An opportunity to persuade and influence the perceptions of the connected segment with targeted efforts, including:
 - Fishing industry publications, websites, social media, and marketing campaigns to reach the broader community.
 - Leveraging opportunities to expand CoOL, sustainable certification, and other point of sale opportunities to engage directly with seafood consumers.
- A more passive approach to communicating with the non-engaged segment, which might include a downstream effect created by established communications and promotions rather than any specific investment.

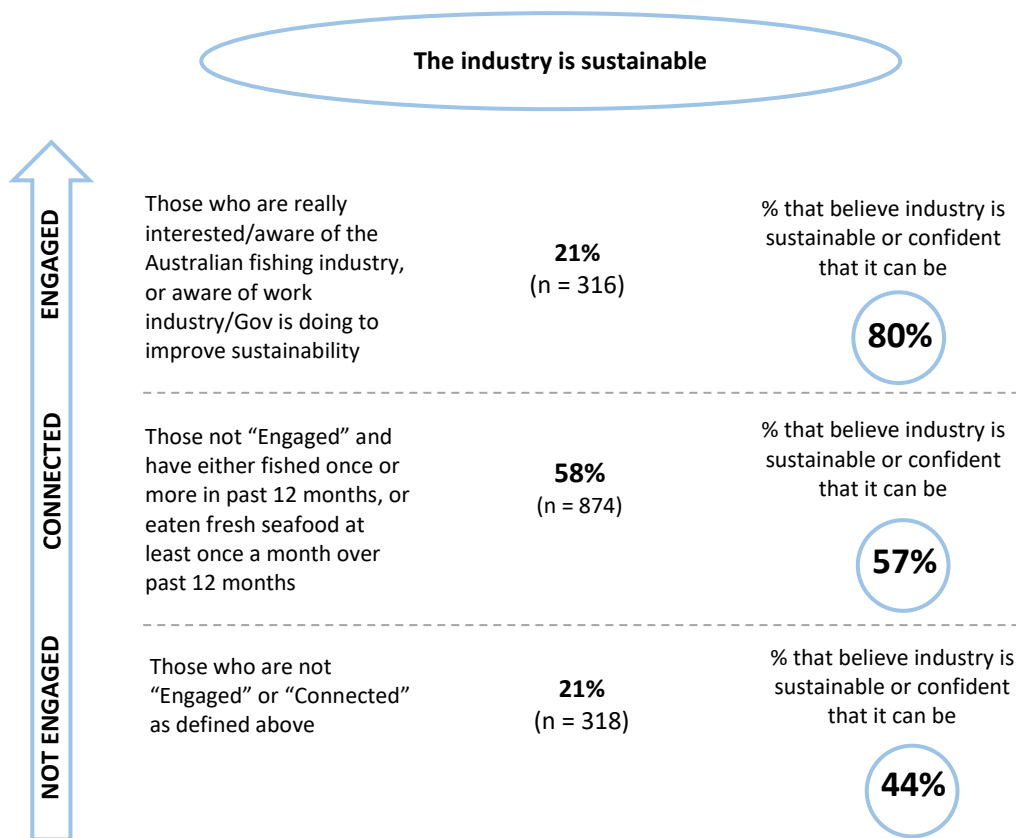


Figure 7. Sustainability of the overall industry according to level of engagement with the fishing industry (© 2018 Community Perception Survey – Appendix 4).

CoOL and certification value increasing

The 2018 survey confirms the community sees an increasing value in CoOL (Figure 8). More than 78 percent of respondents rated their agreement at 8 or above (out of 10). This indicates an overwhelming majority of the community sees CoOL as one of the most important mechanisms driving purchasing decisions. Translating CoOL to sustainability may provide another opportunity to shift community-wide perceptions.

Consumer support for certification schemes also received strong agreement (Figure 8). Most consumers agree that certification provides confidence in seafood sustainability. This result has improved since first asked in 2015 (up 0.7) and should provide further encouragement to continue certification programs across fisheries.

Consumer support for CoO labelling and eco-certification over time

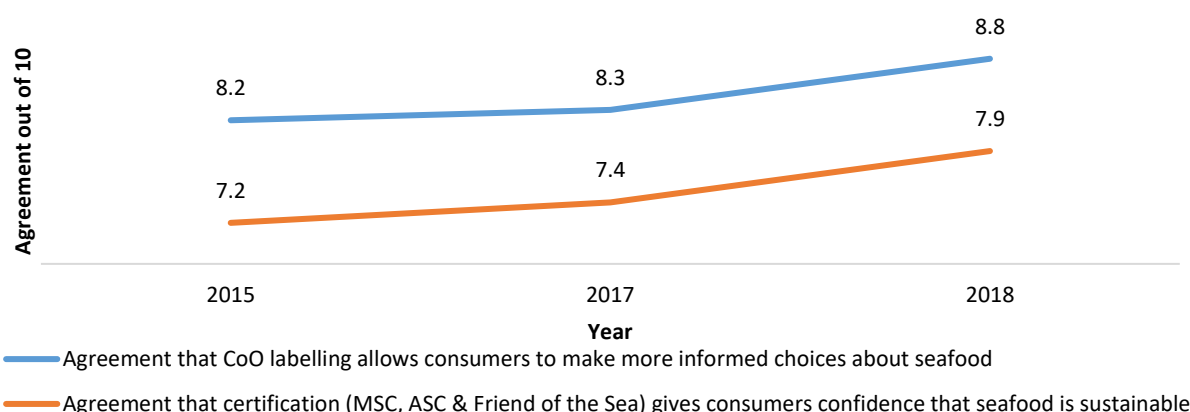


Figure 8. Agreement (out of 10) that CoOL allows consumers to make more informed choices about seafood (blue line) and that certification (MSC, ASC & Friend of the Sea) gives consumers confidence that seafood is sustainable (orange line) (© 2018 Community Perception Survey – Appendix 4).

The views of the fishing industry remains behind other primary sectors.

The community continues to hold different views on sustainability across various rural primary industries. The overall fishing industry and commercial wild-catch sector are perceived as the least sustainable of all rural primary industries, which included horticulture, eggs, beef, dairy, and pork (Figure 9). The rating of the commercial wild-catch sector relative to other primary industries and fishing sectors (farm, recreational, and traditional fishing) further illicit the influence the commercial sector has on overall perceptions of the fishing industry.

The 2018 survey did however show community views of sustainability trending down across most sectors from 2017 results. This highlights the ongoing and significant challenges all sectors are facing in engaging, influencing and sustaining community perceptions around sustainability.

Sustainability across other rural primary sectors

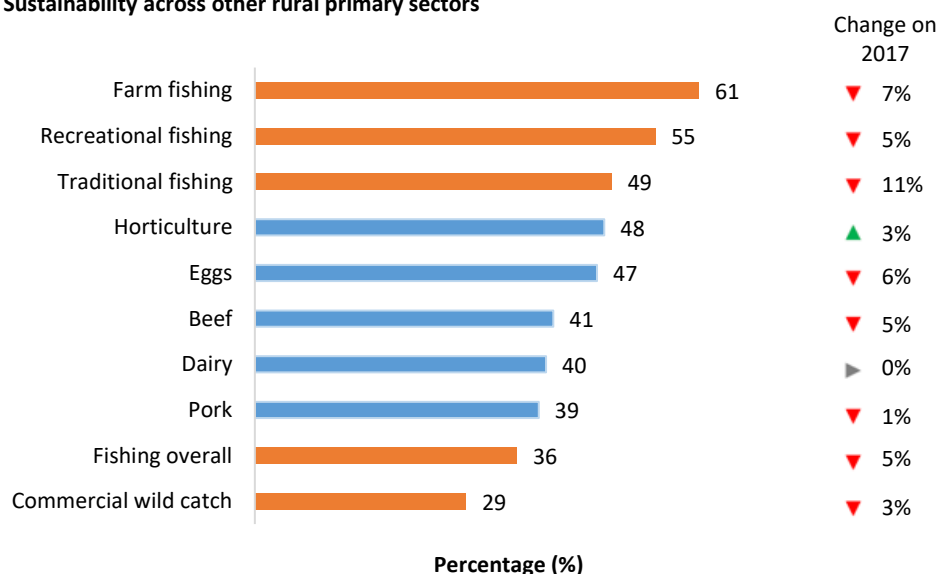


Figure 9. Perceived sustainability of the fishing industry (orange) compared to other rural primary sectors (blue) (© 2018 Community Perception Survey – Appendix 4).

Balancing economics and sustainability

Survey results over time show a clear shift in community values, where in 2011 the supply of fresh seafood and protecting the marine environment were of equal importance (Figure 10). This value strongly shifted in 2015 towards consumers placing much higher importance on protecting the marine environment and has continued to trend upwards since.

Similarly, since 2015 there has been a shift in consumers valuing sustainability more highly than price when purchasing seafood (Figure 11). These comparisons validate the growing consumer demand for sustainability and environmental wellbeing over socio-economic priorities and requires Government planning to continually balance environmental and supply issues.

Balance between supplying seafood and protecting the marine environment

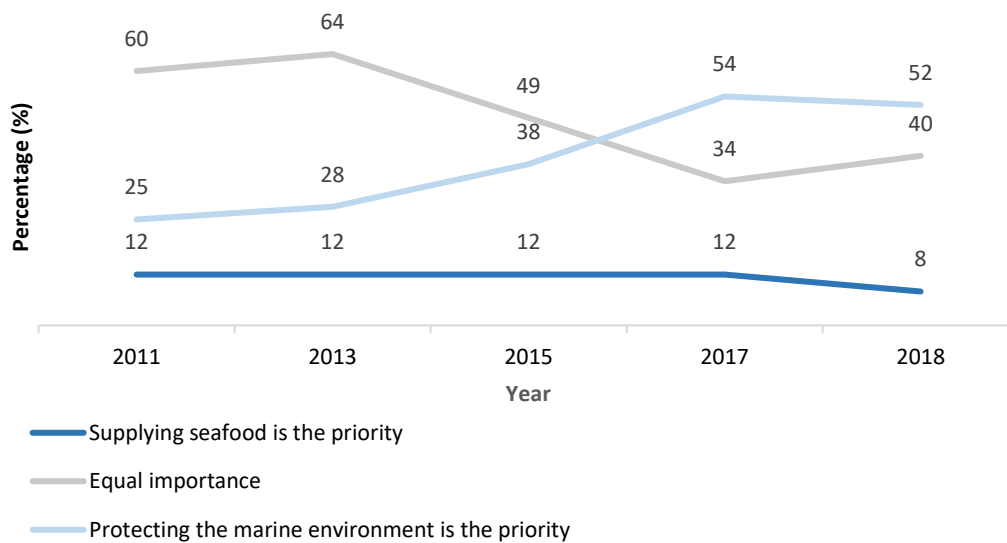


Figure 10. Balance between supplying sufficient fresh seafood and protecting the marine environment (© 2018 Community Perception Survey – Appendix 4).

Balance between price and sustainably caught seafood

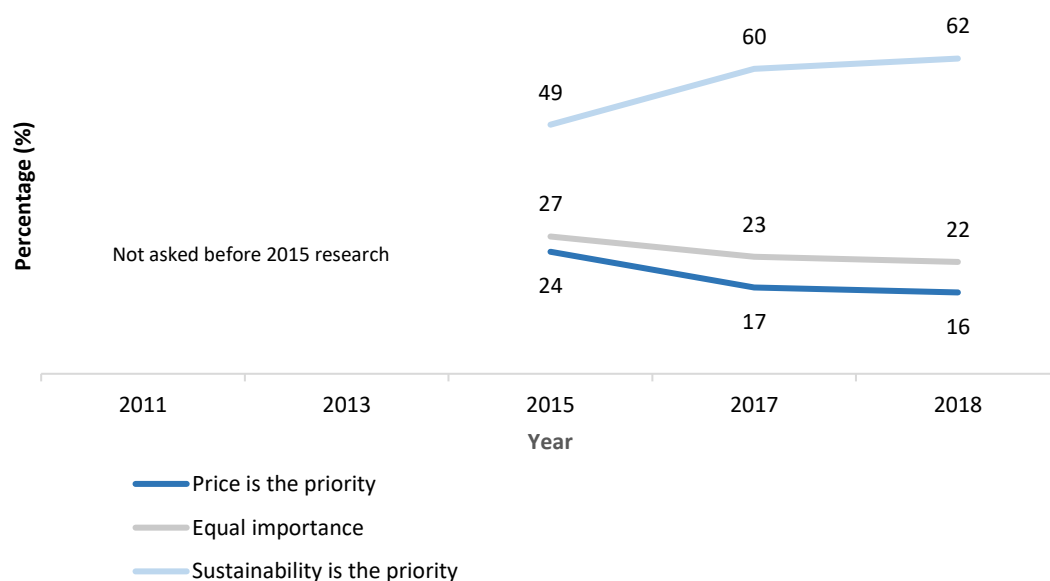


Figure 11. Balance between price and sustainably caught seafood (© 2018 Community Perception Survey – Appendix 4).

The 2018 survey asked for the first time, questions about the level of concern across a broad range of ‘life issues.’ Rising living costs occupied 4 of the 5 most concerning issues for the community, including rising health care costs (71 percent), rising energy costs (71 percent), keeping healthy foods affordable (65 percent), and rising cost of food (61 percent) (Table 4). Comparatively, the value of environmental sustainability of food (49 percent) was the 9th most concerning issue (out of 13). This presents a challenge, where when the fishing industry is singled out, Australian’s highly value sustainably sourced food. However, the cumulative stresses of rising costs across multiple elements of everyday life may in practice limit consumer choices when purchasing seafood. This will be an important consideration for renewed communication strategies going forward.

Table 4. Top 5 concerns of broader ‘life issues’ (@ 2018 Community Perception Survey – Appendix 4).

Concerns about ‘life issues’	2018 Survey Results
Rising healthcare costs	71%
Rising energy costs	71%
Safety of food imported from outside Australia	70%
Keeping healthy food affordable	65%
Rising cost of food / Affordability of food	61%

5.2 MSC Consumer Insight Research

Every two years since 2016, MSC has commissioned a global research study into consumer perceptions by GlobeScan, an independent research and strategy consultancy. This is one of the largest surveys of seafood consumers across several global markets. This highlights consumer interests and concerns for the ocean and seafood which MSC incorporates into their Fisheries Standard Review process. This ensures the MSC Standard is responsive to consumer concerns and incorporates emerging issues related to ecologically sustainable fishery management.

5.2.1 Methods

The 2020 survey was conducted in a total of 23 global markets including Australia, Austria, Belgium, Canada, China, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Poland, Portugal, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, UK, and USA. The survey was conducted online and sourced respondents in each country using reliable national consumer research panels.

For this assessment, only the Australian results were considered (Appendix 5). A nationally representative sample of 2,174 people were surveyed, of which 1,663 were seafood consumers. For the survey, a ‘seafood consumer’ was defined as someone over 18 who has purchased seafood in the past two months and/or regularly eats seafood at home or in a restaurant.

5.2.2 Results

Consumers are switching to sustainable seafood

MSC consumer research shows Australians are significantly concerned for the state of our oceans with overfishing/depletion of fish species the second-most concerning issue amongst respondents (51 percent), behind ocean pollution (61 percent).

Consumers are feeling more empowered to effect change to safeguard our oceans through their food purchases with 60 percent of respondents believing that consumer choices can help make a difference to the health of our oceans. This perspective is being fuelled by the overwhelming opinion that we need to protect fish so future generations can enjoy seafood. To ensure plenty of fish remain in the ocean, 63 percent of respondents believe that consuming seafood from sustainable sources is essential.

Many consumers are already using their purchasing power to conserve fish stocks with more than one-fifth saying they have switched to a brand or product that says it helps protect the oceans or fish, and another 33 percent of people willing to take this action in the future.

At a time when the fishing industry is facing unprecedented challenges, surveys indicate consumers see value in supporting fishers committed to sustainable practices and safeguarding our seafood supplies for future generations by choosing certified sustainable seafood.

- 70 percent of Australians believe retailer and brand claims about sustainability and the environment need to be clearly labelled by an independent organisation.
- 88 percent of Australians want better information so they can be confident they are buying sustainable seafood.
- 78 percent of Australian consumers want unsustainable seafood removed from retail shelves and menus.

Motivators of purchase and ecolabels

The top four main motivators of seafood purchase in Australia, strongly focus on health and quality (taste and freshness etc.) (Figure 12). Sustainably sourced produce is the joint sixth most important factor and is of the same value to consumers as knowing where product originates from, however these motivators fall just behind price. Independent certification remains a much lower motivator of seafood purchase.

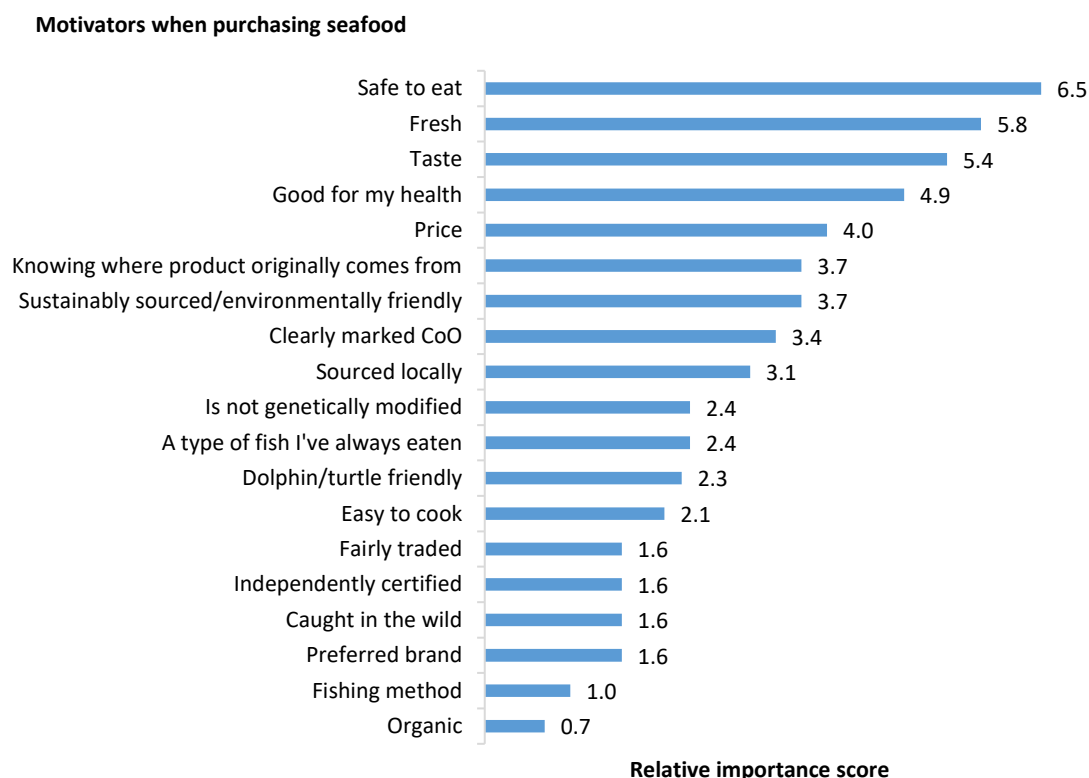


Figure 12. Relative importance of motivators when purchasing seafood (© MSC Consumer Report 2020 – Appendix 5).

Despite the limited impact of independent certification on consumer choices, people have a positive perception towards ecolabels with 50 percent of people saying ecolabelling increases trust and confidence in the brand and are prepared to pay a premium for sustainably certified seafood. There is still however, over half the population who have never heard of ecolabelling (63 percent), which presents a massive gap in the Australian market and creates an opportunity to gain market share through education.

Research indicates there is consumer pressure on businesses to demonstrate their sustainability credentials, with 70 percent of consumers holding the belief that supermarkets/brand claims about sustainability and the environment need to be clearly labelled by an independent organisation.

MSC awareness and understanding

Since 2016, there has been a gradual increase in the number of consumers recognising the MSC label (31 percent, up from 24 percent in 2016) (Figure 13). The MSC label is commonly recognised on fish/seafood packaging and in supermarkets and grocery stores and is particularly high amongst the conscious consumer (58 percent) and younger consumers aged 18-34 (40 percent).

Frequency of seeing the MSC label

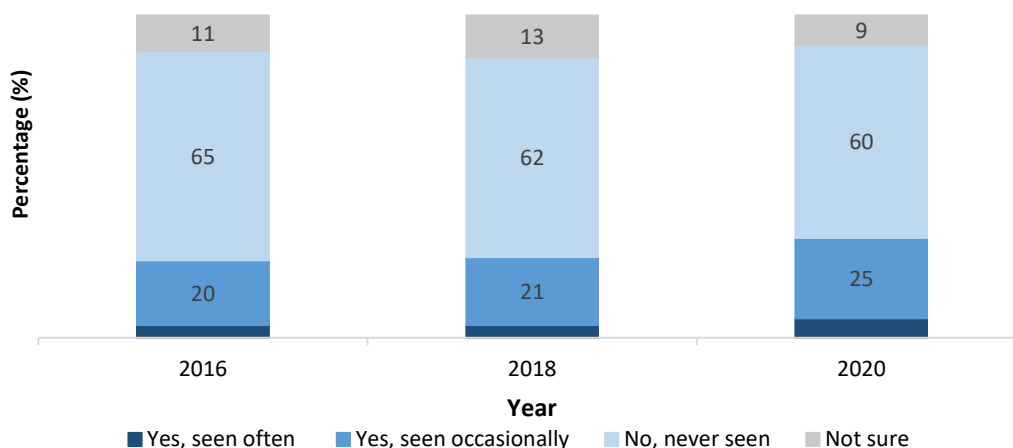


Figure 13. Australian consumer frequency of seeing the MSC label (© MSC Consumer Report 2020 – Appendix 5).

Despite this gradual increase, only 28 percent of Australian consumers had an unprompted understanding of the MSC label, associating it with either sustainability and/or certification. Whilst this number has gradually increased (up 8 percent from 2016), it still indicates three quarters of Australian consumers are not aware of the MSC label or its meaning.

There is promise however, that among those MSC-aware consumers, 92 percent have moderate to high trust in MSC claims (Figure 14). The 2020 survey show a significant jump in consumers having higher trust in the label than previous years.

Among those MSC-aware consumers, how much trust do they have in the MSC label

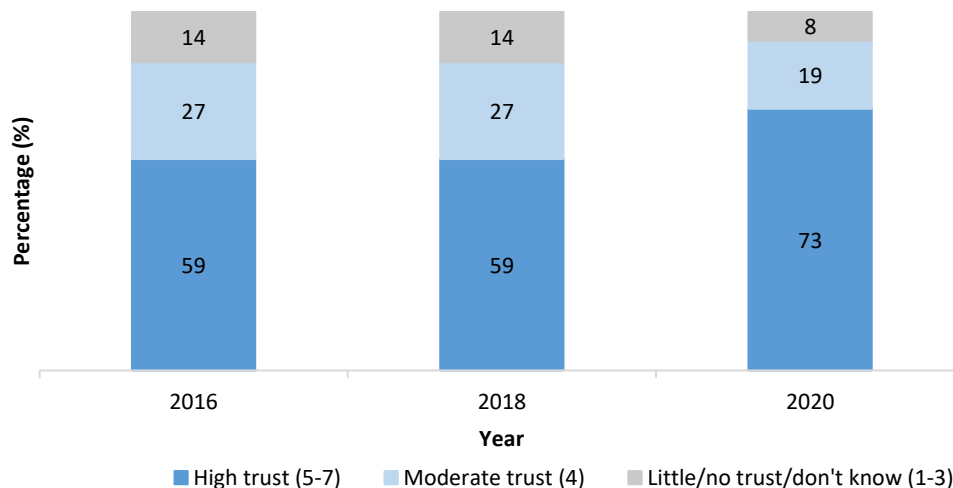


Figure 14. Among those consumers aware of MSC, how much trust do they have in the MSC label (© MSC Consumer Report 2020 – Appendix 5).

5.3 Impact of MSC certification in WA fisheries

Ecolabelling of seafood has rapidly grown internationally, fuelled by the promise of market benefits, more sustainable fish stocks and reduced environmental impacts. With 12 WA fisheries certified to the MSC Standard, the regional representation of sustainable fisheries in WA is significantly higher than the global average. Despite this representation, it is acknowledged that significant market benefits are still to be realised across the majority of WA’s certified fisheries. Regardless of the lack of market benefits, both industry and Government are continuing to invest time and resources into certified fisheries and the MSC program. Considering the results of the community perception surveys, focus must be directed at ensuring the broader Australian community is informed and engaged with industry’s progress towards sustainable development.

5.3.1 Methods

MSC with financial support from WAFIC tasked CSIRO to conduct a research project to identify the socio-economic effects of fisheries participating in WA’s MSC program (Appendix 6). Prior to this study, the perceived social and economic impacts of certification for WA fisheries was largely anecdotal. This research conducted interviews with 33 key stakeholders across seven MSC certified fisheries which operate in (or from) WA to capture the expected and observed impacts of certification. The represented fisheries included:

- Abalone
- Pearl Oyster
- Peel Harvey Estuary Blue Swimmer Crab & Sea Mullet
- Shark Bay & Exmouth Prawn Fishery
- West Coast Deep Sea Crab Fishery
- Western Rock Lobster
- Heard Island & McDonald Islands Toothfish & Icefish (Australian Commonwealth Fishery)

5.3.2 Results

Drivers for obtaining certification

The top three drivers for receiving MSC certification included (Figure 15):

1. Improving sustainability credentials to gain or maintain 'social licence to operate'.
2. Economic incentives from improved market access, marketing advantages and product differentiation.
3. The availability of Government funding to become certified and to improve management outcomes (mainly environmental outcomes).

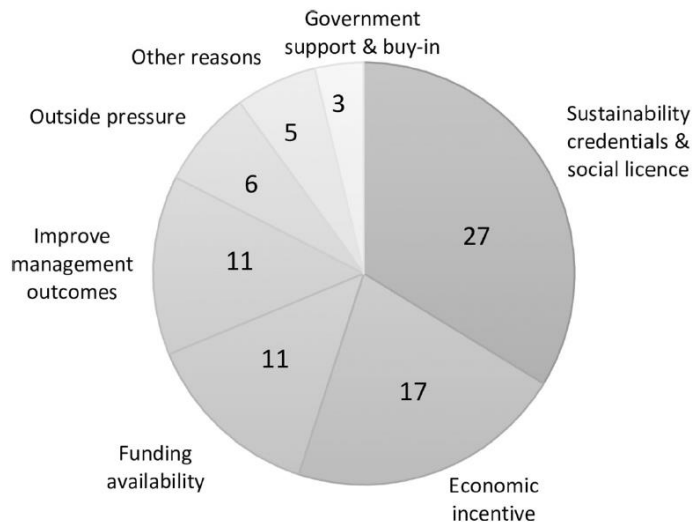


Figure 15. Drivers for obtaining MSC certification in WA fisheries. Digits represent the number of times each driver was mentioned (@ Putten et al. 2020 – Appendix 6).

Observed impacts following MSC certification

Economic, social, environmental, and institutional impacts of MSC certification were classified as either positive, negative, or undefined where there had been no impact (Figure 16). Research found 61 percent of comments indicated a positive impact from MSC certification, 28 percent of comments indicated MSC certification had no impact, and only 6 percent of comments identified negative impacts from MSC certification.

Whilst the social, institutional, and environmental impacts were largely perceived to have been positive, the expected economic benefits did not eventuate.

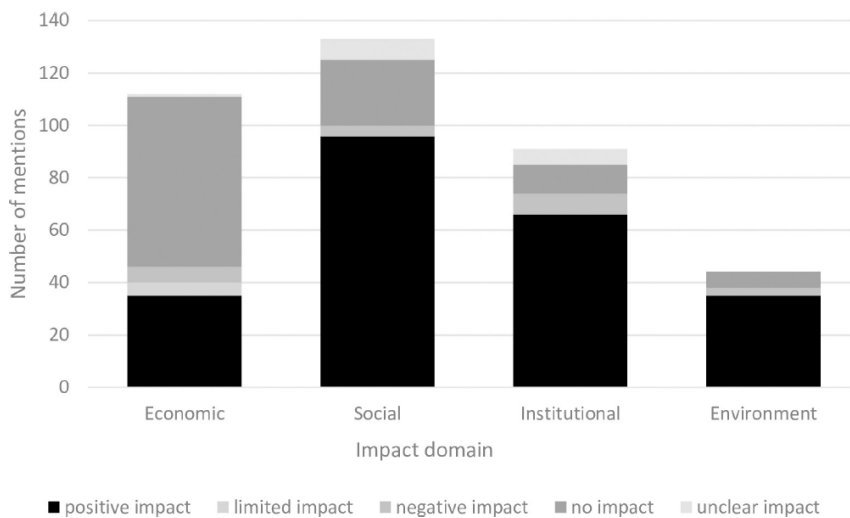


Figure 16. Economic, social, institutional, and environmental impacts of MSC certification in WA fisheries and the types of impact effect (@ Putten et al. 2020 – Appendix 6).

Economic impact – While there was a strong economic driver for initially pursuing certification, it was clear that the expected economic benefits had not materialised in majority of WA fisheries. The lack of economic benefits was predominantly attributed to a lack of brand recognition, the absence of price premiums for certified product, and the absence of the need for certification to access current (mainly Asian) sale markets.

Whilst a large proportion of comments were centred around the lack of, or negative economic impact of MSC certification, 31 percent of comments had indicated some positive economic impacts. That 31 percent came from the few fisheries in WA where pay logo-licencing was able to capture a price premium and economic benefits from the MSC label.

Social impact – The social impacts were largely positive relating to obtaining or retaining social licence, followed by increasing community knowledge levels (predominantly about the environmental impact of the fishery) and improvements in communications between stakeholders generally, and between the government and fishery participants more specifically.

Environmental impact – The environmental impact of MSC certification was predominantly perceived as positive, mainly regarding the overall fishery impact on the environment, as well as environmental management by these fisheries.

Institutional impact – The institutional impacts of MSC certification were mainly perceived as positive. These included positive impacts on transparency (of management and fisheries processes), gains in political influence, and increased funding (resource) availability.

5.3.2.1 Case Study – Peel Harvey Estuary Blue Swimmer Crab Fishery

The Peel Harvey Estuary Blue Swimmer Crab Fishery is the first in the world to receive joint commercial and recreational MSC certification in 2016. The combined sectors share similar values and wish to see a sustainable fishery for generations to come. Meegan Watts, a fifth-generation commercial fisher in the Peel-Harvey Estuary (Figure 17) says ‘MSC gives us 100 percent independent verification that fishing activities within the estuary are sustainable. It is a small-scale fishery with only seven commercial operators and whilst those fishers know the product is sustainable, they want the community to be confident in that knowledge, which MSC offers.’

According to Meegan, ‘this social licence was the driving factor behind certification and is the only reason the fishery is still here. Certification has also forced the Government to consider the Estuary as a prominent fishery and allocate resources towards its management.’

This is a unique fishery in which crabs are caught in the morning and delivered to the market on the same day. The simplicity of the supply chain ensures commercial operations suited requirements for CoC Certification to sell consumer-facing products with the MSC label. Commercial operators trialled the sale of products with the MSC label for three years, however Meegan indicated the fishery ‘recorded no market benefits or premiums on the product when marketed with the label, and the associated costs of using the label were simply not justified.’ When asked how familiar the community is with the MSC label, Meegan suggested ‘9 out of 10 customers don’t recognise the label or brand. Given this, fishers can’t place a premium on certified products as customers have no idea why they are paying extra.’ Interestingly, from Meegan’s experiences, European customers (either tourists or people who have moved from Europe) are the only people well educated on MSC.

As a result, operators have stopped paying to use the label on products. Despite this, commercial fishers still see huge benefits from the gained social licence which justifies the certification costs.



Figure 17. (L-R) Meegan Watts, Chris Watts and Ashley Watts from Peel Harvey Estuary Blue Swimmer Crab Fishery. Image Source – Matt Watson.

5.3.2.2 Case Study – Enhanced Greenlip Abalone (Rare Foods Australia)

Whilst not common, there are a few examples amongst WA certified fisheries which showcase beneficial market impacts following certification. RFA was awarded MSC certification for its wild-enhanced Greenlip Abalone Fishery in 2022. This is the first Greenlip Abalone fishery to be certified worldwide. It was also the twelfth WA fishery to gain MSC certification and WA’s second enhanced fishery.

RFA developed a globally unique sea ranching technique called ‘ABITATs’, or abalone artificial habitats, after witnessing the decline of wild stocks and introduction of tighter quotas in the region (Figure 18). The technique involves hatchery-bred juvenile abalone being placed onto ABITATs which sit on the seabed. The juveniles are left to grow naturally for several years until they reach marketable size. This innovation has enabled the commercial production of wild abalone and has given RFA the competitive advantage of providing year-round supply to meet a growing market demand.

There are now 10,000 ABITATs, equivalent to 20km of reef to grow abalone (RFA, 2023). These ABITATs currently produce 25 percent of the world’s wild and highly sought-after Greenlip Abalone. Given the reef only covers 2 percent of RFA’s 413ha lease area, there are huge opportunities for expansion (RFA, 2023). Since achieving MSC certification, RFA has seen a significant rise in enquiries from overseas buyers looking to source sustainably sourced seafood.

“The MSC certification led to a surge in enquiries from high-profile overseas businesses looking to buy seafood from accredited, sustainable sources. This includes major hotel chains that are mandated to only purchase from sustainable source.” Says Alex Wilson, RFA’s General Manager – Sales and Marketing.

Following certification, RFA won the 2022 WA Export Awards for Sustainability and became a finalist at the 2022 Australian Export Awards. Most recently, founder of RFA, Brad Adams was named ‘Sustainable Fishing Hero’ in the prestigious and internationally recognised 2023 MSC Sustainable Seafood Awards. This award celebrates forward-thinking individuals and organisations placing the long-term health of our oceans and future supply of seafood at the heart of their business.

While perhaps unique among WA’s certified fisheries, RFA’s experiences and success following certification shows the market influence MSC can have. Contributing to this success, RFA is one of the few

WA fisheries which pays for logo licensing through a CoC certification, enabling the use of the MSC logo on its products. One enabling factor allowing RFA to use the MSC logo is their vertically integrated production system in which the company can control different stages along the supply chain and limit their reliance on external suppliers. RFA has also been successful through their proactive marketing strategy that has established Greenlip Abalone as a premium product with high-end restaurants and chefs in both Australian and global markets. The relationship between selling premium products with the MSC label, vertically integrated production systems and control over the supply chain are all contributing factors to the positive economic impacts.



Figure 18. RFA harvesting Greenlip Abalone from its unique sea ranching ABITATs.

5.4 Discussion

Sustainability of Australia’s fishing industry

For the majority of people, fisheries sustainability and management is not an issue that is top of mind within the broad context of Australia’s natural resources. Whilst there is growing support for resource access and sustainability across a full spectrum of industries within the community, many have not consciously considered fisheries as a renewable resource that naturally replenishes itself with or without human intervention.

Generally, the public has little knowledge of how sustainable Australia’s fishing industry is, reflecting a lack of understanding and/or interest in fisheries management and operations. Whilst there is high uncertainty of the sustainability of Australia’s fishing industry, there is strong agreeance Australia is ahead of other countries. Here remains an ongoing challenge to inform, educate and influence the community of Australia’s position as leaders in fisheries management.

Our position as world leaders was highlighted in FRDC’s SAFS Report, which assesses the biological sustainability of a broad range of wild-catch fish stocks against a nationally agreed framework. The report looks at whether the abundance of fish and the level of harvest from the stock are sustainable. The 2020 SAFS report indicated Australia’s fish stocks are well-managed and majority are healthy, with almost 86 percent of assessed stocks classified as sustainable or recovering (Pidcocke et al. 2021).

The 2019 consumer perception survey contrasts with this assessment, where only 46 percent of the Australian community believe the fishing industry is currently sustainable. Despite more than half the population still believing the industry is unsustainable, this number has increased by 9 percent since the first community perception survey in 2011. This increase puts the level of community acceptance at an all-time high and gives indication that the community sees the industry is changing its ways. While some improvements are evident, the slow rate of consumer recognition remains an ongoing challenge which necessitates further strategic actions to inform, educate and influence community perceptions about the sustainability of the industry.

Surveys indicate the strong correlation between familiarity of the commercial wild-catch sector and sustainability of the overall industry. Given this relationship, the challenge in shifting community perceptions will likely reside in the industry's ability to build a stronger awareness of, and engagement with the commercial sector.

This responsibility to commercial fishers reiterates the influencing role they play in shaping people's views of the overall industry. Importantly, commercial fishers want to see the industry flourish and are committed to a sustainable industry from both a fishing and environmental perspective. Many industries have demonstrated this commitment through MSC certification; however, it is evident the community has limited knowledge of this. This requires more accessible information to address issues concerning the community if Australians are to make informed judgements.

Compounding these problems is the industry's lack of public profile. Social licence is often built through personal interaction and trust, and an industry that lacks visibility has few opportunities to build this trust. Efforts to improve economic efficiency and sustainability means the commercial wild-catch sector now employs fewer people and have shifted to larger, more corporate business models. Commercial fishing activity has also been largely reduced along near-shore areas due to growing pressures from the recreational sector and competing marine uses. This has unintended consequences by reducing the visibility of commercial operations and sense of familiarity for the public. With less connection and visibility, commercial fishers operate almost out of sight.

There is, however, room for change. While 46 percent of Australians believing the industry is currently sustainable, a further 31 percent were unsure. Improving access to trusted information and increased familiarity with the industry can help influence this group of people to have confidence in Australian seafood.

Value of CoOL and independent certification

Despite a low understanding of fisheries and their management within Australia, there was a strong agreement that purchasing seafood with CoOL and independent certification allows consumers to make more informed choices and gives confidence in sustainability. This was one of the most promising opportunities which emerged from FRDC's consumer perception surveys and presents a clear pathway for the industry to further promote its sustainability.

This opportunity was further demonstrated in MSC's independent consumer insight survey which showed ecolabelling has become an increasingly important instrument in demonstrating seafood sustainability and is now a key factor influencing consumer choices. Looking forward, ecolabels have great relevance as consumers look to adopt a more sustainable lifestyle.

The global trend for supermarkets, retail outlets and food service providers to source sustainable produce is expected to expand simultaneously as consumer demand increases. There is significant opportunity for Australia to embrace this trend to position certified fisheries to be competitive and recognised as sustainable in both domestic and international markets.

WA MSC-certified fisheries experiences

Whilst community perception and consumer insight surveys highlighted key barriers preventing the full scope of benefits to be realised, WA's experience with MSC certification has been significant for both the commercial fishing industry and Government. Twelve WA fisheries have now met the MSC's rigorous standard for sustainable fishing and continue to advocate global best practice by maintaining certification. The state's portfolio of certified fisheries now represents more than 90 percent value and approximately 60 percent of the state's total commercial catch and has positioned WA as global leaders for MSC certification. Engaging with MSC has also brought wider changes to the industry and has meant both fisheries and Government have been forced to improve. For example, most WA fisheries including those which are not MSC certified, now have formal harvest strategies supported by ecological risk assessments. This improvement has resulted in greater transparency and accountability across the industry.

MSC certification has also meant that industry and Government have had to allocate resources and focus efforts to protect endangered, threatened, and protected species, and assess the impact of fishing on the ecosystem and marine habitat. This has led to numerous beneficial changes to 'sea' operations of commercial fisheries. These changes would either not have been implemented as quickly or would not have been done to the same extent without the inputs measured against the MSC sustainability benchmark.

MSC certification is also valuable in communicating the sustainability credentials of fisheries and gaining or maintaining a 'social licence to operate' especially from local communities. The value of this 'social licence' is again intimately related to how effective this message is conveyed to the broader community. Appendix 6 demonstrated the non-market value of this 'social licence' as the leading factor driving certification in WA. This was supported by the Peel Harvey Estuary Blue Swimmer Crab case study, in which the social benefits justify the certification costs.

The market and non-market benefit study (Appendix 6) strongly indicated that market benefits driving MSC certification have not eventuated in most WA fisheries. In WA, most certified fisheries do not market their products with the MSC ecolabel. Therefore, the only way of gaining a price premium for being sustainable, without an ecolabel on the product, is if consumers are well-aware that the fishery is certified and can easily identify products from that fishery. Consequently, even if a premium were available, it is unlikely that they would receive it without consumer awareness. RFA's enhanced Greenlip Abalone case study did however provide an example of a WA fishery which has seen huge economic growth since receiving MSC certification. As highlighted in the case study, this is one of the few fisheries that pay for logo licensing through CoC Certification which has enabled the use of MSC's ecolabel on consumer facing products.

The role of a renewed communication campaign

The overall lack of understanding of Australia's fishing sector and its sustainability, especially compared to other primary industries, suggests the industry lacks a public profile.

The perception and consumer insight surveys consistently indicate sustainability is a unifying theme, in which the community takes pride in. This presents an opportunity for renewed communication strategies which help build a sustainable ocean imagery for the fishing industry.

Given the increasing public concern for sustainable ocean imagery, industry and Government need to take bold action to publicly celebrate WA fisheries. Actions need to be visible and interactive with the broader community, and not only with those engaged with the fishing industry. Scientific information alone is not sufficient to change perceptions, rather science needs to be complimented by messages and images that instil emotional connections. The scale and complexity of negative perceptions of the fishing industry presents challenges. However, messages which can break down large problems into achievable local

efforts can be highly effective. Providing people with clear ideas for actions that can make a difference and lead to behavioural changes is important.

It is expected that moving forward, consumer interest and engagement with sustainability will continue to increase. This will be accompanied by increasing expectations for Government and industry to demonstrate how they are part of the solution. As more engaged and empowered consumers ask more questions about where their food originates from and its sustainability credentials, it will be important for fisheries to increase transparency and dialogue with consumers to respond to this demand and provide independent re-assurance of the sustainability of Australian seafood.

Given this growing focus on sustainability, there is great opportunity for industry and Government to form a renewed communication strategy which aims to:

- Expand the CoOL scheme in Australia to give consumers a level of comfort and empowerment of Australian produce.
- Improve the MSC ecolabel understanding and position it as the easiest and most trustworthy identification for sustainable seafood.

The power of certification as an independent mechanism in steering community discussions to focus on sustainability was successfully demonstrated on a national level through John West Australia's Marketing Campaign in 2016. John West Australia demonstrated industry-led environmental stewardship which resulted in 43 percent of Australia's canned tuna MSC certified as sustainable (MSC, 2016). This campaign demonstrated the ability of an effective communication strategy in celebrating and significantly raising the public profile of a sustainable fishery.

Example – [John West Australia Marketing Campaign](#)

John West Australia launched 'Our Oceans Forever Campaign' in February 2016 as part of the company's commitment to MSC certified sustainable tuna. John West Australia overhauled their supply chain to offer Australian consumers the opportunity to make wise purchasing decisions by choosing MSC certified sustainable canned tuna. This enabled everyday Australians to be part of the solution for healthy oceans, through changing their purchasing behaviour. The campaign resulted in 760+ pieces of media coverage and 1 million views of the associated TV advertisement in only 6 days.

John West Australia was awarded the Banksia Gold Award at the 2016 Banksia Sustainability Awards. The Banksia Foundation's annual awards recognise and celebrate companies, individuals, and organisations leading Australia towards a more sustainable and innovative future. In addition to the Banksia Gold Award, which recognises the 'best of the best' across 14 award categories, John West Australia also received the Banksia Communication for Change Award.

"With their strong drive to deliver a superior product to the market and communicate the importance of sustainable fishing among buyers, John West Australia has won over the hearts of consumers and inspired businesses and individuals alike" said Banksia Foundation CEO Graz van Egmond.

6 Evaluation of third-party certification that are cost effective and improve the delivery of the program for both fishers and the community

As detailed in Section 5, a range of surveys were conducted to assess any market and non-market benefits accruing to WA MSC certified fisheries. A high level of community awareness of the MSC program and recognition of the logo would be viewed as an important achievement, however it was clear that the expected economic benefits had not materialised in majority of WA fisheries. The lack of economic benefits was predominantly attributed to a lack of brand recognition, the absence of price premiums for certified product, and the absence of the need for MSC certification to access current (mainly Asian) sale markets.

To assess different evaluation methodologies for third-party certification that are cost effective and improve the delivery of the program for both commercial fishers and the community, a detailed case study of the WRL Fishery was undertaken in 2015 (Appendix 7). The WRL Fishery was selected given its long-term certification since 2000, which ensured the analysis would provide evidence of whether there was any cost-benefit accrued to the fishery.

It's important to note that this case study was completed on a high value fishery that, at the time, had a strong export market, so it may not be a suitable archetype for other or small-scale fisheries that rely on domestic market.

6.1 Method

Acknowledge[®] was consulted to provide an independent cost-benefit analysis of the WRL MSC certification. This analysis was used to deliver a report which served future engagements and discussions with the WRL Fishery.

The objectives for the cost-benefit analysis included:

- Consulting widely with the harvest and post-harvest sectors of the WRL Fishery to determine gaps in understanding the value of certification that remain despite the fishery being re-certified.
- Identifying the key principles that ensure strong stakeholder support and long-term commitment, by incorporating the outcomes so there is a bottom-up approach to engagement with industry.

This review of the cost-benefit analysis of MSC certification for the WRL industry was conducted in three phases:

1. A series of interviews with a range of industry participants from harvesters, processors, traders, certifying bodies, researchers, fisheries management, chefs, bankers, NGOs including MSC, WWF and Conservation Councils, public policy personnel and scientists.
2. A desktop study of the history, the papers, strategic plans, consumer market research and general media which constitute opinion and fact on the WRL's MSC certification and its relationship with MSC.
3. A telephone interview series with a further range of industry participants. These elements have been drawn together to compile this report, which will provide a resource for all fisheries entering MSC full assessment and forms an important element for future engagement.

6.2 Results

Across 40 interviews undertaken through phase 1, the WRL industry participants convincingly agreed to the renewal of the MSC certification for 2017-21. This view was based on the community acceptability of

MSC, the third-party certification status, the need to stay with MSC for market access and that it provides economic confidence and an insurance for the industry. These key benefits of the MSC certification are outlined below.

Market Benefits – Including Market Penetration and Access

- An insurance or ‘future proofing’ for the industry: should there be a glitch in the lucrative Chinese market, MSC certification provides a sound backup as most other markets recognise and value certification as a ‘ticket to the game’.
- MSC will become more important in the long-term as the Chinese population becomes more affluent and westernised and seeks more environmentally certified credentials on products it consumes.

Economic Benefits

- Industry certification provides economic confidence and puts the finance sector’s mind at ease that industry is seen to be on the front foot to monitor the sustainability of their industry, thus reducing the risk of a supply failure. One bank identified that MSC certification provided confidence to maintain appropriate lending margins over other fishing industries that are perceived to have greater risks. This translates to a direct industry financial benefit.
- There are potential savings through equivalent work undertaken by industry and fisheries which will see benefits accrue to other fisheries by reduction of certification costs, reduced duplication of *Environment Protection and Biodiversity Conservation Act 1999* reviews and access to international research.
- MSC certification in the WRL Fishery has been a strong contributor for allowing access to the growing areas of marine parks off the WA coastline.

Social Benefits

- Greater public confidence in the WRL Fishery as sustainable because of their MSC certification. The controls and balances set by Government are aligned with the MSC Standard, which also ensures the fishery is well managed.
- Future sustainability and risk can be managed with quota and conducting further research to address industry concerns such as warming oceans and forecasting lobster stock assessments.
- Environmental and animal welfare concerns including seal entrapment in pots and whale entanglements can significantly attract negative publicity to the industry which can have detrimental impacts on export markets. Having an independent body that is identifying and managing such concerns is highly valuable.

Political Benefits

- Improved Government confidence in the WRL industry shields the industry from political debate.
- Industry feedback identified that MSC has improved sustainability measures and has ‘raised the bar’. It gives the public and Government confidence that the fishery is being managed responsibly and protects it from questioning from environmental NGO.
- The industry has reaped rewards through advantages in the political arena and through maintaining access to fishing grounds subsequently reserved as marine parks and reserves.

Scientific Benefits – Including Research, Development and Extension

- Provides direction and priority for research in the fishery.
- An ability to identify and proactively manage issues in the fishery.
- The value of having a rigorous stock assessment and harvest strategy (e.g., the levels of breeding stock and fishing effort/exploitation), provides a check that the scientific research and advice is as accurate as possible, because it has been independently reviewed and is world’s best practice.

- An improved understanding of the fishery's impact on the wider ecology, e.g., impact of pots on the seabed (including corals), impact on by-catch species (e.g., octopus, finfish) and endangered species (e.g., sea lions, turtles, whales).
- DPIRD believes third-party MSC certification will build on their strong record in fisheries management and provide a range of benefits to the WA community and local fishing industry.
- Improved consultation arrangements with all stakeholders during the development and implementation of management arrangements means better relationships with partners such as DPIRD, the recreational fishing sector and conservationists.

Management System Benefits

- Improved overall governance of the industry.
- Delivered improved practices through the rigorous review of each stage of production and harvest.
- Assurance to a wide range of stakeholders and other fisheries resource users that WA's commercial fisheries are sustainably managed to international standards.
- Better understanding of the relationship between WRL and their inter-dependencies for shelter and food which provides insight into the carrying capacity of reef systems. This has ensured management arrangements maintain lobster abundance so catch rates and profit margins are maintained at good levels.

Supply Chain Assurance (for Health and Traceability)

- MSC plays a valuable role in environmental stewardship as it gives the WRL industry credibility in terms of environmental management and community confidence in its sustainability.
- Greater confidence amongst fish buyers that the seafood they are purchasing is sustainably fished.
- Providing a basis to develop stronger partnerships with regional tourism.
- Major supermarkets and overseas retailers are increasingly requiring an assurance system. Whilst not currently a front of mind issue, given China's strong market and low requirement for compliance, if the demand for compliance grows, it is essential to demonstrate an independent tick of approval: MSC provides this.

Recommendations

Furthermore, the report made 11 recommendations to industry to consider regarding MSC certification. These included:

1. The Western Rock Lobster Council (WRLC) invests in MSC re-certification for 2017-21.
2. WRLC to make its members aware of the potential discount on lending margins applied by some financial institutions due to MSC certification. WRLC, WAFIC and DPIRD to provide seminars to financial institutions on the investment benefits of a MSC certified fishery which will build on the WRL Fishery and include other WA fisheries.
3. WAFIC and WRLC to negotiate with MSC to include a communications strategy in the renewal of the MSC re-certification for 2017-21, and for other WA fisheries in the MSC program. Engagement with harvesters and processors is paramount.
4. In renewing a contract to re-certify, WRLC undertakes an internal consultation to determine gaps in performance indicators which the fishery must meet and seek to integrate where appropriate.
5. WAFIC invests in continuity of personal representation at the MSC Stakeholder Council, and membership of the Association of Sustainable Fisheries.
6. WRLC, DPIRD, MSC, Department of Commerce and WRL processors work collaboratively to optimise a long-term market in China and monitor the return for MSC brand management, and potential development of an 'Australian Lobster' brand to differentiate a premium offer.
7. WAFIC and WRLC to work with DPIRD to invest and optimise the research and development investment in all parts of the industry. DPIRD remain as lead coordinator of the MSC re-certification and annual audit process on behalf of WRLC.

8. WRLC to undertake an internal discussion on animal welfare to understand the issues and implications. Develop and implement protocols to manage the issues. This may or may not be in conjunction with MSC certification.
9. In undertaking re-certification, WRLC to set clear agreements with MSC regarding the marketing program to bring MSC to the forefront. Develop joint marketing and communications strategies. Develop performance measures and reporting networks that promote MSC.
10. WRL fisheries social licence to operate. WRLC to develop a month-long WRL festival with affordable products across WA to create awareness and domestic support and recognition for the industry.
11. WRLC to look at alternate industry funding by creating a short-term (three years) collection from harvesters, to create a long-term sustainable reserve for the industry's future.

For additional details on the independent cost-benefit analysis of the MSC certification for the WRL Fishery refer to Appendix 7.

6.3 Discussion

Consumer purchasing habits are continuously evolving alongside a growing global demand for safe, environmentally friendly, sustainable, and ethically sourced food. The recent 2022 Environmental Performance Index offers a sustainability scorecard that when using 40 performance indicators for 180 Countries, Australia was ranked 17 in the world, with Europe and the UK topping the charts (Wolf et al, 2022). As detailed in section 7.2, UK retailers have collectively doubled the number of certified products available to consumers between 2015/16 and 2019/20.

One of the recommendations from the cost-benefit report highlighted the shortfalls in promoting the WRL MSC certification to the broader WA community and the need for an 'Australian Lobster' brand. It also recommended the development of a month-long WRL Festival with affordable products across WA to create awareness, domestic support, and recognition for the industry.

Some of the results from this report may also be an unintended consequence of the successful export market, limiting the local supply of WRL in WA and a broader understanding of the world leading sustainability credentials the WRL Fishery holds.

A change in legislation in 2020, to allow commercial WRL fishers to sell a set number of lobsters per day directly from the back of boat to supply local restaurants, fresh fish retailers and the public, may have assisted in capturing the domestic market and consumer demand for WRL within the local community. Since this concept was first initiated more than 160,000 lobsters have been sold straight to the consumer, promoting the commercial fishing industry, the sustainability of the product and developing a relationship between the consumer and fisher (Government of Western Australia, 2022).

The broader fishing industry, and in particular those fisheries already MSC certified, could explore and leverage off the learnings from back of boat sales. Selling direct to consumers can help manage the growing community demand to consume safe, environmentally friendly, sustainable, and ethically sourced food and help support the fishing industry's social licence to operate.

The cost-benefit analysis of the WRL Fishery also found there was a potential discount on lending margins from some financial institutes as a direct result of the MSC certification. With fishers supporting reinvestment in the MSC re-certification program, there are further opportunities to explore in capturing this potential lending margin discount and provide certainty in ongoing investment in the fishing industry. According to the World Bank (2023) improved fisheries management and protection of key habitats can help restore the productivity of oceans and generate benefits worth billions of dollars, while ensuring future growth, food security and jobs for coastal communities.

The importance of the ocean is recognised now more than ever and will play a key role in addressing climate change. The World Bank's Ocean portfolio exceeds \$7 billion in active projects, including

sustainable fisheries and aquaculture, circular economy, sustainable coastal tourism, maritime transport, and offshore renewable energy (World Bank, 2023). WA's fishing industry needs to leverage off its sustainability credentials more broadly to attract investment and ongoing support from financial lending institutes.

7 MSC Chain of Custody and stakeholder engagements that optimises community recognition and appreciation of third-party certified seafood

The journey from ocean to plate may involve many stages and supply chains before reaching the end point. For some fisheries, the supply chain can be very complicated and for others very simple. The MSC CoC Standard ensures that products are traceable and separated from non-certified products. This means for certified products to carry the MSC label, every company in the supply chain must have a valid CoC certificate.

To be certified, businesses are also audited by independent certifiers. CoC is an important component for MSC as it derives revenue and delivers long-term financial viability. In this project the CoC uptake in seafood retailers and restaurants, displaying the MSC ecolabel, was thought to generate the most significant impact in delivering the MSC message to consumers.

Mislabelling is a well-known issue, and it can be challenging to locate reliable information about seafood origin due to the complicated international supply chains for majority of seafood products. Ideally, seafood labels should provide verifiable information about the species, the primary fishery, the nation of origin, and sustainability information. All businesses in the supply chain that desire to handle or sell an MSC certified product with the MSC ecolabel on consumer-ready packaging must have MSC CoC once a fishery has received certification. This way, every link is checked to make sure the MSC label is only displayed on seafood from a MSC certified sustainable fishery. As there are costs associated with CoC through royalty payments to MSC and annual licencing fees, to encourage the benefits of CoC in WA, a cost-effective solution needs to be investigated that could support smaller retailers and restaurants to gain CoC.

In 2014, this objective was modified as MSC was undertaking a systematic review of the CoC program with an aim to improve the accessibility and consistency of the CoC Standard and requirements. The outcome was to ensure the CoC program addressed important sustainable seafood traceability challenges within the industry and delivered an integrated standard that provides greater clarity, consistency, and integrity. As a result of this review MSC developed a suite of [supporting documents](#) so the objective was modified.

This project explored options on developing and testing a new framework to enable independent retailers and wholesalers to gain CoC in a more cost-effective manner, by acting as a group entity for end-of-supply-chain partners. The revised objective would assist MSC meet part of the requirements of the new framework.

At the time, major Australian supermarkets, retailers, and restaurants were primarily making decisions on behalf of consumers, so the promotion of MSC CoC and the recognition on the MSC certification and seafood su was going to be a challenge. The concepts effectively working in Europe could not be easily applied to WA, due to number of factors including health codes, fisheries management arrangements around the sale of seafood products and the limitation of not having a large finfish fishery certified in WA. It also highlights the need to work with stakeholders across the supply chain to achieve the benefits of third-party certification.

7.1 Methods

The uptake of CoC and displaying the MSC ecolabel in seafood retailers and restaurants, will deliver the most significant impact in promoting sustainable seafood to consumers. Part of this project is to progress

CoC in WA. Prawns are the most popular, regularly itemised item on local menus in WA and therefore it may drive the hospitality sector to take up CoC.

To stimulate discussion and attendance at meetings, a CoC scenarios paper was developed and presented to industry (Details found in section 7.2).

Two frameworks were considered for development to enable independent retailers and wholesalers to gain CoC in a more cost-effective manner:

1. The UK ROC Group – this group was established primarily to target fish and chip shops that sell high volume, low value frozen fish such as Cod and Haddock. The group had been running for 12 months in the UK and had been successful in sourcing lower cost options for small restaurants and caterers in getting CoC MSC certification. 23 sites received CoC MSC certification through this model. The estimated cost saving in this model was between 50-66 percent for those restaurants that have MSC CoC certification (UK ROC Group, 2015).
2. Create a WA version of the UK Roc Group, with WAFIC or another entity taking on the CoC group role and running it as part of an MSC outreach program. The money generated from providing the group CoC may fund, wholly or in part, the appointment of a staff member to manage the service. The person may also be able to provide additional MSC community education and promotional support.

WAFIC approached a range of consulting companies to explore how to implement a CoC framework for WA, similar to the UK ROC Group. The concept for a CoC group program to reduce barriers for restaurant was developed and named the Trac Group.

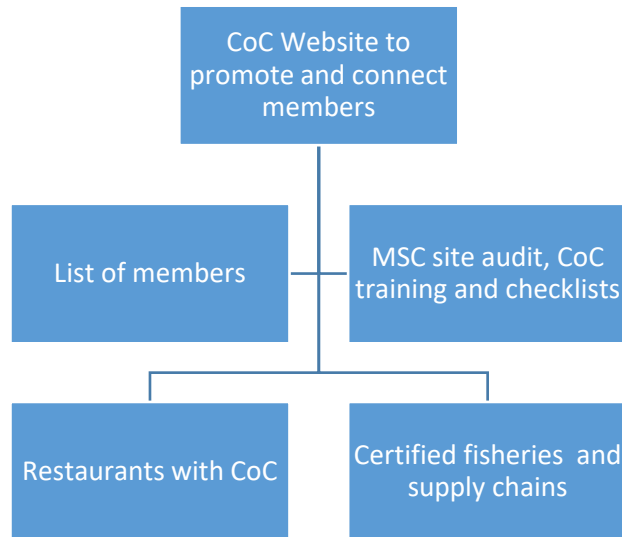
Through a series of workshops and meetings, the proposed formats were presented to supply chain representatives from certified fisheries from across the industry. The prawn sector was selected to work through developed CoC scenarios to trial the program. The cost efficiencies for restaurants to take up MSC CoC, recognised that 10 certifications in a block was expected to be cost effective, so for this concept to be a success and implemented, the supply chain from fishing vessel to consumer had to be all linked by MSC CoC. This could include wholesalers, retailers, and restaurants to feature MSC certified product.

7.2 Results

The framework program concept would mean, as a fishery is certified in WA, the fishing industry would have access to a visible supply chain to the consumer that can be marketed to increase consumer awareness and sales of locally sourced and sustainable fish.

The Trac Group developed a CoC concept program, which was the first of its kind in Australia (Appendix 8). The program however would only be effective if it was well designed, implemented and maintained by dedicated staff who had knowledge of the certification requirements and understand of the fishing industry and supply chains.

The Trac Group model in summary is made up of the following:



Together, the Trac Group program and the different CoC scenarios were presented to industry to help producers understand CoC options and associated costs of audits, licence fees, and royalties payable to MSC (Table 5).

Table 5. The different CoC scenarios presented to industry.

Scenario 1 – Use of MSC ecolabel in business to business (non-consumer facing)	
<pre> graph LR Boat[Boat] --> Wholesaler[Wholesaler] Wholesaler --> Restaurant[Restaurant] </pre>	
<p>Prawns packed on board vessel in 10kg cartons with the MSC logo on the carton.</p> <p>The carton goes unopened directly to restaurant or through a wholesaler to restaurant. The carton is not opened anywhere in the supply chain until it gets to the restaurant.</p>	
Cost	<ul style="list-style-type: none"> • Licence logo annual fee payable to MSC by the fishing company. • No MSC royalty fee required to be paid by the fishing company.
Benefit	<ul style="list-style-type: none"> • Logo printed on the 10kg and 5kg carton – chefs know it is from a sustainable fishery. • Brochures promoting the fishery – brochures can be inserted in cartons to explain MSC. • Used on website – informing seafood consumers. • On crew uniforms – crew and local pride, logo featured in any promotional photographs.
Outcome	<p>Getting restaurants to use the logo on menus under this scenario 1:</p> <p>While the chefs will know the product is MSC certified, the restaurant can't use the logo on its menu unless it has entered into a separate licence agreement with MSC. The restaurant must also purchase the prawns from a wholesaler that also has a MSC CoC certificate.</p>
Scenario 2 – Business to consumer facing	
<pre> graph LR Boat[Boat] --> Wholesaler[Wholesaler] Wholesaler --> Retailer[Retailer for sale in frozen 3kg carton - consumer facing] </pre>	
<p>3kg carton packed on board in tamper proof carton that goes to retailer either directly or through wholesaler to retailer to be sold as a frozen carton of whole prawns.</p> <p>The 3kg carton will be sold as is, it will not be opened, and prawns will not be sold on fresh fish counter.</p> <p>MSC definition – the retailer buys pre-packed consumer ready product with the MSC ecolabel that will not be tampered with or relabelled in any way.</p>	
Cost	<ul style="list-style-type: none"> • MSC royalty fee paid by the fishing company as the product is packed into final tamper proof format on board – the fishing company can be the licence holder and pay the subsequent annual fee and royalty fee.

	<ul style="list-style-type: none"> The fishing company pays MSC royalty.
Benefit	<ul style="list-style-type: none"> Regardless of whether a wholesaler or retailer has CoC, the MSC logo will identify prawns as MSC certified to seafood consumers.

Scenario 3 – Business to consumer facing



10kg carton (with MSC logo on it) is sent to retailer who thaws and sells on fresh fish counter.

For the MSC logo to appear on prawns at the fresh fish counter:

- The wholesaler must have MSC CoC.
- The retailer who sells the prawns must
 - Have MSC CoC.
 - Have paid for an audit by third-party to MSC CoC Standard.
 - Agree to pay an annual fee to display the logo on the fish counter.
 - Pay a royalty on purchases – wholesale price of prawn.

Cost	<ul style="list-style-type: none"> MSC royalty fee and logo licencing fee to be paid on wholesale costs of prawns by either the wholesaler or retailer if the logo is to be used on the fresh fish counter. No additional fees to be paid by the fishing company.
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Scenario 4 – Business to consumer facing



10kg carton sent to wholesaler who re-packages into smaller packages from cartons originally packed on board the vessel. They are re-packaged to smaller consumer frozen packs e.g., 1kg or 500g vacuum pack.

For the MSC logo to appear on prawns in the freezer section of retailer:

- The wholesaler must have either MSC CoC or have been audited to demonstrate CoC.

<ul style="list-style-type: none"> The wholesaler who re-packs prawns and puts the MSC logo on the package is responsible for MSC royalty payment. 	
Cost	<ul style="list-style-type: none"> A fishing company would: <ul style="list-style-type: none"> Pay audit cost for CoC of the processing/wholesaler facility. Pay royalty fees on their sales. Logo licence cost already covered under annual fee agreement. An independent wholesaler that repackages prawns would: <ul style="list-style-type: none"> Pay audit costs for CoC. Pay logo licence annual fees. Pay royalty fee on sales.
Benefits	<ul style="list-style-type: none"> If vessel to wholesaler/producer products display the ecolabel on carton, then fishing company is the licensee and pays the annual fee only as products are non-consumer facing at this stage. If wholesaler/producer to consumer products then repacks into consumer facing retail packages, then each wholesaler/producer acts as licensees as product format has changed and pay annual fee and royalty fee as products are now consumer facing retail.
Scenario 5 – Business to overseas to non-consuming facing	
<pre> graph LR Boat --> FishingCompany[Fishing Company Facility] FishingCompany --> Transport1[Transport] Transport1 --> ProcessorOverseas[Processor Overseas] ProcessorOverseas --> Transport2[Transport] Transport2 --> Wholesaler Wholesaler --> Restaurant </pre> <p>10kg carton sent overseas for processing and returned as peeled raw or peeled cooked, re-packaged, distributed by wholesaler to restaurant or retailer.</p>	
Cost	<ul style="list-style-type: none"> A fishing company would: <ul style="list-style-type: none"> Pay for the audit of the international processor (or processor pays own audit costs). Logo of packaging (no charge already covered). No charge going to non-consumer facing.

Scenario 6 – Business to overseas to consuming facing

<pre> graph LR A[Boat] --> B[Fishing Company Facility] B --> C[Transport] C --> D[Processor Overseas] D --> E[Transport] E --> F[Wholesaler (Australia)] F --> G[Retailer for sale on fresh fish counter] </pre>	
<p>10kg carton sent overseas for processing, and returned as peeled raw or peeled cooked, re packaged, distributed by wholesaler to retailer.</p>	
<p>Cost</p>	<ul style="list-style-type: none"> • A fishing company would: <ul style="list-style-type: none"> ○ Pay for the audit of the transport and international processor (or choose companies that already have MSC CoC). ○ Logo on packaging (no charge already covered). ○ No royalty payable – retailer pays if they display MSC logo.
<p>Scenario 7 – Business to consuming facing</p>	
<pre> graph LR A[Boat] --> B[Fishing Company Facility] B --> C[Processor Overseas] C --> D[Wholesaler (Australia)] D --> E[Retailer for sale in frozen packages] </pre>	
<p>10kg carton sent overseas for processing, and returned as peeled raw or peeled cooked, re packaged, distributed by wholesaler to retailer in frozen packages with MSC logo on packaging.</p>	
<p>Cost</p>	<ul style="list-style-type: none"> • A fishing company would: <ul style="list-style-type: none"> ○ Pay for the audit of the transport and international processor (or choose companies that already have MSC CoC). ○ Logo on packaging (no charge already covered). ○ Pay royalty based on sales of pre-packaged frozen prawns. In this example, the company placing the product into final consumer ready format would act as the licensee, so unless the wholesaler does any repacking, this is usually the overseas processor i.e., China, which we frequently see. They have their own licence agreement and pay annual fee and royalty.
<p>Scenario 8</p>	
<p>An MSC fishery that chooses not to take out logo licence agreement can't use the MSC logo on any packaging.</p> <p>However, with design approval from MSC, can use the logo to promote the fishery in general as MSC certified – e.g., on websites, in promotional material.</p> <p>There is provision for associations to use the logo at no charge to promote the fact that the fishery is certified – e.g., websites, newspaper ads, and posters.</p>	

Details on the MSC logo licensing annual fee and the royalty fee paid to MSC are available via <https://www.msc.org/>.

As an outcome of these meetings there was limited interest in engaging with restaurants and being part of a trial to establish a more cost-efficient framework for CoC. The main driver for not taking up CoC was the lack of demand in the supply chain for local wholesalers, retailers, and restaurants for MSC certified product. With these learnings, the expected CoC outcomes were not achieved. Feedback from industry and stakeholders noted that they were more likely to embrace CoC in response to market demand. As detailed in Section 5.3.2.1 (Case Study – Peel Harvey Estuary Blue Swimmer Crab Fishery), some industry members took up CoC initially, before experiencing no benefit in CoC and decided to not validate the CoC certificates.

The outcome for CoC expansion was also not achieved, as WA had not yet managed to get a large-scale finfish fishery certified, despite DPIRD progressing them through a FIP program. The Trac Group program, as like the UK Roc Group approach, relied on a supply of finfish to promote the program through targeted seafood restaurants such as fish and chips shops.

At the time, it was anticipated that a WA large-scale finfish fishery under assessment would take between 1-2 years to achieve MSC certification. However, at the time of publishing this report, none of the large-scale finfish fisheries have gone beyond the preassessment process. Therefore, using the UK Roc model and progressing the Trac Group program, which showed some early success in cost savings to fish and chips shops, was not possible to replicate in WA.

The MSC promotion campaign included a seafood dinner at Parliament House, showcasing to State Government Political leaders not only the importance of the WA commercial fishing industry, but the high-quality seafood, including MSC certified products, it supplied to local, intrastate, and overseas markets. Part of this project was to try and get Parliament House to have MSC CoC, which potentially would show bipartisan support. However, after a range of negotiations, including a reduction in fees from MSC, the Catering Manager at the time deferred progressing MSC CoC.

Current in 2023, 15 suppliers in WA have MSC CoC certificates. Four suppliers have stopped using CoC and Two restaurants in WA had CoC, with one restaurant no longer using CoC.

7.2.1 UK/Ireland Case Study

The assessment of consumer trends and MSC certified fisheries in Section 5 acknowledged that significant benefits are still to be realised in WA. Despite this, fisheries continue to seek certification for the social licence and community recognition which is gained. The assessment of community perceptions highlighted limited consumer awareness and understanding as a key barrier preventing the full scope of benefits to be realised in Australian markets.

On a global comparison, independent research into European consumer trends revealed almost half of consumers notice ecolabels when shopping (45 percent) compared to 27 percent in Australia (Appendix 9). MSC awareness is also high in Europe, with the highest levels of awareness seen in Switzerland (76 percent), Austria (65 percent) and Germany (65 percent), while only 31 percent of consumers recognised the label in Australia (Figure 19). These findings support WA industry member experiences as detailed in Section 5.3.2.1 (Case Study – Peel Harvey Estuary Blue Swimmer Crab Fishery) where only European customers (who are either travelling or moved to Australia) were well educated on the MSC brand and logo.

MSC awareness in European countries compared to Australia

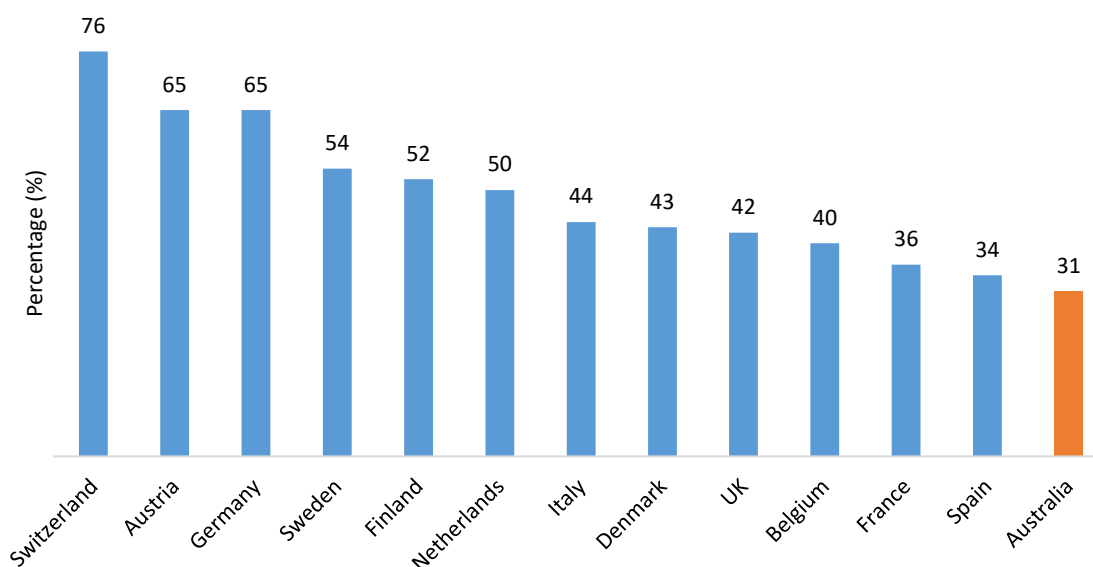


Figure 19. MSC awareness of consumers in European countries in comparison to Australia (orange) (© Understanding and Activating Seafood Consumers Europe – Appendix 9).

A 2020 market report on MSC in the UK and Ireland (Appendix 10) showcases the leadership of European markets in sustainable seafood and provides some reasoning behind this increased awareness. Notably, the UK and Ireland has seen incredible growth of MSC certified seafood by more than tenfold between 2009 and 2019, with an expanding number of MSC certified products and menu offerings now available to consumers.

“In 2019, for the very first time, consumer spend on MSC certified seafood products in the UK and Ireland exceeded £1bn, increasing by 12 percent from 2018 to £1.2bn. In 2020, consumer spend on certified sustainable MSC fish and seafood in the UK and Ireland has grown a further 16 percent to £1.3bn. This growth in MSC product sales has been driven by increased engagement with the MSC program across supply chains. Between January 2015 and January 2020, the number of businesses in the UK and Ireland certified to MSC’s Chain of Custody Standard increased from 230 to 300.

As the sales of MSC labelled products have grown, so too has the volume, which surpassed 174,000 tonnes in 2019/20. Supplying more MSC labelled products into the UK and Irish market has been made possible by an increasing number of certified source fisheries. These fisheries represent an ever-expanding diversity of species, which is reflected in the range of sustainable seafood options now available to consumers; in the last 5 years the number of species sold bearing the blue ecolabel increased from 33 to 47, while the number of certified consumer-facing products doubled from 807 to 1629” UK and Ireland Market Report 2020 – Appendix 10.

Comparative data from the Australian market (as of March 2023) shows the number of valid CoC certificates in Australia is 62 and the number of MSC labelled products sits at 345 (MSC, 2023). The significant difference in MSC certified products and menu offerings demonstrates the limited visibility and public profile of MSC in the Australian community and marketplace. The UK and Irish industry are continuously looking to optimise the future growth of MSC labelled products through ‘Project UK’. This project is a collaboration between the supply chain and fisheries to drive fisheries improvements towards a status where entering an MSC assessment could be viable, and in turn, improving the availability of other species in the market.

Retail

In response to growing consumer demand for sustainably sourced seafood, UK retailers have collectively doubled the number of certified products available to consumers between 2015/16 and 2019/20 (Appendix 10). The UK's retail landscape notably has much greater complexity with ten leading retailers. Of those ten, the top six MSC retailers in the UK sold 70 percent or higher of their range of wild-catch seafood products with the MSC label including Aldi, Coop, Lidl, Waitrose, Tesco and Sainsburys (Appendix 10).

Comparatively, Australia's traditional duopoly-based retail market consisting of Coles and Woolworths has not historically had retail competition. Previously in 2011, Coles and Woolworths both developed policy towards only sourcing MSC certified seafood. However, it was quickly realised that Australia had limited volume of MSC certified seafood. Coles and Woolworths have since modified their policies to encompass responsible seafood sourcing broader than MSC products. The recent emergence of MSC aligned retailers such as Aldi and Tesco in the domestic landscape will likely disrupt this duopoly. Aldi's leadership in this space was recognised at the 2023 Sustainable Seafood Awards Australia when they won the 'MSC Best Sustainable Seafood Supermarket' for their wide range of everyday affordable and accessible MSC-labelled products and their continued commitment to ocean health.

The MSC label has also increased in popularity in the UK and Ireland food service sector, as more businesses achieve MSC CoC certification for their menus. The volume of certified seafood sold peaked at just over 7,000 tonnes in 2019/20 equating to over 47,652,941 portions of fish (Appendix 10). By using the MSC ecolabel next to seafood dishes, businesses can confidently and credibly inform their customers they are making sustainable choices when dining out and ensures everybody in the community can play a part in securing a healthy future for our oceans.

While In WA, a very large portion of certified products are not labelled with the MSC logo. The fisheries have passed every certification assessment, they could put a label on it, but the end user is not paying for the final CoC certification. Using the logo in-store on products, packaging and menus is considered the highest level of participation, however this has not proved to be worth the high price tag for many WA supply chains. The result, as evident in Chapter 5, is a massive consumer base that does not recognise the MSC blue tick logo or understand its value.

7.3 Discussion

The Trac Group program was only going to be successful if it was implemented and maintained by dedicated staff who have knowledge of the certification requirements and understand the fishing industry and supply chains. During this project the UK ROC Group also failed, as the dedicated person driving the program took on other commitments and it simply stopped working. The lack of success in CoC was attributed to not having a large-scale finfish fishery MSC certified.

As detailed in Section 7.2.1, the UK has experienced a growing consumer demand for sustainably sourced seafood, effectively resulting in doubling the number of certified products available to consumers between 2015/16 and 2019/20. In Australia, Coles and Woolworths have had limited retail competition and could implement and modify policies to match their buying capability. However, the recent emergence of MSC aligned retailers such as Aldi and Tesco in the domestic landscape, has the potential to change consumer demand for sustainable sourcing standards and polices, which may extend the need for third-party certification.

Australian retail leaders are all now promoting their sustainability credentials, as summarised below:

- [Coles states](#) that it is keenly encouraging their major brand suppliers to assess their own sustainable seafood practices.
- [Woolworths states](#) it wants to ensure that all their seafood comes from sustainable sources and in the long-term they want to have all their wild-catch seafood range be certified by MSC.

- [Aldi states](#) it makes sure that consumers are made aware of MSC certified seafood products. They take this topic seriously as sustainable seafood and fish products are part of their Corporate Responsibility goals.
- [Tesco states](#) that they are committed to playing their part to protect the world's oceans and fish stocks, whilst ensuring that customers can enjoy great quality fish at affordable prices.

There are also some major restaurant/fast food chains committing to MSC certified products and MSC CoC, including:

- [IKEA](#) restaurants and Swedish Food Markets around the world, where majority of seafood products sold and served are MSC or ASC certified.
- In the United States, Canada and Europe [McDonalds](#) restaurants, all whitefish served in their restaurant is certified and they have MSC CoC traceability standards. With this experience, there is an opportunity to encourage McDonalds to roll out MSC CoC traceability standards to Australia.

Within the Australian market the number of valid CoC certificates is only 62 and the number of MSC labelled products sits at 345 (MSC, 2023). The significant difference in MSC certified products and menu offerings reflects the limited visibility and public profile of MSC in the Australian community and marketplace. With the major supermarkets, retailers and restaurants in Australia primarily making decisions on behalf of consumers, the promotion of CoC and the recognition of the MSC brand is an ongoing challenge, as consumers have learnt to trust their seafood suppliers and expect them to source sustainable seafood. However, an increase in major retailers creating competition in Australia, may reach a critical point that will see independent certification fully recognised by the broader community.

8 Key Findings

At the time of this report's publication, 12 WA fisheries have attained MSC certification, representing more than 90 percent of fisheries by value and approximately 60 percent of the state's total commercial catch. As detailed in the Communication Plan in Appendix 1, the long-term success of MSC would be judged on the value and number of certified fisheries, and how well the MSC model is embraced through the supply chain. It is essential that MSC's ecolabel is regularly seen on certified seafood, and appreciated by consumers, thus generating community confidence in WA fisheries and their management.

Globally, buyers in major markets have made strong commitments to purchase sometimes up to 100 percent of their wild-catch seafood products from independently certified fisheries, and these commitments are increasing. These purchasing preferences increase the global demand and market access for certified sustainable seafood and provide the critical incentives needed for fisheries to undergo the rigorous and transparent assessments required in the MSC program.

Through this program, WAFIC aimed to increase consumer awareness and engagement with the MSC brand, its sustainability values and retail appeal as a high-quality, sustainable product. Secondary communications targeted commercial fishers and focused on increasing understanding of MSC certification and analysing the associated cost and logistics, so commercial operators can make informed decisions before joining the program.

The consumer surveys generated valuable insight about the current social acceptability of Australia's fishing industry. There is growing support amongst Australian consumers to make more sustainable food choices, but they are currently limited by knowledge and a lack of information. As sustainable consumption becomes a norm amongst consumers, enabling it needs to become a priority.

To extend the application of MSC in WA and maximise long-term benefits, it is essential the visibility and awareness of the brand and logo grows in the community and marketplace. Surveys revealed CoOL and independent certification provided a level of comfort and confidence in the origin and overall sustainability of consumer-facing products. This presents an opportunity for the fishing industry to build a public profile that increases community awareness whilst satisfying consumer preferences for Australian-made and sustainable produce.

The MSC focused event campaign undertaken in parallel with this project resulted in some outstanding achievements, in particular the creation of a seafood ambassador role to promote WA seafood and MSC through cooking demonstrations, distribution of recipe cards and video stories around industry and the concept of fisher to plate journey (Table 2, Section 4.5).

The UK/Ireland Case Study (Section 7.2.1) showcased Europe's leadership in promoting MSC in consumer markets to power market incentives for certified fisheries. In Australia, the additional requirements to certify MSC products through a CoC certification has proven costly and difficult to implement, meaning a large portion of MSC-certified products are not marketed with the logo. Building the MSC 'brand' in marketplaces and supply chains should become a high priority in the future with more pro-active advertising of the logo and associating it with global best practices in fishery management.

8.1 Challenges with MSC

Based on the outcomes from this project and learnings over the last 10 years, there are challenges that need to be considered to enable the future extension of MSC certification in WA.

1. Ongoing costs to the fishing industry

The success of this project was not possible without the financial commitment made by Government in 2012 and the ongoing support for fisheries to obtain MSC certification. The ongoing financial costs to industry in maintaining its certification is becoming a challenge. These ongoing financial costs are primarily attributed to annual surveillance audits and implementing changes to fishing operations to address MSC conditions. This challenge is particularly relevant for smaller fisheries when the financial gain of being MSC certified has not resulted in economic benefits.

2. Client representation

As part of MSC requirements, when a fishery goes through the certification process, there is an assigned Client. In WA, WAFIC is the Client for four out of the 12 MSC fisheries, whilst licence holders (collectively), relevant fishing associations and/or other sector bodies are the Client for the remaining eight fisheries.

The role of the Client is to liaise, co-ordinate and collaborate with Government (management, compliance, and research), CAB, relevant licence holders and the community, on behalf of the certified fishery to achieve and maintain certification. This includes facilitating annual surveillance audits and re-certification processes, developing, and implementing Client Action Plans to address fishery conditions, maintain audit contracts and administering invoices, as well as promoting the social benefits of MSC certificated fisheries with the local community. This Client role is often resource and administrative intensive and requires personnel with extensive working knowledge of MSC and the fishing industry to maintain certification requirements.

3. Changes to MSC Fishery Standard

The MSC Fishery Standard is reviewed every five years by MSC with the aim to reflect the evolution and uptake of good fisheries management practices and address stakeholder concerns. The intent for undertaking a review of the Fishery Standard and the need for continual improvements is understood by industry, however there are broad concerns amongst stakeholders that the increased expectations and costs associated with new standards may not be achievable.

If the MSC Fishery Standard is eventually considered unachievable by industry, and the overall costs of certification outweigh the benefits, it may result in fisheries withdrawing from the MSC program.

4. Understanding cost versus benefit

Understanding the cost versus benefit of a fishery to be MSC certified has not been fully grasped by industry, particularly in small-scale fisheries. Since WA invested in MSC, the true cost versus benefit outcomes is yet to be realised and requires further extension. More recently, MSC certification is a useful tool to ensure the fishery is given a higher level of priority within Government and to foster social acceptance within local communities to continue to operate. Additionally, having MSC certification has been used as justification during resource access and catch share arrangements with other marine sectors, such as the oil and gas and offshore renewable energy sectors acknowledging MSC certified fisheries. Further studies are required to quantify whether these emerging institutional and social benefits justify the certification costs.

9 Recommendations

There are six recommendations which can extend MSC's application in WA fisheries and maximise market and non-market benefits accruing to certified fisheries. These recommendations are necessary to improve the visibility and awareness of the MSC brand and ecolabel in the community and domestic marketplace.

1. Governments globally are increasingly investing in the development of policies, including funding mechanisms, to assist industry to pursue fisheries eco-certification to demonstrate their stewardship credentials and sustainability. Whilst the WA Government had the foresight to invest in a certification program in 2012, the shortfalls in influencing consumer perceptions suggest a need for an updated policy which outlines strategic priorities and communication strategies to expand third-party certification and raise community awareness of sustainable seafood.
2. The 2019 national community perception survey provided the first indication of a significant rise in the perceived sustainability of Australia's fishing industry. This rise coincides with strategic efforts to promote MSC to the broader community as presented in this report. A follow-up survey which explicitly explores the role of ecolabelling on influencing community perceptions of sustainability is recommended. This can help drive future strategic priorities for Government and industry to raise the public profile of Australia's fishing industry.
3. Understanding the cost versus benefit of MSC certification has not yet been fully grasped by industry. Since research was completed on the impacts of sustainable seafood certification in WA, four additional fisheries have achieved MSC certification and were not included in the impact analysis including WA Octopus, WA Sea Cucumber, Abrolhos Island and Mid-West Scallops, and RFA's enhanced Greenlip Abalone. An updated analysis that includes all current certified fisheries would improve the broader understanding of cost versus benefits accruing to WA fisheries.
4. The broader fishing industry could explore and leverage off the learnings from WRL back of the boat sales. Selling direct to consumers could act as a solution to improve community perception on production of safe, environmentally friendly, sustainable, and ethically sourced food and help support the fishing industry social licence to operate.
5. As CoOL in Australia progresses, there is an opportunity to link CoOL and MSC CoC certification. Through this link a new CoC trial group could be developed to progress cost-effective approaches for restaurants, retailers, and supply chains to take up MSC CoC as a potential off the shelf approach to CoOL. This could also leverage off new retail competition which could potentially influence and/or change the market to promote sustainability credentials.
6. All commercial fisheries in WA were subject to MSC preassessments in 2015 under MSC Standards 1.0. Since these preassessments were done, the MSC Standards have been revised significantly and are now at version 3.0. With the support of DPIRD, there is then an opportunity to target select fisheries with a realistic objective in achieving third-party certification and undertake a focused gap analysis to provide a basis for a FIP program, to assist in progressing and expanding certification in WA in line with MSC Standard 3.0.

10 Further Development

This project offers some key learnings, case studies and opportunities to improve the commercial fishing industry MSC certification status. Ongoing extension of the information presented in this report, with a scope to review and improve progress with the MSC program is important to WA and the fishing industry.

As detailed in Section 7, the uptake of CoC in WA was significantly limited by the inability to certify large-scale finfish fisheries. Plans to expand CoC relied on a supply of finfish to demonstrate value in the MSC program through targeted seafood restaurants such as fish and chip shops. However, at the time of publishing this report, none of the large-scale finfish fisheries had progressed beyond pre-assessment despite DPIRD putting them through a FIP program. To further expand CoC, it will be essential to certify a large-scale finfish fishery who are responsible for supplying local fish produce to WA and other Australian domestic markets.

11 Extension and Adoption

The CAP that was originally created in WA to guide the extension of MSC certification of WA fisheries should be restated with membership to include DPIRD, WAFIC, WRLC, Recfishwest and MSC. This will provide an opportunity to evaluate the progress of the MSC certification program in WA, guided by the outcomes of this report and work through a strategy for further expansion and adoption of sustainability credentials for fishing more broadly, to manage the global influence from the community applying more and more pressure on production of safe, environmentally friendly, sustainable, and ethically sourced food.

Appendices

Appendix 1 – Communication and Extension Plan

(Note some of the content of this plan is out-of-date and no longer current)

INTRODUCTION

The long-term success of *WA's MSC plans for fisheries* will be judged on the value and number of WA fisheries that become MSC certified, and how well the MSC model is embraced through the supply chain. Retailers and restaurateurs/chefs are the WA fishing industries shop shopfront. It is important that the MSC ecolabel is regularly seen on MSC certified seafood, and appreciated by consumers, thus generating community confidence in WA fisheries and how they are managed. Long-term success is defined as 10 to 20 years.

There is no question that the long-awaited launch of the MSC program by Coles is a game changer. In reality, this is the launch of the MSC in Australia. It is anticipated it will provide media exposure and in-store promotion that neither the industry nor the MSC could afford to purchase.

In time, it is hoped the Coles MSC campaign and the certified seafood they sell, will be as well recognised in the community's psyche as "stall free pork" and "hormone free beef". For the first time Australian consumers will learn about the Marine Stewardship Council, what it stands for and what they should look for.

Western Australia is ideally placed to capitalise on this awareness. While modest in budget and scope, the communication strategy, aims to assist industry get its message out through the supply chain and to the consumer, as opposed to getting the message out for the industry.

That major thrust of this strategy is designed to trial how best to assist fisheries engage with their supply chain - wholesalers, retailers and restaurants – and get the "shop front" of the industry to take up Chain of Custody to help fisheries promote their MSC certification. Ideally by getting the ecolabel in the public arena.

Chain of Custody requires a licensing agreement to use the logo, payment of annual audits and, for consumer facing businesses, royalty payment – this represents a significant financial commitment and is widely acknowledged as the biggest challenge of the MSC model.

Key elements of the strategy:

1. Does not address the "launch" of each fishery to MSC certification. A special plan will be developed and discussed for each launch, according to budgets provided by each fishery and contributed to by MSC, WAFIC and DPIRD.
2. It is a strategy that will be driven by individual fisheries. It is important that the education/information component of the strategy be embraced by MSC fisheries and driven by fisheries through their supply chain. To achieve this, the communication tools can be adapted to the requirement of each fishery, and how they can best target the most relevant part of their supply chain.
3. Aims at promoting the need for MSC fisheries to:
 - a. Use the MSC tool;
 - b. engage with the MSC in joint promotions and media exposure; and
 - c. consider the value in investing in broader MSC industry branding led by WAFIC.
4. Pays special attention to the MSC certification of the joint commercial and recreational crab fishery in Mandurah. This fishery provides a unique opportunity to communicate to the community the value of MSC certified fisheries. It is anticipated that MSC will provide significant resources to

support the promotion of the joint certification of this fishery because it provides MSC the opportunity to present to the world its first MSC certified recreational fishery.

5. Development of logo to position the MSC initiative to the community.



MEDIA

WAFIC'S Communication Manager is taking the lead on media, and responsible for WAFIC's messaging in media releases and distributing WAFIC's media releases in conjunction with the MSC certified fisheries, the Government, DPIRD and MSC. The FRDC WAFIC Extension project leader to play a co-ordinating role and project manage the major media launches of fisheries announcing their MSC certification. The ability to generate media in partnership with the MSC will be increased significantly once a fishery is certified.

Key opportunities:

- Announcement of entering pre-assessment
- Announcement of achieving MSC certification.
- On-going opportunities with supply chain engagement with retailers and restaurants and MSC certified fisheries

WEBSITE

The DPIRD website was a key resource for information and explanation of *WA's MSC plan for fisheries*. The website will be updated to reward and highlight fisheries that have achieved MSC certification, by incorporating new drop-down pages for each Australian certified fishery. Each page will feature a link to the MSC website page and website contact pages for the fisheries.

The website was used in all Ministerial and WAFIC MSC releases as a reference point. DPIRD is also working on increasing its reference to their website.

WAFIC's new website will highlight the project and have prominent link to WAMSC. It is also anticipated that when the Mandurah Crab Fishery is certified, Recfishwest will also promote a prominent link to the www.wamsc.com.au website.

PHOTOGRAPHY

A bank of photographs to use in communication collateral is being developed for both commercial and recreational fisheries involved in the program. MSC is co-funding the cost of photographs.

INFORMATION CAMPAIGN

The purpose of this campaign is to assist industry to engage and inform its supply chain about the MSC program and to encourage members to participate in the Chain of custody framework trial detailed in the milestone report.

INFORMATION LEAFLETS

Fishery specific DL flyers that each MSC certified fishery can use as a tool to inform their supply chain will be developed. While the look, and basic information will remain the same, they will be tailored to meet the demand of the fishery and whom they wish to target in their supply chain. Crucial to the success is that it is a useful tool for the fishery and that they are motivated to distribute it. A fishery may choose to target wholesalers, retailers or restaurants. They will also be available to WAFIC to distribute at events.

Each leaflet will be produced to a branded template format and tailor made to the market the fishery thinks will be most productive: Key information: Colour photo, fishery snap shot, MSC information, Fishery website address, *WA's MSC Plan for fisheries website*, if the leaflet is targeting wholesalers/chefs, where to find more information about gaining MSC Chain of custody for your business, key project logos.

OUTCOME: An informed and engaged supply chain.

TIMING: As fisheries become certified.

The Fisherman, the chef & the MSC - POSTCARDS AND VIDEO

"The fisherman, the chef & the MSC" is a theme for an information campaign to engage restaurants and retailers. The campaign is to be driven by MSC certified fisheries to reinforce special relationships and encourage uptake of Chain of custody with chefs and fishmongers. It is hoped that new entertaining partnerships can be forged between chefs and fishermen, that WAFIC may wish to showcase at events to bring a new boat-to-plate element to entertaining cooking segments e.g. chef Russell Blaikie cooking Blue Swimmer Crab while bantering with Damien Bell about the fishery (and sometimes with Damien's recreational fishing mate, Barrie Wiseman); David Correia with Peter Manifis & Shark Bay Wild Prawns; Don Hancey and George or Alex Kailis talking about Exmouth Prawns; Josh Catalano with Basil Lenzo cooking lobster

POST CARDS TO SHOW CASE CHEF'S CHAMPIONING MSC FISHERIES

The first 10 chefs or retailers, who choose to take up MSC Chain of custody will be offered to be featured in a postcard to highlight their restaurant and one MSC certified fishery that they have on their menu. The imagery for the postcard is to be art focused with a discrete MSC logo. The image will primarily be the chef and seafood, but depending on the fishery, could include the fisherman or shot of the fishery. The postcard series will:

- Encourage commitment to the Chain of Custody trial;
- Provide a fishery/MSC presence on the counter of the restaurant or retailer;
- Can be taken away by the customer for those keen to learn more from the website;
- Include a simple hero statement from the chef, a simple recipe or secret cooking tip to encourage take home value;
- Include a website address to *WA's MSC plan for fisheries* and restaurant details.

VIDEO TO SHOWCASE CHEF'S CHAMPIONING MSC FISHERIES

Creation of 3 X 60-second video vignettes featuring a Fisherman and a Chef. Conceptually it is the fisherman and chef talking as the chef prepares a dish in his restaurant. Tightly edited, the focus is the conversation, personality and entertainment. This is NOT a "how to cook" video. The seafood is showcased for artistic reasons only. The purpose is to showcase the chef as an MSC champion and lover of prawns/lobster/Glacier 51 toothfish in conversation with the fisherman. The video provides:

- Vehicle for chefs to champion MSC certified fishery;
- Encourages commitment to the Chain of Custody trial;
- Entertaining on-line content for YouTube, websites, in house and corporate videos, presentations; and

- The potential to be edited into a 30sec TV commercial or cinema.

OUTCOME: Chefs engaged in MSC Chain of Custody and committed to championing MSC certified fisheries

TIMING: March 2016 launch

EDUCATION

Getting the concept of third-party certification, MSC and *WA's MSC plan for fisheries* in the school curriculum and in teachers' orbit is fundamental to generational change on how our fisheries are managed, and changing the community perception of the fishing industry by having a better informed community.

The DPIRD Education Unit, which is well respected in the school community, will develop an MSC module. The proposal targets the appropriate areas in the Secondary School curriculum. It will include:

Overview on third-party certification, including *WA's MSC plan for fisheries* and develop case studies based on:

1. Western Rock lobster
2. Prawns – Exmouth and Shark Bay
3. Mandurah Crabs – Commercial recreational & commercial
4. Crystal Crabs
5. Pearling

DPIRD will promote the availability of the new education resources to teachers via

- The Education branch's database of school contacts
- Science Teachers Association and Geography Teachers Association
- Professional Learning workshops (1 per term, total 4)
- Regional offices

A specific launch for the Mandurah module has been budgeted. Work will be done to encourage a series of local media launches involving the module, regional fishing towns and schools that fishermen's children attend.

OUTCOME: WA secondary school teachers and students will have a greater understanding and respect for how WA fisheries are managed and knowledge about WA's MSC certified fisheries.

TIMING: 1st Term 2016: Western Rock lobster and Exmouth Gulf & Shark Bay Prawns. Mandurah Crab, Crystal Crab, Pearling after certification.

MANDURAH CRAB FISHERY COMMERCIAL & RECREATIONAL

A large percentage of the WA community is engaged in recreational fishing. They provide a new audience to engage in WA's commitment to attaining MSC certification for fisheries. The key is giving the recreational sector ownership of their achievement of the fact that the Mandurah recreational crab fishery is the first MSC certified recreational fishery in the world. And to highlight the new MSC partnership forged between recreational and commercial fishers in Mandurah. Recfishwest has approved its component of the strategy and meetings are scheduled to incorporate it into their marketing strategy and budget planning.

TIMING: The recreational and commercial crab fishery are scheduled to be certified in June 2016. While launch plans are not finalised, no significant promotion will take place until December 2016, leading into

summer 2017 – the time when people catch and eat local crabs. (Noting the commercial crab fishery is closed in October.)

LEAFLET

- Commercial fishery emphasis, including Sea Mullet, with good reference to world first joint certification with Recreational fishery.
- Recreational fishery emphasis on MSC world's first recreational fishery, with good reference to new MSC partnership with commercial fishers.

Leaflet distribution

- Recfishwest outreach programs
- Tackle and bait retailers
- Recreational Boat Users via Mandurah Trainer: A relationship has been developed with a respected Recreational fisher who teaches people how to drive recreational boats in Mandurah. He has agreed to be photographed with his children for promotional purposes and interested in supporting the project
- DPIRD
- Tourism outlets – e.g. Mandurah Cruises, restaurants.
- City of Mandurah libraries etc

POSTERS

Development of a colour A3 poster to promote joint commercial and recreational MSC certification of Mandurah Crab for distribution in tackle, camping and fishing shops, schools, DPIRD Regional offices, Mandurah Council facilities e.g. libraries, museums etc. and from commercial fishermen direct to public sales in Mandurah, and to their supply chain of wholesalers, retailers and restaurants.

MSC BRANDED CRAB GAUGES

Recfishwest now owns the moulds to produce crab gauges.

The FRDC project budget will support Recfishwest with a \$6,000 cash contribution, to assist in the supply of MSC branded crab gauges, that will also include reference to wamsc.com.au to encourage broader knowledge of the MSC plan. MSC will be approached to provide additional funding.

OUTCOMES: The WA community is made aware of the new MSC partnership between the recreational and commercial Mandurah crab fishers.

TIMING: The recreational and commercial crab fisheries are scheduled to be certified in June 2016. While launch plans are not finalised, no significant promotion will take place until December 2016, leading into summer 2017 – the time when people catch and eat local crabs. (Noting the commercial crab fishery is closed in October.)

A recreational sector that is aware and proud of the fact that the Mandurah crab Fishery is the first in the world gain MSC certification in partnership with commercial fishers.

MEDIA LAUNCH OF SCHOOLS PROGRAM & CRAB GAUGES IN MANDURAH TO SCHOOL CHILDREN

A budget allocation has been made to ensure a successful launch of the gauges and the education program at a Mandurah school highlighting the joint MSC certification of the recreational and commercial fisheries.

OUTCOMES:

1. The recreational sector is aware and proud of the fact that their Mandurah recreational crab fishery is the first recreational fishery in the world to gain MSC certification.

2. The WA community aware of the new MSC partnership between the recreational and commercial Mandurah crab fishers.

TIMING: Certification likely July 2016. Aim for 3rd term launch and lead into summer. 3rd term starts W/C 13 October 2016.

WHOLE OF INDUSTRY COMMUNICATION

REGULAR BI-MONTHLY COMMUNICATION MEETINGS

- Improve communication between all players – WAFIC, DPIRD, Fishers and MSC
- Plan media placement around the MSC program
- Update and discuss events in the newly created *WA's MSC plan for fisheries* shared Google calendar
- Encourage industry to work with MSC to achieve "joint promotions" and capitalise on budget matching.

OUTCOME: MSC fisheries engaged and motivated to use of the MSC "tool" to talk to the community and customers and consider joint-funding promotions

STAKEHOLDER MEETING: Monday 26 October, 2015 at 4pm, Crown Casino.

This is a follow-up meeting to the one held in March 2014 to introduce the plan to non-fishing industry stakeholders. The proposed meeting is to update on the progress of the project – to NGO's, Local Councils, Regional Development, University & Education sectors and Tourism.

The meeting was held in conjunction with Seafood Directions, so this group of stakeholders has the opportunity to hear MSC CEO, Rupert Howes.

170 Invitations issued. 34 - Replied: Yes. 15 - Replied: No. 25 invited guests attended.

MEMBERS OF PARLIAMENT: Date TBA – early 2016

- **Chain of Custody for Parliament House restaurant** – Parliament House is considering.
- **WAFIC Event at Parliament House, 17 November 2015** – Launch of Parliament House's MSC Chain of Custody
- **Follow up after event:** Letter to all MPs from WAFIC re progress of *WA's MSC plan for fisheries*.

LAUNCH OF GROUP Chain of Custody opportunity to Chefs

Margaret River's Gourmet Escape (MRGE) – 20-22 November, 2015.

WAFIC has undertaken a major sponsorship of this event with the **key objective** to position the industry and Government working together to rollout the \$14.5 million initiative to have every commercial fishery MSC certified.

The event details are presented at www.gourmetescape.com.au

The six key elements to sponsorship are:

1. Dinner on the Jetty with Rick Stein, presented by WA Fishing Industry Council featuring WA's MSC seafood.

2. Private welcome party to the 50 celebrity chefs – luncheon will feature seafood in the MSC program. Three seafood producers in attendance.
3. MSC information marquee in the Gourmet Escape village to communicate to discerning seafood consumers who attend the event
4. East Meets West satellite event, to feature Western Rock Lobster. Geraldton Fishermen's Cooperative to attend.
5. The Gourmet Escape includes a campaign that includes social media, paid advertising, and direct marketing to a database of more than 45,000 subscribers. In addition, WA's MSC plan for fisheries will be outlined in editorial of the official handbook.
6. The inclusion of two questions in a post-event survey conducted by Brand Events to measure the key objective of the sponsorship.

Key Messages:

1. WA, a global leader in sustainable fisheries management, is rolling out a visionary \$14.5 million initiative to have every commercial fishery certified by the MSC.
2. The MSC is the international gold standard for seafood sustainability, and in future a wide range of WA's sensational seafood will carry the MSC's blue tick ecolabel.
3. Western Rock lobster and Glacier 51 Toothfish have carried the internationally renowned MSC eco label for many years. WA lobster was the first in the world to become MSC certified in 2000.
4. Fisheries currently in MSC full assessment are: Exmouth Gulf Prawns, Shark Bay Prawns, Peel Harvey Blue swimmer crab and Sea mullet, North Coast Crystal crab and Broome's Pearl Oyster Fishery.

Key target audiences:

1. Chefs – local, national and international chefs. Attracting influential chefs is a key marketing strategy of this event. It is this target audience that the MSC program needs to engage in order to encourage Chain of Custody uptake to showcase MSC-certified fisheries in restaurants and to champion MSC-certified seafood.
2. High-end consumers and net worth individuals (aged 24-55+). MRGE escape is positioned, and marketed to attract this audience, which are an influential group who are most likely to buy WA's high value MSC-certified seafood.
3. Media- international, national and local attend this event.
4. The WA State Government is the major sponsor of this event and it is a key element of its 2020 Food and Wine Strategy. The Government has invested \$14.5 million in the MSC initiative. It is important to demonstrate that industry is committed to promoting WA's MSC-certified fisheries.

How this sponsorship assists the FRDC MSC project achieve objectives:

Objective 1: To develop and assess communication strategies on how best to obtain commercial fishers' support for implementation of third-party certification in their fisheries, with the focus being on Marine Stewardship Council (MSC) certification

1. WAFIC & MSC have undertaken this sponsorship to provide fisheries in the MSC-certified program a platform for showcasing their achievements. This year will give the individual fisheries the opportunity to assess the benefit it delivers and if satisfied provide substantial financial support for next year's event.
2. WAFIC's substantial commitment in providing this forum to fisheries in the MSC program, communicates to fisheries the importance the peak industry body places on the MSC initiative now and in the future.
3. Fisheries in the MSC program have supported the promotion with substantial in-kind donations. It is the first time that WA fisheries involved in the MSC program have had the opportunity to work collaboratively to promote their MSC certification. The eight fisheries involved in the MSC program,

and the three fisheries that have committed to go into the program within the next three months, have all, without exception, joined the promotion. The fisheries will be profiled in the information booklet.

4. Three key producers – Austral Fisheries, MG Kailis Group and a producer from the Shark Bay Wild Prawn Fishery will attend the private Chefs event to network with Chefs, and assess how WA's MSC message is delivered to this group. A key communication tool will be the information booklet, which will be inserted into Chef's welcome satchel. At the event, seafood will be on display and a blackboard artist will be creating a seafood menu identifying seafood in the MSC program.
5. A key strategy has been developed for the GFC and profiling of Western Rock Lobster in the Asian Market. Specific video segments and images to be recorded featuring Western Rock Lobster at the "East Meets West" event for use in China. GFC will be able to assess the success of this strategy when it integrates this material to engage chefs in China. Chaceon, a Crystal Crab producer, also has a keen interest in the Asian market, and is purchasing tickets to the East meets West Event in order to assess how this kind of event could assist its marketing of MSC-certified crab in 2016. Crystal Crab expected to be certified March 2016.

Objective 2: To assess options for promoting MSC to obtain public confidence in the management of WA fisheries

1. WAFIC and the MSC have negotiated a cost efficient first year sponsorship arrangement with Brand Events on the basis that if it is to be renewed next year, that a great financial investment will be required, and this will be supplied by Industry if they are supportive of the benefits of the event based on the impact of the 2015 sponsorship.
2. Engaging chefs as a champion of WA seafood, and in particular MSC-certified seafood, is a major objective. Chefs who develop a passion for delivering a sustainable seafood message are most likely the ones motivated to take up MSC Chain of Custody in their restaurants.
3. One of the key issues identified in the Cost Benefit Analysis of MSC Certification for the WA Rock Lobster Industry was the lack of promotion to lift community awareness of the fishery's MSC certification. One of the key recommendations was for the industry to look at becoming involved in a major seafood festival. Geraldton Fishermen's Co-operative is supporting the event by providing an estimated \$8,000 in product to: Chef's Event, Dinner on the Jetty and the East Meets West event. In addition, to ensure the MSC-certified lobster message is carried throughout the event GFC has provided additional product to support Don Hancey in his event in Augusta and Chef Marco Pierre White to present a MSC-certified lobster risotto as part of a central stage demonstration. GFC has stated that this promotion fits in perfectly with their strategy to engage with Chefs in the Asian market, and is keen to sit down with WAFIC and the organisers to help structure next year's event, including what Chefs are invited to participate.
4. Taste 2020¹: A strategy for food and wine tourism in Western Australia. Tourism WA developed the strategy in conjunction with the departments of Regional Development, Agriculture and Food, and Fisheries and the tourism and hospitality industry following extensive research and community consultation. Gourmet Escape has been identified as a key initiative in the food and wine strategy, which was recently announced by WA Premier, Colin Barnett. The objective is to grow Margaret River Gourmet Escape into one of the world's leading food and wine festivals. It is hoped that MSC's certified fisheries will become an integral part of this strategy and this event as it develops. WAFIC will discuss outcomes with the Department of Tourism, in conjunction with the Department of Fisheries, and draw on their evaluations of the event.
5. The right to use photographs and video from the event to assist the profiling of the WA MSC program. Fisheries and WAFIC will have the opportunity to assess the benefits of this material and incorporate findings in next year's proposal.

<https://www.readkong.com/page/taste-2020-tourism-wa-4348907>

6. The awareness of the MSC program delivered by this event will be measured by the post event survey conducted by Brand Events, and research conducted by WAFIC in 2016.
7. Other key outputs that will be used to assess the impact of the sponsorship will be;
 - Print and TV media coverage
 - Social media activity
 - Feedback from fisheries involved in the promotion

This sponsorship has been funded by WAFIC and MSC.

No FRDC project money is invested in the sponsorship. FRDC project contribution, as detailed in the budget, is for the development of an information booklet to deliver the key messages. Noting that the project specifies that a suite of documents for public consumption should be produced.

Delivering the key messages:

- A5 8-page information booklet (Appendix 11) to be produced for the event to summarise the messages, to be distributed at
 - Jetty Dinner (400)
 - Chef's event (100)
 - MSC marque (9000)

In addition, this booklet will be distributed to:

- Seafood Directions delegates (300)
- Stakeholders briefing featuring Rupert Howes (100); and
- Posted to every MP from WAFIC prior to Christmas 2015 (100)
- MSC is having the brochure translated in Chinese and reprinted for distribution in the Chinese market.

Industry representatives are attending all key functions to assess the sponsorship. Based on this assessment they will decide whether they will invest in supporting the initiative next year, and beyond. The long-term vision is that this major State Government supported event could become the showcase for WA MSC certified seafood on an annual basis, thus maintaining the momentum of the MSC initiative in one very significant, well publicised annual celebration.

ASSESSING THE EFFECTIVENESS OF COMMUNICATION STRATEGIES:

We are planning several surveys to test the impact of a number of initiatives including general awareness, the effectiveness of FRDC communication strategies, impact of Gourmet Escape, and the views of industry. These include:

1. A proxy for the demographic of people attending the event is the survey of the Western Suburbs of awareness of MSC and related matters we undertook in 2012- It is these suburbs that WA attendance at the MRGE is drawn from. The attendance is 85 percent WA with an average household income \$183,300- primarily Western Suburbs residents. We will repeat this survey in 2016 with the addition of ascertaining the effectiveness of MRGE in communicating the engagement of WA fisheries in the MSC program. We will also include reference to Coles roll out of its Responsible Seafood Sourcing policy including MSC to determine its effectiveness, and test awareness of WAFIC & MSC recall from Gourmet Escape promotion.
2. As a part of this research strategy, we will also brief the research agency to test the effectiveness of the key elements of the communication plan to three specific groups:
 - a. High School Teachers – to ascertain that they know the education resource exists and how useful it is as a teaching resource in terms of fitting in with the curriculum, and content.

- b. Chefs, Wholesalers and Retailers – to ascertain their level of awareness about the WA’s MSC initiative and their attitude to investing in MSC Chain of Custody for their restaurant.
 - c. Recreational fisher: benchmark attitudes to WA’s MSC initiative.
3. In 2017, this research will be repeated: Noting that the Mandurah Crab Recreational & Crab fishery will not be promoted until December 2016. It will be interesting to gauge any change of attitude when the recreational sector has ownership of a MSC certified fishery.
 4. We will conduct pre-entry and post exit surveys of participating MSC certified, in assessment and committed to assessment fisheries to determine whether their expectations were realised and whether they will participate in following years. This will also be relevant to WAFIC’s consideration of future participation in the event.
 5. We will have the opportunity to put two post event questions to the event visitors through the event organisers – these have not yet been drafted but will be framed around awareness of the WA MSC initiative. In addition, we are drafting a questionnaire for use at the Gourmet Escape marque to determine pre and post awareness of the MSC sustainable certification.
 6. We have surveyed participants at the Seafood Directions pre and post the conference to see if attitudes to third-party certification were altered as a result of relevant conference presentations. These results are being compiled but are not yet available.

BUDGET

MSC Fishery	OUTPUT	OUTCOME
<p>Education leaflet for 7 MSC certified fisheries: All MSC fisheries to end of 2016; Rock lobster, Shark Bay Prawns, Exmouth Prawns, Mandurah Crab & Mullet commercial, Mandurah Recreational, Pearling, Crystal Crab.</p> <p>Each leaflet will be produced to a branded template format and tailor made to the market the fishery thinks will be most productive: Key information: Colour photo, fishery snapshot, MSC information, Fishery website, <i>WA's MSC Plan for fisheries website</i>, targeting wholesalers/chefs, where to find more information about gaining MSC Chain of custody for your business. Key project logos.</p>	<p>35,000 leaflets</p> <p>(7 fisheries X 5,000 double side DL colour @ \$2,500)</p>	<p>An informed and engaged supply chain.</p>
<p><u>The Fisherman, the Chef & MSC featured in Postcards distributed in restaurants or retailers.</u></p> <p>Chef/fishmonger featured driven by fisheries wanting to highlight relationship with restaurant/or retailer.</p> <p>Production costs based on printing 10 at one time.</p> <p>Linked to Chain of Custody restaurant Group Framework trial.</p>	<ul style="list-style-type: none"> • 10 Fishermen, chef & MSC partnerships created X 1,000 postcards. • 10,000 postcards produced 	<p>Chefs engaged and committed to championing MSC certified fisheries in their restaurants and in the media.</p>
<p><u>The Fisherman, the Chef & MSC featured in 60 second video</u></p> <p>The budget allows for three fisheries to be featured in one production schedule</p>	<ul style="list-style-type: none"> • 3 Fishermen, chef & MSC partnerships highlighted. • Can be edited to 30 second commercial 	<p>Chefs engaged and committed to championing MSC certified fisheries in their restaurants and in the media.</p>
<p><u>Mandurah Crab Recreational & Commercial</u></p>	<ul style="list-style-type: none"> • 500 A3 COLOUR Posters 	<p>A recreational sector that is aware and proud of the fact that the Mandurah crab</p>

MSC Fishery	OUTPUT	OUTCOME
<ul style="list-style-type: none"> Designed to maximise MSC communication to the vast recreational fishing sector. Posters: Feature reference to joint MSC certification of Commercial and Recreational (\$2,300) Recreational Crab gauges (\$6,000 to be contributed to Recfishwest produce gauges with reference to website, also seek contribution from MSC) Launch school program & crab measurer (\$1,700) 	<ul style="list-style-type: none"> Recreational Crab gauges with MSC logo /website address Launch of gauges and Mandurah crab school program 	<p>fishery is the first recreational fishery in the world to gain MSC certification.</p> <p>The WA community aware of the new MSC partnership between the recreational and commercial Mandurah crab fishers.</p>
<p><u>Information booklet to position WA's MSC Plan for fisheries to be distributed at</u></p> <ul style="list-style-type: none"> Seafood Directions delegates Margaret River Gourmet Escape to Chefs and seafood consumers Members of parliament at WAFIC Parliament House Event on Nov 17 MSC to translate into Chinese, print and distribute at trade shows 	<p>A5 booklet to position WA's MSC plan</p>	<p>Better informed community, chefs, industry and members of parliament about the long-term vision for all WA seafood to carry the MSC ecolabel.</p> <p>Better informed Chinese seafood buyers.</p>
<p>Contingency</p>		
<p>Funding from other sources:</p>		
<p>Education module –DPIRD to pay for the development out of residual CRC funds.</p> <ul style="list-style-type: none"> Promotion through teachers Associations Regional offices Teacher development Local regional launches 	<p>Education Program developed: What is 3rd Party certification, WA's MSC Plan for WA Fisheries & 7 case studies</p>	<p>Teachers and students have a greater understanding and respect for how WA fisheries are managed.</p>
<p>Margaret River Gourmet Escape – WAFIC major sponsor to showcase MSC certified fisheries.</p>	<p>Press, television, social media, major events, direct electronic</p>	<p>More people know that industry and Government are working together to have</p>

MSC Fishery	OUTPUT	OUTCOME
<ul style="list-style-type: none"> • Chef’s Event for 50 leading local, national and international chefs. • Dinner on the Jetty with Rick Stein • East Meets West event to feature lobster and highlight China connection • Strategy to engage chefs in chain of custody. 	mail, endorsement by celebrity chefs.	every WA fishery independently certified by MSC.
<p>Margaret River Gourmet Escape – MSC</p> <p>Village Marquee to provide information and discussion about the project to discerning seafood consumers and chefs.</p>	Marquee in the Gourmet Escape Village	Better informed seafood consumers about MSC and its mission
<p>Margaret River Gourmet Escape – Industry Support – In kind</p> <p>Supply of Seafood from Geraldton Fishermen’s Cooperative, Austral Fisheries, Abalone Professional Fishermen’s Association, Shark Bay Wild, Exmouth Gulf Prawns, Blue Swimmer Crab from Mandurah Professional Fishermen’s Association. More suppliers are expected.</p>	Seafood to show case MSC certification	Chefs and Seafood consumers will know which WA fisheries are MSC certified.

Appendix 2 – Literature Research for Extension of MSC Certification and Literature Research on the Benefit of MSC Certification

Literature research for Extension of MSC Certification of WA Fisheries by Jo-Ann Ledger

There has been many papers written on third party certification, the *FRDC Project 2011/222 Development of a Cohesive Industry-wide policy on Eco-Certification for the Australian Commercial Fishing Industry* argues the case for a national consensus on 3rd party certification and a mechanism for funding it, providing a synopsis on the growth of 3rd party certification and analysis of benefits that a 3rd party certification national policy could provide the Australian Fishing Industry.

The Western Australian government has made the decision to invest \$14.5m to have WA's commercial fisheries assessed against the MSC standard. Following pre-assessment, the government has given fisheries the opportunity to move to full assessment providing funding for the first full assessment and audit.

The key objective of the initiative is to build community support. When the program was announced, the then, WA Fisheries Minister Norman Moore said: "We are seeking to confirm for West Australians and the world that WA fisheries are sustainable and the MSC scheme is the most widely recognisable and credible third party certification program currently available,"¹

This government initiative comes with the reassurance provided to licence holders by the written Guidelines for accessing Government money that stressed this was a **voluntary** commitment and provided an exemption clause based on the provision of an independent business case.

In the words of Neil McSkimming, Coles Responsible Resourcing Manager, at a recent meeting with fishermen:

"The government has given you a tremendous heads up".

Much of the literature written about MSC talks about market incentives and price premiums, and while some fisheries have received price premiums as outlined in the 2009 *MSC Net Benefits Report*² many have not, however, the prime objective of Australian fisheries interest in gaining MSC certification has primarily been political rather than economical.

Gulbrandsen and Lars, in *The Emergence and effectiveness of the Marine Stewardship Council*³ argue that the emergence of the MSC was driven from a political consumerism perspective.

"It was not actual buying behaviour that mattered, but the fact that retailers were aware of the power of environmental organisation to name and shame companies and industries, as well as consumers' ability to express political and ethical preferences through boycotting and "buycotting" (ie positively choosing) products and brands"

The rise of global norms and principles related to corporate social responsibility and sustainable development, frequently invoked by environmental groups, meant that retailers committed to sustainability could not afford to ignore calls for demonstrating responsible procurement policies. This moved them to collaborate with environmental groups and address their supply chains, which in turn boosted producer participation in certification schemes. Rather than reward certified companies with higher prices, environmental organisations, purchasers and retailers have made certification a cost of doing business.

¹ <http://wamscpublic.s14.powerwebhosting.com.au/images/wamsc---roogheethe.pdf>

² <http://www.msc.org/documents/fisheries-factsheets/net-benefits-report/Net-Benefits-report.pdf?searchterm=net+benefits>

³ *The Emergence and effectiveness of the Marine Stewardship Council*: Gulbrandsen, Lars H. Marine Policy, Volume 33 (4) July 1, 2009,

In essence, it is large retailers driving third party certification; they want to be ahead of the game, and not subject to ambush and the focus of an orchestrated public campaign.

Skimming describes how Coles will “create the conversation” about sustainable seafood in 2015, just as they have done with “Stall free pork” and “Hormone free Beef”. He pointed out, that the overwhelming majority of the community had no concept of stall free pork, but animal activists did and the supermarkets did not want to have a public fight, and so sought out suppliers to deliver their sustainability policy of “Stall free pork” and turned it into a positive point of marketing differentiation.

He pointed out that their research showed that price was still the most important driver for their customers (no price premiums), however customers were increasingly interested about the origins and sustainability of their seafood, and that the key to increasing seafood sales was taking it off customers “special occasion” list and putting it on their “regular” shopping list.

The lesson learned:

1. Involve the retail sector in driving home the political and public relations benefits of 3rd party certification. Form good relations with Coles and Woolworths sustainability executives, and invite them to one-on-one meeting with the fishermen. They sell their sustainability story positively and credibly, leaving no doubt about the reality that this is now a cost of doing business.
2. Recognition that the supermarkets will play a major role in creating the seafood sustainability conversation, but it is important that smaller local retailers can also participate. The barrier to their uptake of chain of custody is most likely to be the costs, not the willingness to showcase MSC certified seafood.

In the political context of wanting to obtain public confidence in how WA fisheries are sustainably managed, the role of MSC as an independent champion of MSC certified fisheries in the media will become increasingly important, and a major benefit of certification.

There are numerous cases where producers have struggled to tell their story, and the weight of conservation groups condemning their practices has won the hearts of minds of the community, and therefore politicians, not on fact but emotion. Cases that spring to mind and resonate with fishers are:

1. The “Stop the **Super** Trawler” (Margiris) campaign: Seafish Tasmania’s battle to fish its quota of mackerel was lost because the public were persuaded that big (super) equated to evil;
2. The live cattle trade to Indonesia closed down over one Four Corners story;
3. The issue of sustainability guides, notably in Perth, Jimmy Mendolia’s sardines have just been given a yellow (less) light on the AMCS Sustainable Guide, he was questioned about his rating by producers of “Ocean to Plate” series and the reason for the listing do not apply to his fishery. He is worried that this will impact on his new launched range of canned product.

American network NPR took on the MSC in a three part series *by* Daniel Zwerdling and Margot Williams, the transcripts provide a good example of the MSC defending not only its standard, but also its MSC certified fisheries.

Part 1: Is Sustainable-Labelled Seafood Really Sustainable?⁴

⁴ <http://www.npr.org/2013/02/11/171376509/is-sustainable-labeled-seafood-really-sustainable>

Highlights: Greenpeace is ideologically opposed to trawling, and believes trawl fishing should be banned. So no trawl fishery should get MSC certification.
MSC executives counter that some boats can dredge carefully, without causing serious damage. So they agreed to label Canadian scallops sustainable with conditions.

MSC on by catch: "We are not saying that shark by catch doesn't matter," says Howes. "What we're saying implicit within the labelling of that fishery is, the shark by catch of that unique individual certified fishery is safe. It's within ecological limits."

Part 2: Conditions Allow for More Sustainable-Labelled Seafood⁵

Part 3: Most Americans Eager to buy seafood that's sustainable⁶

- Includes announcement of Greenpeace's ranking of retailers with the best sustainability policies.

Marine Stewardship Council responds in full to the 3- part NPR series⁷

Case Studies:

The Western Rock Lobster Fishery

In the *Promise and Pitfalls of MSC certification: Main lobster as a case study*⁸ there's a discussion about the reasons for going to certification. WA's rock lobster fishery is cited as an example; it talks about how fishery managers used the achievement of MSC certification to prevent the introduction of marine reserves in WA waters, rejecting the need for fishing sanctuaries on the ground that the fishery is certified.

The article goes on to say, that from the start, the WA Rock Lobster Fishery sought certification mainly for political reasons in an attempt to resist Federal Government's desire to increase regulation under the EPCA act.

"The focus on certifying the fishery for political rather than market-based reasons caused some conflict between stakeholders, many not wanting to re-certify.

Although the companies pushing for certification had speculated that they would receive a price premium for certified lobster, they did not make much effort to advertise their product in the marketplace. Therefore, when no price premium or other market benefits materialised as a result of certification, many fishermen were upset and considered not recertifying the fishery."

The Baja California Spiny Lobster fishery, on the other hand, initially pursued MSC certification in order to compete with the WA rock lobster fishery in the global market for certified lobster products with a particular eye on European and US markets.

They did not get the economic benefits for a variety of reasons including buyers wanted tails not live and lack of a market distribution network. But the fishery did gain a better reputation within Mexico

⁵ <http://www.npr.org/2013/02/12/171376617/conditions-allow-for-more-sustainable-labeled-seafood>

⁶ <http://www.npr.org/blogs/thesalt/2013/02/11/171743185/most-americans-eager-to-buy-seafood-thats-sustainable>

⁷ <http://www.npr.org/blogs/thesalt/2013/02/13/171897814/marine-stewardship-council-responds-to-npr-series-on-sustainable-seafood>

⁸ [The promise and pitfalls of Marine Stewardship Council certification: Maine lobster as a case study](#)

Goyert, Wendy; Sagarin, Raphael; Annala, John
Marine Policy, Volume 34 (5) – Sep 1, 2010

and internationally and was able to attract political favour from the Mexican government, which has since increased support and investment in the fishery and community development.

Patagonian Toothfish

Austral's Patagonian toothfish journey from species under threat to MSC certification and best choice on the Monterey Bay Aquarium's Seafood Watch is an example of a company that did not simply gain MSC certification and wait for it to do all the work. MSC certification gave them the credentials and then Austral took that tool and worked hard to get a green light listing for Patagonian Toothfish in the lucrative American market and have made MSC certification a focus of their domestic marketing. A story prepared for Scoop provides a case study of the journey. It is attached as part of the research, in particularly in regard to the Seafood Watch program.

Lakes and Coorong Fishery, South Australia

'The main reason why we pursued MSC certification was to defuse the politicization of fisheries management and establish a purer model'

Garry Hera-Singh, Chairman, Southern Fisherman's Association⁹

The fishermen have taken great pride in their achievement and have marketed their produce with skill and achieved price premiums. Their mullet has been championed by celebrity chefs, in particular Neil Perry who has it on his menu; in the MSC Net Benefits report they say they are "commanding premiums of 30 to 50% more for produce carrying the MSC label" and Coorong Wild Seafood's has just won the prestigious 2014 *delicious Awards Producer of the Year* and the *From the Ocean* category.¹⁰

However, the price premium bonus did not happen simply because they got the MSC certification, the premium came because they put effort into marketing their achievement¹¹, branded the produce by region, and by doing so have carved a successful niche in the market created by their courage to go for certification and commitment to capitalise on it.

Main Lobster

Main Lobster announced their MSC certification in 2013. The Main lobster case study paper, which in the end, recommended that the Main Lobster fishery should NOT seek certification, Identified the following expected benefits from MSC certification:

1. Increased market penetration may be a benefit of certification if the correct markets (such as Europe) are targeted.
2. Third party verification that the fishery is well managed and sustainable is important in gaining the trust of the consumer;
3. Differentiae of the product is useful in helping to gain a market advantage; and
4. Under the right market condition an increased value of the product due to its differentiation as well managed and sustainable is possible

Interviewees stressed that it is important to

1. Involve all fishermen from the beginning of the certification process
2. Be clear about fishery's objectives for undergoing certification before beginning process
3. Gain grassroots support; and
4. Market-focused sellers of the product.

⁹ MSC Net Benefits Report 2009
<http://www.msc.org/documents/fisheries-factsheets/net-benefits-report/Net-Benefits-report.pdf?searchterm=net+benefits>

¹⁰ <http://www.taste.com.au/delicious/article/produce+awards/delicious+produce+awards+2014+winners,2192>

¹¹ <http://www.coorongwildseafood.com.au>

The concern about the importance of fisher engagement in the process, the need for bottom-up commitment, clear objectives and retailer support, is universal.

In the paper's conclusion it almost laments the fact that there is no magic bullet in regard to certification, you get the feeling that the authors would have recommended certification **if**

"...If there was a way to ensure that fishermen benefited financially from any price premiums paid on MSC certified lobster."

One can only speculate that if the MSC could ensure that proposition that every fishery in the world that could be, would be MSC certified.

ARGENTINIA CASE STUDY

Interesting research, reported in *MSC Certification In Argentina: Stakeholders' Perceptions And Lessons Learned*¹², was conducted in Argentina on stakeholder's perceptions of the MSC certification experience and its effects. The research interviewed stakeholder's representatives from the Hoki, Patagonian Scallop, Anchovy, Southern King Crab fisheries and researchers, fisheries managers, academics and NGOs

The interview reporting headings were:

- Seeking certification is a good decision? Why?
- Who should promote the MSC certification?
- Impression about the certification process?
- Economic or non-economic benefits after certification
- Factors preventing the certification of additional fisheries

The most interesting question and result was for:

Who should promote the MSC certification?

Answers ranged from Government, MSC, All stakeholders and NGOs.

Lesson learned: This is an important question that should be addressed in developing the communication strategy for this project, including getting fisheries to focus on their role and responsibility in promoting their own certification, developing a united front amongst MSC certified fisheries and exploring how best to utilise the resources and expenditure of key organisations like WAFIC, MSC and Government.

ACTION:

1. Bring all players together to discuss communication strategy, the roles and responsibilities of all stakeholders and funding.
2. In association with MSC offer marketing workshops for fisheries going into full assessment so that they are prepared, well in advance, to incorporate their certification in their own marketing and communication strategies

SUMMARY OF LESSONS LEARNED IN LITERATURE REVIEW

¹² *MSC Certification In Argentina: Stakeholders' Perceptions And Lessons Learned*
Perez-Ramirez, Monica Luch-Cota, Salvador Lasta, Mario
Marine Policy, Volume 36 (2012) 1182-1187

Subject	Key learning	Action to incorporate in Methodology
Objectives	Clear objective setting	<ul style="list-style-type: none"> The project has defined clear objectives – the prime objective is gaining public confidence in management of WA fisheries.
Engagement with fishers	<p>Bottom up priority</p> <p>Communicate to fishers about the program</p> <p>The role of MSC as independent champion of MSC fisheries</p>	<ul style="list-style-type: none"> Face-to-face meetings with fishers, as many as it takes, to resolve issues. This is the current focus of the engagement. Care to include crew and other support staff in the process and understanding of MSC – this is being facilitated by on site visits by MSC Outreach officer eg – On vessel fishing trip already completed with MG Kailis Group Develop workshop for “all staff” MSC presentation prior to announcing MSC certification. Ensuring that everyone from receptionist to fishermen understand the fishery’s achievement. Invite supermarkets to tell their story direct to fishers – far more powerful than industry representatives mounting the case. Actioned. The website gives fishers the opportunity to be fully informed. The MSC blog highlights the effort being taken to talk to fishers on the ground as detailed by Matt’s reports and photographs of his visits. Highlight that it is an opportunity and that it is voluntary. Important role to play in defending ideological objections eg trawling as a fishing method, keeping sustainable guides “honest”.
Engagement with super markets	Key driver of certification	<ul style="list-style-type: none"> Form strong relationships, benefit from the massive promotional power they have. Involve them in face-to-face meetings with fishers eg Coles presenting at Pilbara finfish meeting
Chain of custody for retailers and restaurants	Important shop front to sell eco-label	<ul style="list-style-type: none"> Facilitate possible CoC cost savings for smaller independent retailers, restaurants and institutions like University campus and government catering. MSC to take lead on establishing Stakeholder Council targeting local retailers and chefs to build support for CoC and roles as “champions of the process”
Development of inclusive Communication Strategy to address not just how, but <u>who</u> is marketing the WA’s MSC plan and funding it	All stakeholders need to play a part in marketing	<ul style="list-style-type: none"> Run first inclusive Communication workshop to set out priorities and get stakeholders to focus on their roles, responsibilities and contributions. Develop MSC marketing workshops for fisheries going to full assessment in association with MSC to ensure all fisheries are well prepared for certification. Particularly important for smaller fisheries and recreational fishery.
Education	Value of community education	<ul style="list-style-type: none"> Monterey Bay’s collaborative network of over 700 aquariums Replicate MSC’s relationship with Toronga Zoo with Perth’s AQWA. Get MSC on the Education Curriculum agenda. MSC has supplied various education tools to the Department of Fisheries as a base to consider developing resources for their teacher’s education resource program and website. Involvement with the Home Economics Institute of Australia conference to be held in Perth to engage with teachers in this sector and canvass best way of engaging with them to facilitate the distribution of information about the program

Literature research on the benefit of MSC Certification

Supplied by the Marine Stewardship Council

In General

The MSC mission is to use the MSC ecolabel and fishery certification program to contribute to the health of the world's oceans by recognising and rewarding sustainable fishing practices, influencing the choices people make when buying seafood, and working with our partners to transform the seafood market to a sustainable basis.

“Demand for eco-certified fish and seafood is high all over the world. Certification under the MSC program could open doors to trade for these fisheries and contribute to long-term social, environmental and economic benefits in their communities.”

Yemi Oloruntuyi, MSC Developing World Program Manager

Creating market incentives to improve the world's fisheries

The MSC program is designed to create market incentives to reward sustainable fishing practices. When any buyer chooses to purchase MSC certified fish, certified fisheries are rewarded for their sustainable practices through that market preference. MSC and its partners encourage processors, suppliers, retailers and consumers to give priority to purchasing seafood from MSC certified fisheries and to demonstrate this through use of the MSC logo. Globally, buyers in major markets have made strong commitments to purchase sometimes up to 100 per cent of their wild-capture fish products from MSC certified fisheries, and these commitments are increasing. These purchasing preferences increase the global demand and market access for certified sustainable seafood and provide the critical incentives needed for fisheries to undergo the rigorous and transparent assessments required in the MSC program. The same incentives also provide a significant influence on many fisheries that are operating below the MSC standard. If such fisheries want to enjoy these market rewards, they will need to reduce their environmental impact and improve their management practices to become eligible for certification. This “pull” for certification and the improved performance required in many cases in turn improves the stewardship of the world's oceans and enables many fisheries to better compete in a global marketplace that increasingly demands proof of sustainability.

Growing Retailer Trends

Today MSC certified products are sold by many retailers. Some of them are for example Coles, Woolworth, Aldi, McDonalds and IKEA. Coles states that it is keenly encouraging their major brand suppliers to assess their own sustainable seafood practices

(<http://www.coles.com.au/helping-australia-grow/responsible-sourcing-and-sustainability/responsibly-sourced-meat-and-seafood/responsibly-sourced-seafood>).

Woolworths wants to ensure that all their seafood comes from sustainable sources and in long term they want to



have all of their wild-caught seafood range be certified by MSC. (http://www.woolworthslimited.com.au/page/A_Trusted_Company/Responsibile_Sourcing/Sustainable_Fish_and_Seafood/). Aldi makes sure that consumers are made aware of MSC certified seafood products. They take this topic very serious as sustainable seafood and fish products are part of their Corporate Responsibility goals (<https://corporate.aldi.com.au/en/corporate-responsibility/corporate-responsibility-at-aldi/sustainably-caught-fish/>). Furthermore McDonalds is very engaged in the MSC Program as for example all whitefish served in their U.S., Canadian and European restaurants is certified to the MSC Chain of Custody traceability standard (http://www.aboutmcdonalds.com/content/dam/AboutMcDonalds/2.0/pdfs/2012_2013_csr_report.pdf). IKEA intends that all seafood served in the IKEA restaurant and sold in the Swedish Food Market will be ASC or MSC certified by August 2015 http://www.ikea.com/ms/sv_SE/pdf/reports-downloads/sustainability-strategy-people-and-planet-positive.pdf

For more information also see:

<http://www.msc.org/documents/email/global-impacts-delivered-in-partnership-2014>

The MSC states that using the MSC ecolabel on seafood products brings many benefits for MSC partners. First of all the partners know that the fish they are selling is sustainable. The MSC ecolabel means that MSC partners know the fish comes from a sustainable source. No guessing or further research is needed – it's assured. This is because only fisheries that meet the highest standards of sustainability are certified as meeting the MSC environmental standard for sustainable fishing. Furthermore MSC secures the supply for partners. Seafood can be accessed from over 1000 certified suppliers through the MSC supplier directory. The MSC Chain of Custody program makes sure that every company in the supply chain is independently audited to prove its MSC-certified seafood can be traced back to a certified sustainable fishery. The MSC also claims that partners enhance their reputation by using the MSC ecolabel. Using the MSC ecolabel will demonstrate company's commitment to sustainability. The MSC is recognised globally as having the highest standard for sustainable fishing. The rigorous, independent fishery assessment process ensures credibility and provides customers with reassurance of partners environmental responsible sourcing. In addition MSC partners feel good about the future. For example MSC certified businesses report that managers and staff experience added motivation and pride, knowing that they are helping to safeguard the future by contributing to the growing market for certified, sustainable fish.

Another important benefit for MSC partners is that consumers respond positively to the promotion of certified sustainable seafood. The ecolabel has been shown to add value to a brand by enhancing its sustainability credentials. An independent consumer research survey conducted for the MSC (Research from Two Minds Dec 2008 – 800 respondents across USA, UK, Germany and Japan) shows how the MSC ecolabel can benefit a brand's sustainability credentials. When asked about MSC-labelled products, there was a 69% or greater agreement from respondents that:

- The brand is a responsible business
- The brand is concerned about the future of fish stocks
- Respondents had a better feeling about the brand
- Respondents were more likely to buy the product
- Respondents are rewarding a good business when they buy the product

The MSC program is gaining recognition from consumers globally. Logo recognition and recall has generally increased between 2010 and 2012. Purchasing behaviour in some countries has also seen a boost, reflecting consumers' positive response to seafood sustainability claims.

“Certification provides us a larger customer base as more companies state a desire to sell products that have a sustainability label attached to them. Having a fishery certified as sustainable has become entrenched as part of the industry now.”

Greg Viscount, general manager at Ocean Conservation International

“I know that our member companies have kept customers as a result of MSC certification, and have broadened their customer base in Europe and the UK because of it. There is no doubt about it – there are benefits.”

Jim Gilmore, public affairs director, At-Sea Processors Association

“Working together with the Hastings Dover sole fishery made me even more aware that this is the only way forward. That is why Fishes works only with MSC certified sustainable fisheries. By doing this and communicating the message to consumers in order to educate them, we take our responsibility in conserving our oceans.”

Bart van Olphen, Managing Director, Fishes Wholesale BV

“As a ‘wild-only’ seafood buyer, processor and marketer, Harbour Marine Products Inc has a vested interest in a healthy and sustainable fishing industry. MSC certification has opened up new commercial opportunities for us, including new value-added business. It is our MSC products that help differentiate us from the competition and show significant new volume potential. MSC is proving to be good for consumers, the supply chain, and the fisheries.”

Ron F Habijanac, President and CEO, Harbour Marine Products Inc

Environment and Ocean

The MSC claims that one of the biggest benefits of the MSC certification programme for the environment is the reduction of the environmental impact. The most important aim is to protect the marine environment. Endangered species, fish stocks and marine



habitats are being closely monitored, and controls are in place to minimise the impacts of fishing in certified fisheries. Fisheries entering the program are making improvements so that they meet the MSC standard and after certification many implement new Action Plans to support further improvement where it's needed. Some of their actions include for example:

- *Reducing the number of fishing hooks discarded, leading to fewer hooks being found in seabird nests - South Georgia Patagonian toothfish longline fishery*
- *Diversion of fishing effort away from fishing grounds to avoid the catch of juvenile fish and halt a declining stock trajectory – New Zealand hoki fishery*
- *Reduction in fishery related litter discarded at sea – Western Australia rock lobster fishery*
- *Bycatch limits and area closures introduced to reduce bycatch and improve stock status – South African hake trawl fishery*

These actions can let MSC's vision come true of the world's oceans teeming with life, and seafood supplies safeguarded for this and future generations. To ensure that the reduction of the

environmental impact keeps in focus of the MSC programme there are three principles to be followed:

Principle 1: Sustainable fish stocks

The fishing activity must be at a level which is sustainable for the fish population. Any certified fishery must operate so that fishing can continue indefinitely and is not overexploiting the resources.

Principle 2: Minimising environmental impact

Fishing operations should be managed to maintain the structure, productivity, function and diversity of the ecosystem on which the fishery depends.

Principle 3: Effective management

The fishery must meet all local, national and international laws and must have a management system in place to respond to changing circumstances and maintain sustainability.

The MSC standard to which fisheries are certified allows the marine environment to flourish, helps seafood remain a global nutritional resource, and helps ensure that fishing-related livelihoods thrive for generations to come.

<http://www.msc.org/business-support/global-impacts/key-facts-and-findings>

Some Examples:

- **Getting technology on our side**

Depleted, unproductive oceans are bad news for everyone, but technology can be used responsibly and to benefit the conservation of marine resources and habitats.

Take this example: *Quotas in the MSC certified Alaska pollock fishery are set based on fish stock estimates compiled using state of the art data collection and modelling. Observers on boats relay real-time catch and bycatch data to ensure that these quotas are not exceeded. In addition, this information is shared among vessels in the Alaska pollock fleet so that vessel captains can act to avoid bycatch hotspots.*

- **Protecting the seas' diversity**

It is difficult to completely eliminate bycatch from most fisheries, but there are simple, inexpensive actions that fishers can take to reduce the effect of bycatch on marine ecosystems.

Take this example: *In the MSC certified South Georgia Patagonia toothfish fishery seabird bycatch was reduced to almost zero when fishers added bright streamers to their vessels, and started to discard fish heads away from dangerous fishing lines. In the Crangon brown shrimp fishery – which is not yet certified to the MSC standard – the fishers are trying new nets with a bigger mesh size to reduce their bycatch of plaice.*

- **Improvements**

In the report (2013), environmental scientists Dr David Agnew and Dr Nicolas Gutierrez identified almost 400 improvements in MSC certified fisheries with the average improvement action plan taking only three years to complete.

Key improvements include:

- 13 fisheries have completed stock improvements to reach best practice levels.
- 22 fisheries have completed habitat and ecosystem improvements including gear modification, (additional investment in) research, and new closed areas

- 64 fisheries have completed fishery management improvements including strengthened compliance with regulations
<http://www.msc.org/business-support/global-impacts>

“What attracts me to the MSC is how it can serve as a force to seriously reduce the environmental impact of fisheries, like curbing bycatch of seabirds and other marine wildlife.”

Dr Euan Dunn BirdLife International

“The marine environment is facing challenges that, if not addressed immediately and effectively, will have profound implications for sustainable development.”

Kofi Annan, Former UN Secretary General World Environment Day, June 2004

“If you are looking for a good news story, here’s a really good one; How about: Fishery Rebuilt Under MSC Custody, Stock Now Well Above Maximum Sustainable Yield?”

George Clement, CEO of the DeepWater Group Ltd in New Zealand

“I like the MSC because it sets a standard – and by doing that, it gives us, the industry, something to adhere to. With some NGOs, the bar keeps moving; you can never satisfy them. With the MSC, it’s rigorous – but when you do get certified, you know you are doing something right.”

Brad Pettinger, Director of the Oregon Trawl Commission

“I don’t want to get rich by taking everything out of the sea, only for my son to go fishing and not catch anything at all. Fish stocks, damage to the seabed, bycatch... the MSC looks at the whole picture.”

Paul Joy, Chairman, HFPS

“What MSC certification does is get the fishermen’s minds engaged and fully supportive of our measures to try and manage the stock more sustainably – especially if they can see some benefit in terms of value.”

Joss Wiggins, Chief fishery Officer, Kent & Essex Sea Fisheries Committee

Changing community perceptions

The MSC Program has changed and is changing the community perceptions by rewarding sustainable MSC certified fisheries. As the article “Chilean Seabass Goes From ‘Take a Pass’ to ‘Take a Bite?’” <http://newswatch.nationalgeographic.com/2013/04/12/chilean-seabass-goes-from-take-a-pass-to-take-a-bite/> shows there is no need to check the “red list” for fish anymore, the only thing consumers have to do is to reward sustainable fisheries by choosing MSC certified products. Furthermore many conservation organisations like WWF (<http://www.wwf.org.au/our-work/saving-the-natural-world/oceans-and-marine/marine-solutions/sustainable-seafood/>), the Alliance of Monterey County <http://www.alliancemonterey.org/> or the iséal alliance (<http://www.isealalliance.org/about-standards/sectors-covered/fishing>) are supporting MSC to safeguard marine ecosystems and ensure the long-term viability of seafood supplies. WWF marks “MSC and ASC certification as the highest standards available for sourcing sustainably caught and responsibly farmed seafood.”

The MSC claims that the biggest benefit of the MSC Certification for consumers is that the blue ecolabel gives everyone an easy way to make the best environmental choice when shopping or dining out. In addition choosing MSC certified sustainable seafood allows the



consumer to enjoy eating fish in the knowledge that they have made a positive choice to support well managed and sustainable fisheries. These fisheries are pioneering new ways to conserve the marine environment. By supporting them through regular shopping decisions the consumer sends a clear message back, encouraging more retailers to stock sustainably-sourced seafood and more fisheries to switch to sustainable practices. This also leads to an increasing of the availability of certified sustainable seafood and the distinctive blue ecolabel makes it easy for everyone to take part. The consumer can be sure that the seafood bearing the MSC ecolabel comes from an independently certified sustainable fishery because all companies in the supply chain must be certified as meeting the MSC chain of custody standard. Overall the MSC Certification and especially the MSC ecolabel give consumers the power to actively participate in the process to safeguard seafood supplies for this and future generations by choosing MSC sustainable certified products. Furthermore the next generation is being encouraged to eat sustainable fish and understand the importance of marine conservation. Through the Fish & Kids project the MSC provides teaching resources on marine issues and work with school lunch providers promotes sustainable seafood served in schools.

“With the MSC, consumers can be reassured that sustainability is not just a word on a label. Our albacore tuna is traceable back to the vessel that harvested it – which has helped us tell our story to the world. The more market we build, the more stability we are creating for our fishery.”

Natalie Webster, Director of Operations, AAFA

“With cod, there are many conflicting claims about sustainability. What are the real facts? For consumers, not having to worry is a big factor. They can buy our MSC-certified product with confidence.”

Paul Gilliland, Managing Director, Bering Select Seafoods Company

“The MSC label gave us the confidence to talk to consumers about Alaska pollock. We were able to say not just ‘This is the name of the fish’ but ‘This is why it means something to you as a consumer: it comes from a fishery that is sustainable’.”

Mark Ventress, Category Director at Young’s Seafood

“There is no doubt the MSC is here to stay, and we want to continue sending a positive signal to the entire sector as well as to the consumer.”

Jesper Kold Sorensen, Amanda Seafoods

Fisheries:

The MSC states that there are also many benefits of the MSC certification for fisheries. First of all the MSC certification and usage of the MSC ecolabel offers fisheries around the world a way to be recognised and rewarded for good management and sustainable fishing. The MSC standards and requirements meet global best practice guidelines for certification and ecolabelling programs. By working in partnership with MSC the fisheries can help to create a market for sustainable seafood and give incentives to other fisheries to change their practices as well. Throughout the world MSC fisheries are using good management practices to safeguard jobs, secure fish stocks for the future and help to protect the marine environment. The science-based MSC environmental standard for sustainable fishing offers fisheries a way to confirm sustainability, using a credible, independent, third-party assessment process. It means sustainable fisheries can be recognised and rewarded in the marketplace, and give an assurance to buyers and consumers that their seafood comes from a well-managed and sustainable source. Growing demand for MSC certified fish and increasing retailer commitments to source only MSC certified fish has led (in some cases) to better prices for MSC certified fisheries. Both large as well as small fisheries have benefitted and it is anticipated that price premiums for MSC certified fish will create real opportunities for fisheries going forward. In addition the MSC certification is leading to an improved reputation for fisheries. An assessment against the most rigorous and credible sustainability standard in the world is great means to generate positive publicity for fisheries. If certification is obtained, a very credible claim can be made about the sustainability of that fishery to customers, consumers, and other NGO's.



“Before certification, we were making certain assumptions in our stock assessments and modelling arrangements for mackerel icesh. By running these past the MSC team, we found we had other brains to draw on, people who were also highly skilled in fisheries management. Our assumptions were tested, and the fishery is better for that experience.”

David Carter, CEO, Austral Fisheries, Perth, Western Australia

“We entered this programme because we believed we met the MSC standard, but what the MSC does, through its third-party validation, is provide an added assurance – and recognition in the seafood community that it is a well managed fishery. It gives us enhanced visibility.”

Jim Gilmore, public affairs director, At-Sea Processors Association

“I’M TIRED OF being attacked by groups that wouldn’t know sustainability if it bit them in the butt.”

Brad Pettinger, Director of the Oregon Trawl Commission

“It gives an assurance that we will be in business next year because third-party certification is a fact of life now. Shoppers don’t just want vegetables, they want organically certified vegetables. Everyone is looking for something extra, and that is what the MSC provides. We’re all in.”

Brad Pettinger, Director of the Oregon Trawl Commission

“Before certification, this fishery was sustainable because we said so. Now, all this wonderful scientific information is reviewed by experts around the world. We get an automatic peer review of how we manage our fishery.”

Dexter Davies, Executive Chairman, Western Rock Lobster Council

“The MSC assessment has driven and speeded up our management improvements. It gave us the impetus to move our plan forward more quickly. We simply could not have achieved this without the MSC.”

David McCandless, Chief Fishery Officer, NESFC

“There is no contradiction in being modern, technologically efficient, highly productive, profitable – and yet being sustainable. Recognition of that is the huge thing the MSC has achieved for this sector.”

John Goodlad, Chairman, Scottish Pelagic Sustainability Group

“I’d say we are commanding premiums of 30 to 50 per cent more for produce carrying the MSC label. It is way above average because there are so few MSC-certified products in Australia.”

Garry Hera-Singh, Chairman, Southern Fisherman’s Association

“Certification has had a very positive effect on our prices. I can’t tell you it has added 15 cents a dollar or anything like that, but we have had so much free publicity. The Monterey Bay Aquarium promotes the MSC and chefs talk about it on television. That has generated new demand.”

Bob Alverson, Executive Director, Fishing Vessel Owners Association

“If it hadn’t been for the MSC, we wouldn’t have considered requirements like these for our fisheries regulations. All the improvements will help strengthen the fishery and its future management.”

David McCandless, Chief Fishery Officer, NESFC

“Australian mackerel icefish are managed to CCAMLR standards or better, which already include precautionary targets and limits and an extensive review at its annual meetings. Nevertheless, MSC certification provides a public acknowledgement of the high standards used in the management of this resource and provides a much more recognizable face to the consumer.”

Dr Malcolm Haddon, Chair of Commonwealth Sub-Antarctic Resource Assessment Group

“The reality is that most westernised fisheries are not managed on biological or sustainability criteria, but to give one sector a bigger slice of the pie than others. The main reason why we pursued MSC certification was to defuse the politicisation of fisheries management and establish a purer model.”

Garry Hera-Singh, Chairman, Southern Fisherman’s Association

“The New Zealand hoki fishery is the largest fishery in New Zealand. We supply clients across Europe, the Americas and Asia with MSC certified sustainable hoki. MSC certification of the New Zealand hoki fishery has confirmed for us both the need and the benefit for our long-term commitment to sustainable seafood supplies.”

Eric Barratt, Managing Director, Sanford Ltd Sustainable Seafood

“The Dungeness crab fishery had always been singled out as the poster child for sustainable, well-managed fisheries on the West Coast and in Oregon...MSC was a fairly new concept and we thought that if we could lead the pack, there would be promotional and public relations value.”

Nick Furman, executive director of the Oregon Dungeness Crab Commission

“We believe our North Pacific halibut fishery, managed by a joint United States and Canadian commission (International Halibut Commission), is a model for future generations. The MSC label is further verification that all stakeholders are – and should be – committed to sustainability. Our children’s children can expect to fish for, process, sell and consume this wonderful resource.”

Dana Besecker, President, Dana F Besecker Co, Inc

“Ninety per cent of our sablefish goes to Asia, mostly to Japan – where they are just beginning to be interested in MSC certification. Recently, for the first time, we had a group call and say, ‘We want MSC sablefish’. In Europe, they are demanding only MSC – which has helped us a lot.”

Bob Alverson, Executive Director, Fishing Vessel Owners Association

“They (the Welsh Assembly government) are saying that we need to have more MSC certified fisheries to demonstrate that we are doing the job well. It’s an independent measure of success, a benchmark. MSC looks at the whole picture.”

Phil Coates, Director, South Wales Sea Fisheries Committee

“MSC certification recognises a well managed fishery. I’ve seen so many investments lost because there have been no proper controls or management. We need continuity of supply and we need sustainability.”

Colin MacDonald, Chairman, Penclawdd Shellfish Processing Ltd

“Scotland’s fishing industry is to be congratulated on this MSC certification for Scottish North Sea herring. All fisheries depend upon well managed, sustainable stocks – and certification is vital to the future success of Scottish fisheries and their local communities.”

Alex Salmond, First Minister of Scotland

Building pride in local fishing communities

The MSC certified Lakes and Coorong Fishery is a good example for how a MSC certification builds pride for local fisheries communities. The Lakes and Coorong fishery is the 2011 National Seafood Environment Award winner. This small coastal community fishery got rewarded for their actions to take the lead in securing its future by taking the step to be a MSC certified sustainable fishery. They are very proud to be the 3rd in Australia & 27th Fishery in the world certified to the MSC’s standard for sustainable fisheries (<http://www.coorongfishery.com/pages/initiatives-awards/initiatives/msc.php> and http://www.fishfiles.com.au/knowning/seafood_stories/Pages/coorong_fishers_turn_the_tide_of_fortune.aspx). One of their supporters is Neil Perry who on the one hand publishes nice recipes with Coorong Yellow Eyed mullet and it is also a regular on his menus at his Restaurants <http://www.goodfishproject.com.au/coorong-yellow-eye-mullet-with-herb-butter/>.

“I was watching the guys unloading the fish and, for the first time in a long time, I saw hope in their eyes. One fisherman was talking about getting his son into the business, something I have never heard him say before.”

Natalie Webster, MSC certified albacore tuna fishery

“You can see and you can feel when you talk to people and they say, ‘Yeah, we are certified and sustainable,’ that it means something to the crew and the guys who are running the boats and the office.”

Bill Orr, president of the Alaska Seafood Cooperative and CEO of Iquique U.S., a member company

“In the Coorong, we have the best-practice fin-fish fishery in Australia – an amazing thing to be proud of, and a shining light for other fisheries here to follow. With MSC recognition, we can one day take the uncertainty out of buying Australian seafood that is environmentally safe.”

Neil Perry, Chef and Director, Rockpool restaurant group, Australia

“We can say to the Scottish Government and other stakeholders, ‘Look, we are running a sustainable fishery’. That is the benefit of being MSC.”

Karen Starr, Secretary, Torridon Nephrops Management Group

“Thames herring, or ‘silver darling’ as we call it, is a historic local food source that sells well at farmers’ markets. Because it comes from an MSC certified fishery, customers know fishermen will be dipping their nets in 20 years’ time.”

Tony Talbot, Managing Director, Aquanet Ltd

“In New Zealand, we are proud of our sustainable fisheries management and therefore we welcomed the MSC recertification of our hoki fishery as an independent audit of these practices. This is a good news story.”

George Clement, CEO, Deep Water Group Ltd, New Zealand

Celebrity chefs in support of MSC

There are many celebrity chefs like Neil Perry, Rick Stein, Tom Kime or Jamie Oliver and Young, who are supporting MSC by publishing recipes with MSC certification, using MSC certified fish in their restaurants and doing public relations to promote sustainable seafood.

Neil Perry celebrated the first MSC certified sustainable Spencer Gulf king catch of the season in 2011 (<http://hungryaustralian.com/2011/11/neil-perry-chucks-a-sustainable-spencer-gulf-shrimp-on-the-barbie>).

That is what he said about the MSC certification: “I’m really excited to be in Adelaide for the first catch of the MSC certified Spencer Gulf King Prawn it’s just great to see an industry that’s taken sustainability so seriously for such a long period of time get the benefit of this third party brand. These guys, they’re not only saying they’re doing it, they’re actually doing it.” (<http://vimeo.com/29425567>).



Furthermore Neil Perry hopes to get all seven of his restaurants MSC certified in the near future (<http://www.goodfood.com.au/good-food/food-news/long-way-from-the-humble-tuna-can-ecolabels-reach-menus-20140113-30qm3.html>).

Jamie Oliver has got his own frozen range with Young’s Seafood Limited. Most of his products are MSC certified as Jamie Oliver wants to give a sustainable alternative for everyday life. (<http://www.jamieoliver.com/news-and-features/news/jamie-oliver-launches-frozen-range-using/>).

Tom Kime, who is the owner of the MSC certified fish&co restaurant in Sydney, not only wants to deliver the best quality, freshest fish possible but also wants to make sure that they use only sustainable fish. He also emphasises that sustainable seafood is delicious within a family budget’s reach and doesn’t have to be a luxury product (<http://www.fishandco.com.au/about/msc/>).

(The MSC claims that there are different benefits for MSC certified restaurants. First of all the ecolabel on a restaurants menu is a great way to show the commitment to seafood sustainability. The MSC ecolabel is the most widely recognised and trusted indicator of seafood sustainability, allowing restaurants to demonstrate best practice in sustainable fish and seafood sourcing. Secondly restaurants which use MSC certified products can be sure that they are using sustainable fish. The MSC ecolabel means restaurants know the fish comes from a sustainable source. No guessing or

further research is needed – it's assured. This is because only fisheries that meet the highest standards of sustainability are certified as meeting the MSC environmental standard for sustainable fishing. Furthermore restaurants supply is secured. By choosing MSC-certified seafood restaurants can access certified suppliers through the MSC supplier directory. The MSC Chain of Custody program makes sure that every company in the supply chain is independently audited to prove its MSC-certified seafood can be traced back to a certified sustainable fishery. Using the MSC ecolabel in restaurants will demonstrate the company's commitment to sustainability. The MSC is recognised globally as having the highest standard for sustainable fishing. The rigorous, independent fishery assessment process ensures credibility and provides customers with reassurance of the environmental responsible sourcing. MSC certified restaurants and take-aways report that managers and staff experience added motivation and pride, knowing that they are helping to safeguard the future by contributing to the growing market for certified, sustainable fish.)

"Jamie Oliver already used the MSC website to choose sustainable fish. It therefore was a logical step for Fifteen to get the MSC certification in order to show our customers that we use sustainable fish. The more people are aware of the blue logo, the more they will ask for it."

Sarriel Taus, Fifteen, Amsterdam, The Netherlands

"I want to show first that it can be done, that restaurants can make the commitment to source only sustainable seafood... I also want to show that it will contribute to business success. I believe people care about how their actions affect the environment and when they are made aware of options, they will support restaurants that demonstrate they are sourcing sustainably."

Kristofor Lofgren, Owner, Bamboo Sushi, USA

"I passionately believe that it is up to each of us, be it consumer or chef, to make a responsible choice. By supporting MSC, I am ensuring that as a chef, I am helping to ensure that fish stocks will be replenished for generations to come. I also hope that many more chefs will join this worthy cause."

Raymond Blanc, Chef patron, Le Manoir aux Quat Saisons Oxfordshire, UK

"What surprised me about the certification process, was that our staff really got into it. They learnt a lot and now are really keen to talk about this huge issue in the seas and about how our business is contributing to the solution"

Caroline Bennett, Proprietor, Moshi Moshi, London & Brighton, UK

"What the MSC does is bring all these like-minded people together and give them a sense of direction, a sense of community. Nowhere have I seen this more than with the sea bass fishermen of Bridlington."

Caroline Bennett, Restaurateur and Owner of the Moshi Moshi sushi chain

(<http://www.msc.org/get-certified/restaurants/certified-restaurants>)

Sustainable Seafood Market:

Seafood buyers are increasingly introducing fish sourcing policies, and many include the MSC as the sole or key criterion. Fisheries that have attained certification to the MSC standard are ahead of the curve in meeting that growing market demand. MSC certification gives fisheries access to a global marketplace of sustainable products and secures contracts with existing companies that are committing to the MSC, affording business security...in the long term. The aim is to see a seafood market where less well managed fisheries find it harder to sell their products, and sustainable fisheries are recognised and rewarded. And MSC is succeeding to give the fisheries access to new markets and secure contracts, which helps to transform global seafood markets for sustainable

seafood. MSC certification is still gaining importance as a market-based tool as shown by an increase in number of certified fisheries (390%), chain of custody certificates (180%), and ecolabelled products in the market (710%) since 2008. To join MSC can give fisheries and partners the opportunity to get an edge over other competitors in the marketplace.

Improving the performance of fisheries globally

A core tenet of economics is the powerful effect of incentives and how they shape behaviour. This has proven true in the case of the MSC's market-based program and global fishing. Many of the fisheries initially undertaking assessment against the MSC standard were well operated and had to make few changes to meet the standard. These pioneers provided the foundation for MSC to become established and the market's recognition of these fisheries has provided the necessary incentives for other fisheries to follow. Many fisheries achieving certification recently have made more substantial changes to improve their environmental performance prior to entering the assessment process to attain the MSC standard. This is where the MSC will deliver its greatest contributions to environmental sustainability and this is becoming clearer as the program matures. There are many current cases throughout the world where fisheries are engaging with governments and non-governmental organisations to take the actions needed to improve their performance. In many of these cases, they are using the MSC standard as the benchmark against which to measure themselves and are creating "fishery improvement plans" and partnerships to address performance issues identified. The improvements the MSC program incentivises will help safeguard healthy fish populations for future generations, supported by healthy habitats and robust ocean ecosystems and that fisheries management systems are effective in ensuring that these benefits can be sustained for the long-term. These transformations are the promise of the MSC, and an unprecedented example of markets transforming fishing practices for a sustainable future.

"It is very exciting that in less than a decade, the MSC has demonstrated the market can create powerful incentives for global sustainable fisheries management."

Dr Cathy Roheim, University of Rhode Island

"The MSC has allowed us to develop new markets and create more awareness of sustainable fisheries around the world – such as the AAFA, which has been using sustainable fishing methods for generations. That is why we work together. MSC certification was another acknowledgement of their efforts made in sustainable tuna fishing."

Andrew Bassford, Operations Manager, Fishes Wholesale BV

"Certification of the Oregon's pink shrimp trawl fishery is a huge achievement. The MSC is an internationally recognized organization with very high scientific standards for approving the certification of a wild fishery. Certainly, this certification will help our pink shrimp fishermen maintain existing market access and gain access to new markets."

Katy Coba, Director of the Oregon Department of Agriculture

"MSC is seen as the gold standard. The message is that, if you want to deal with the big multiple retailers in the future, you have to be MSC."

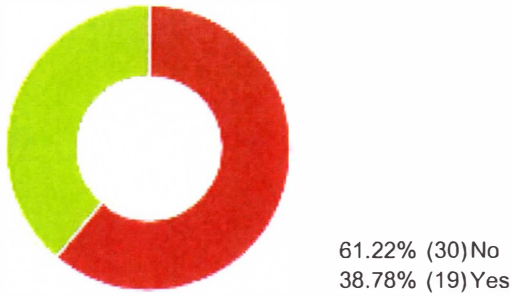
Nathan de Rozarieux, fisherman and Project Director, Seafood Cornwall

Ends.

Analytics: MRGE MSC Survey

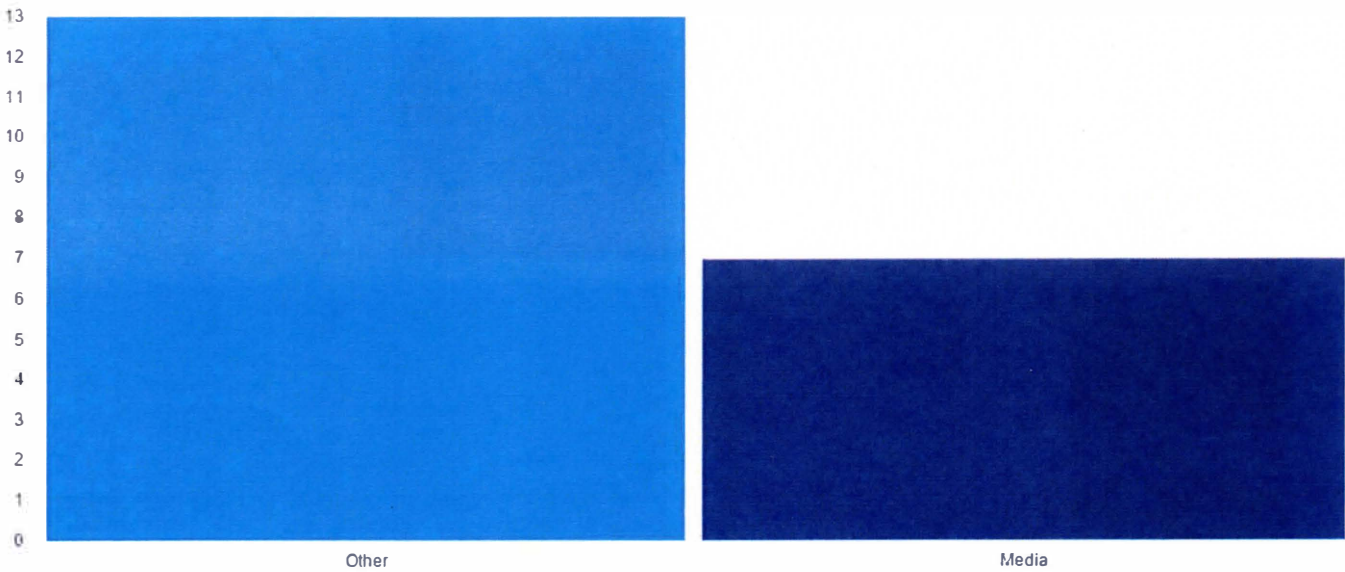
1. Prior to visiting MRGE did you know about the Marine Stewardship Council (MSC) sustainable seafood eco-label?

Results based on 49 responses to this question



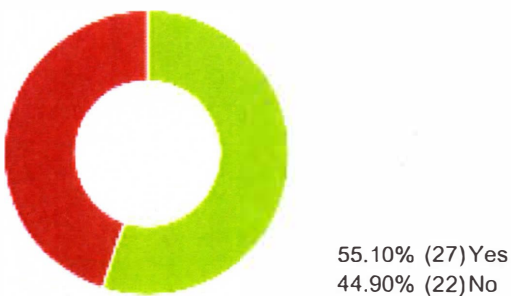
2. If yes, where from?

Results based on 49 responses to this question



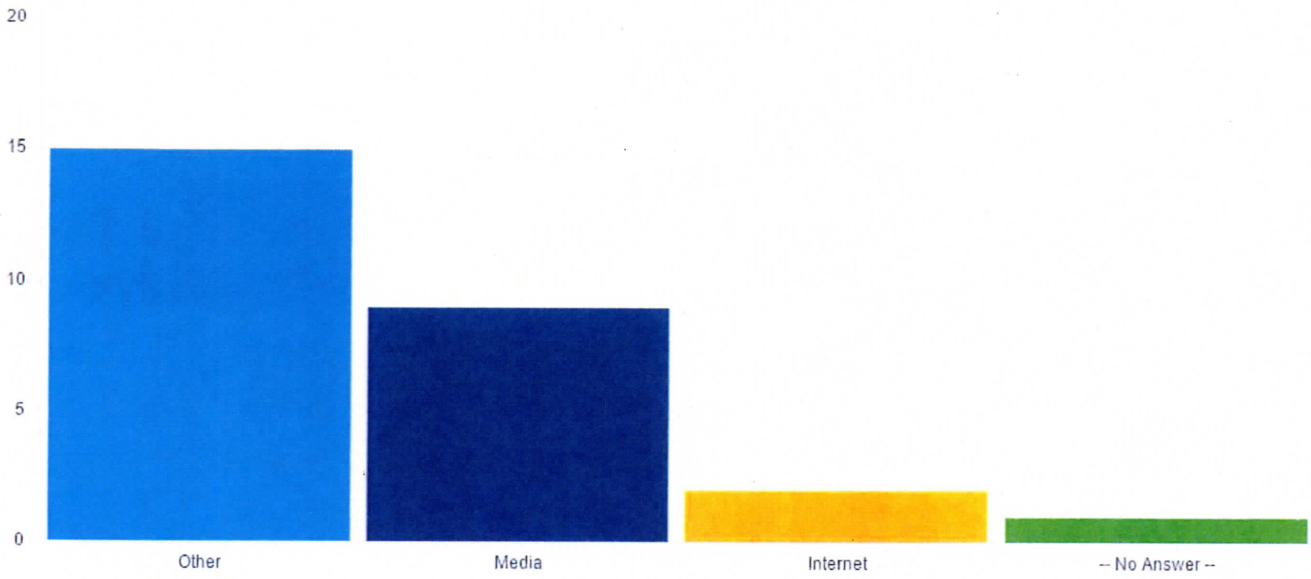
3. Prior to visiting MRGE did you know about the WA Fishing Industry Council (WAFIC)?

Results based on 49 responses to this question



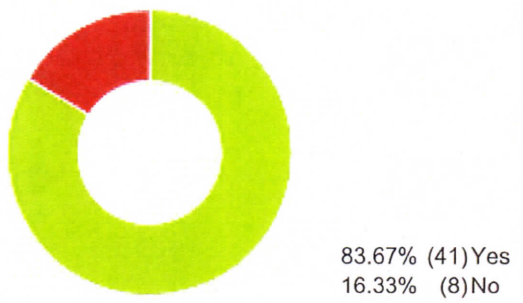
4. If you know about WAFIC, where have you heard the name?

Results based on 49 responses to this question



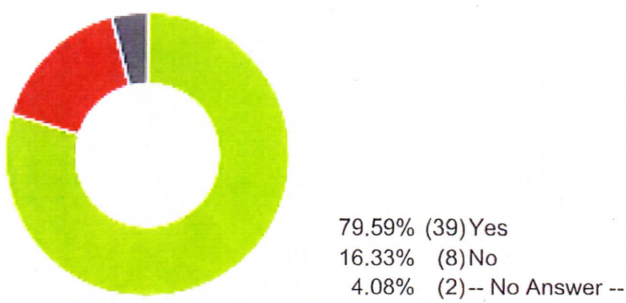
5. Was MRGE useful in supplying information on MSC third party certification?

Results based on 49 responses to this question



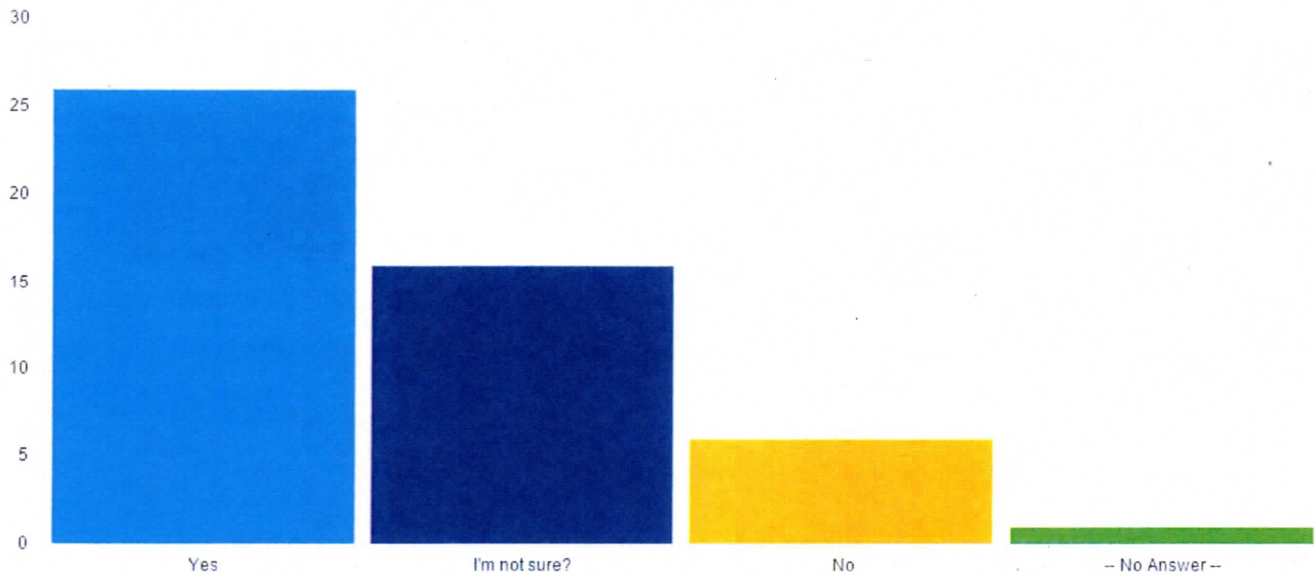
6. Was MRGE useful in supplying information on the WA Fishing Industry Council?

Results based on 49 responses to this question



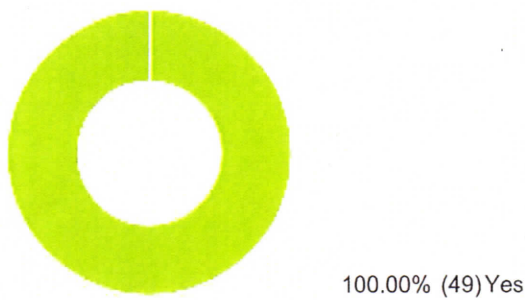
7. Do you think WA's commercial fisheries are sustainable and well managed?

Results based on 49 responses to this question



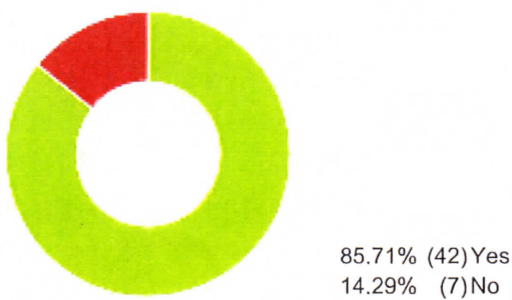
8. Do you think it is a good idea that WA fisheries are independently audited against the MSC's global sustainable fishing standard and earn the right to use the MSC sustainable seafood eco-label?

Results based on 49 responses to this question



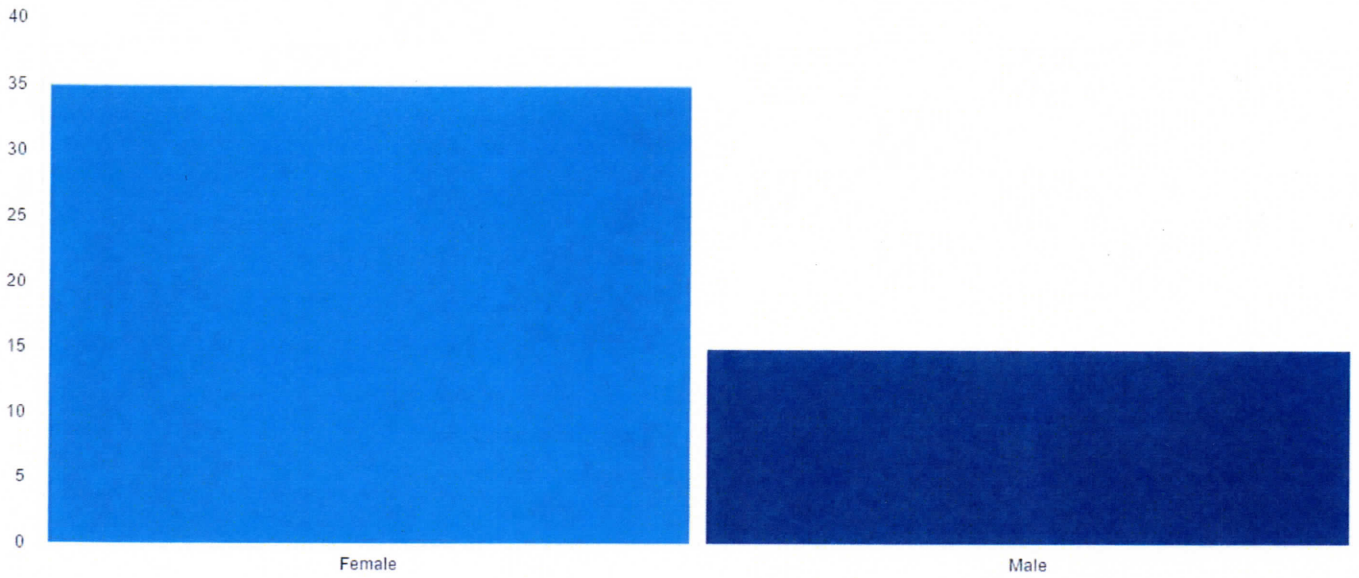
11. Would you like to join the MSC/WAFIC mailing list?

Results based on 49 responses to this question



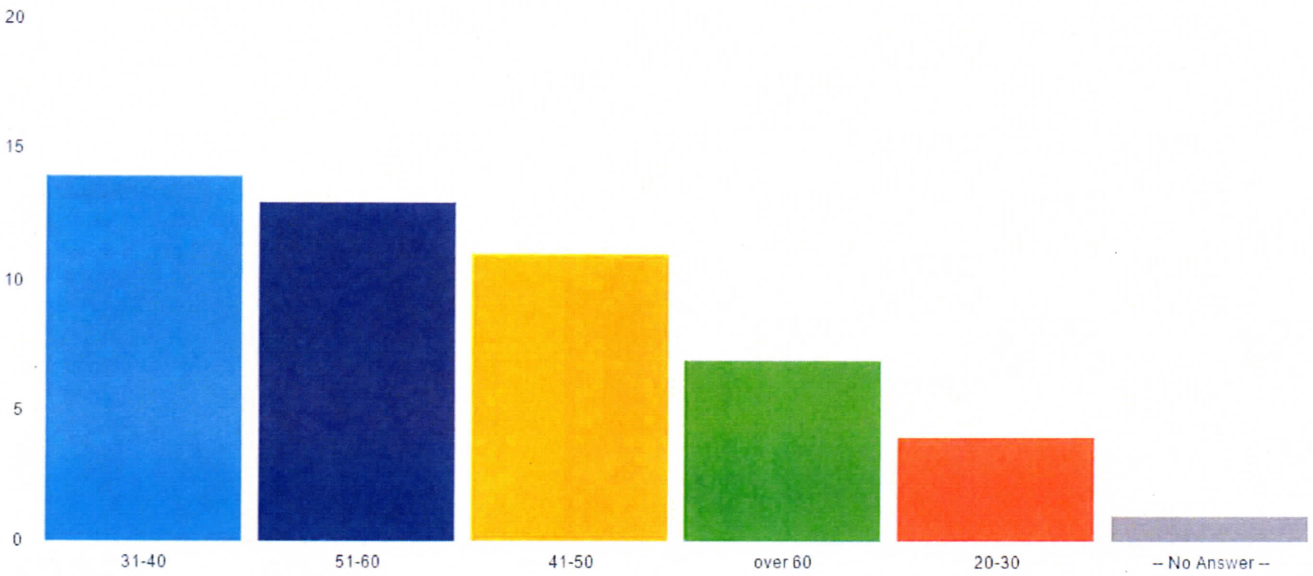
16. Gender

Results based on 49 responses to this question



17. Age Group

Results based on 49 responses to this question



[Back](#)

Appendix 4 – Community Perceptions of the Sustainability of the Australian Fishing Industry

Community perceptions of the sustainability of the fishing industry in Australia

April 2011

Our reference: P4587

Prepared for: Peter Horvat
Communications Manager
Fisheries Research and Development Corporation



Prepared by: Michael Sparks
Director
Intuitive Solutions



executive summary

research context

One of the significant challenges facing the Australian fishing industry is in achieving long term sustainability for the industry. With ongoing efforts and investment being made by all sectors of the industry and Government, ensuring that the broader Australian community is both informed about the industry's progress (in regards achieving sustainability) and engaged with these efforts and at the same time engaged in the direction for the industry is an important 'marker' for the industry.

The objective of this research was then to gauge community perceptions about the achievements and ongoing investment the industry is making into achieving long term sustainability. An online survey of a nationally representative sample of n=1,025 randomly selected adult Australians (aged 18 years and over) was conducted to provide robust measures of the current community perceptions.

The survey was conducted in early April 2011 with results from the survey weighted using the ABS population estimates to ensure the final results appropriately reflected the current size and structure of the Australian population. The key results from this research are now presented.

does the Australian community believe the industry is sustainable?

For the purposes of this research sustainability was defined as *"the industry having the necessary practices and policies in place that ensure the future of fish species and the marine environment while at the same time providing sufficient supply of fish for commercial and recreational fishing needs"*.

The results from the 2011 research indicate that the Australian community remains divided with:

- o just over one in three (37%) believing the industry was sustainable;
- o just over one in four (26%) believing the industry was not sustainable; while
- o the remaining one in three (37%) just not sure if the industry was sustainable or not.

Among those who were uncertain or dismissive that the industry was currently sustainable, there is a clear sense of pessimism with 52% not confident the industry will become sustainable.

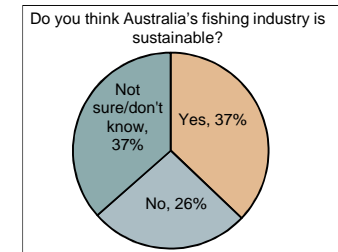
Perhaps not surprisingly, people who fish regularly and eat seafood regularly were more likely to believe the industry was sustainable. However the level of support even amongst these arguably advocate groups suggests further work is required to strengthen perception around sustainability.

Clearly then there is a substantial challenge to better inform, educate and influence community perceptions about the long term sustainability of the fishing industry.

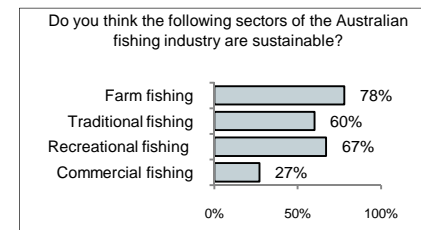
The results were also reported across the different sectors of the industry. As can be seen from the figures opposite:

- o There is a stronger level of confidence across the community about the sustainability of aquaculture (78%) and recreational fishing (67%); whereas
- o Perceptions are decidedly weaker in regards commercial fishing (just 27% believing it's sustainable).
- o Of note is that these community perceptions have appeared to have remained static for some time (comparison made with a 2003 study by FRDC). This result suggests that efforts during this period have been largely unsuccessful at driving changes in community perceptions. A separate and more targeted effort may be required if substantive change is to be achieved.

These results suggest that community perceptions around the sustainability of commercial fishing are a key driver of their perceptions of the industry as a whole. Focus on improving this specific result may well help drive improvements in the 'whole of industry' result.



Base: All respondents; n=1025



Base: All respondents; n=1025

Fishing Sectors	2011 (% agree)	2003 (% agree)
Farm fishing	78%	77%
Traditional fishing	60%	64%
Recreational fishing	67%	56%
Commercial fishing	27%	27%

executive summary

is the community aware that industry and Government working towards sustainability?

The results in this area are disappointing and reflect a low level of visibility and awareness of the efforts being made in this area. The results were consistent with the earlier findings with just 16% reporting they were aware of the work the industry and Government is doing to improve the sustainability of the industry.

Right now these results suggest the specific efforts and investments have not achieved any significant level of public awareness. On a more positive note the majority of adult Australians (53%) assume that both industry and Government are working to make improvements in this area.

The challenge going forward then is to ensure major investments and achievements by both industry and Government receive sufficient community visibility – this should then have a positive down stream effect on the key indicators of sustainability for the industry.

by comparison

More than one in two adult Australians (54%) believe the Australian fishing industry is ahead of other countries in regards sustainability (18% reporting Australia was well ahead and 36% slightly ahead). Given the high level of uncertainty about exactly what the Government and industry are doing here in Australia this result should be treated with some caution.

so who is responsible for the sustainability of Australian fisheries?

The results from this question appear opposite. What is apparent from this result is that most adult Australians acknowledge that achieving sustainability is a shared responsibility.

The results further suggest that 'industry' as a collective (everyone who fishes) is the predominant 'custodian' for sustainability, although the results clearly indicate that Australians consider that Government and indeed the broader community has a role to play in these efforts. Clearly however the industry will need to be a leading advocate and driver of change and improvements to the sustainability of the industry.

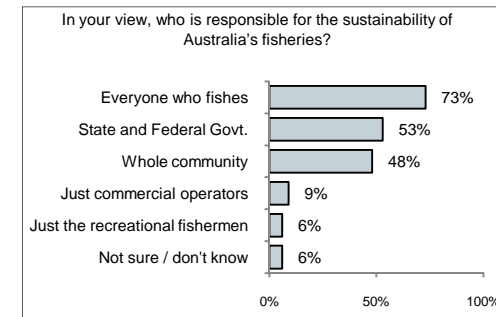
where is the balance between environment and supply pressures?

The results from this study suggest the majority of Australians (64%) believe the industry and Government should achieve an equal balance between supply of fresh fish for consumption and the delicate environmental needs of the marine environment.

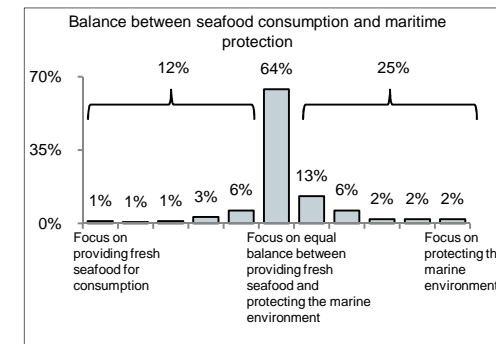
While this provides some licence for both protecting marine areas and at the same time ensuring recreational and commercial fishing is catered for there is likely to be a delicate balance – in some respects a discussion of one cannot be held without reference to the other.

Moving forward FRDC will need to remain cognisant of the need to continually balance environmental and supply issues.

The detailed results from the research now follow.



Base: All respondents; n=1025



Base: All respondents; n=1025

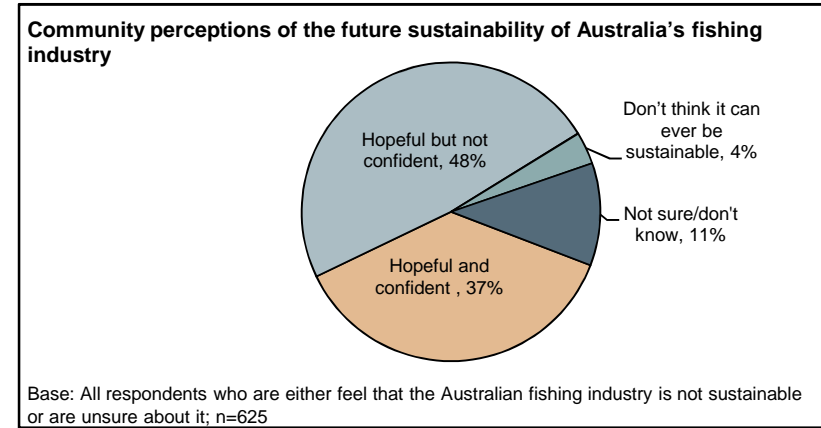
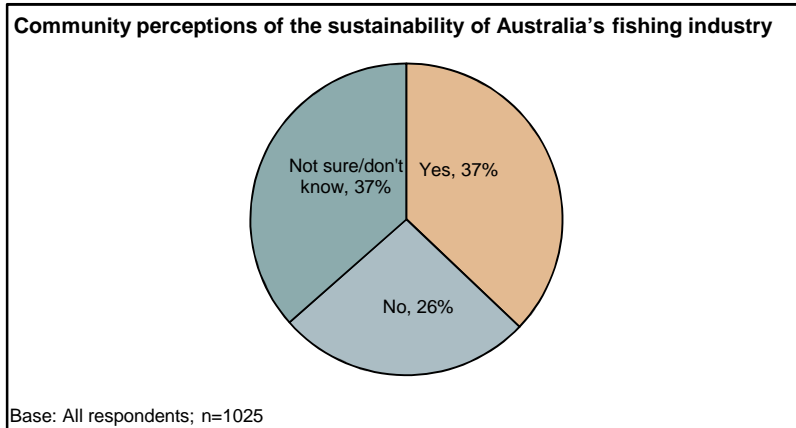
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community perceptions of the sustainability of
Australia's fishing industry

community perceptions of the sustainability of Australia's fishing industry



Segmentation tables

	Frequent eaters	Regular eaters	Occasional / non eaters
n	611	310	100
Yes	41%	36%	24%
No	25%	25%	33%
Not sure/don't know	34%	38%	43%

	Frequent fishers	Regular fishers	Occasional / non fishers
n	194	255	576
Yes	57%	41%	29%
No	30%	26%	25%
Not sure/don't know	13%	33%	46%

Note: The definitions of frequent, regular, occasional / non fishers and eaters is presented in the research design section of the report.

	Frequent eaters	Regular eaters	Occasional / non eaters
n	351	194	77
Hopeful and confident	41%	33%	33%
Hopeful but not confident	48%	51%	42%
Don't think it can ever be sustainable	3%	4%	6%
Not sure/don't know	8%	12%	19%

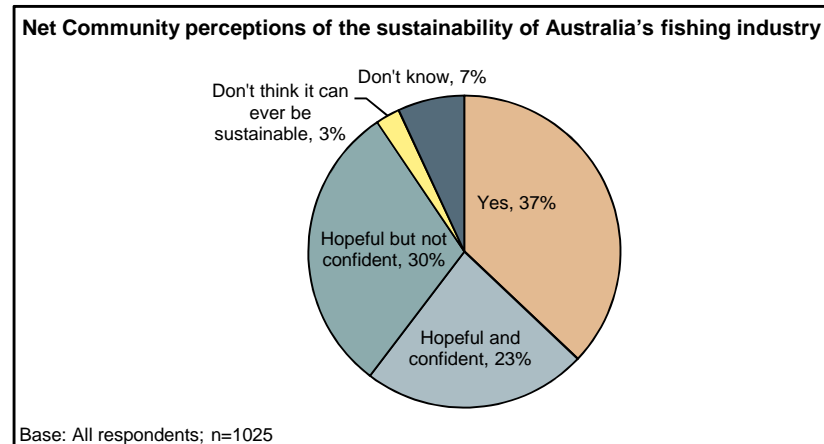
	Frequent fishers	Regular fishers	Occasional / non fishers
n	87	148	390
Hopeful and confident	22%	44%	37%
Hopeful but not confident	68%	49%	44%
Don't think it can ever be sustainable	4%	5%	3%
Not sure/don't know	6%	3%	16%

What we asked:

Do you think Australia's fishing industry is **sustainable**? That is, does the industry have the necessary practices and policies in place that ensure the future of fish species and the marine environment while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?

Do you think Australia's fishing industry can be sustainable?

community perceptions of the sustainability of Australia's fishing industry



Segmentation tables

	Frequent eaters	Regular eaters	Occasional / non eaters
n	611	310	100
Is sustainable	41%	36%	24%
Hopeful and confident	24%	21%	25%
Hopeful but not confident	28%	33%	32%
Don't think it can ever be sustainable	2%	2%	5%
Not sure/don't know	5%	8%	14%

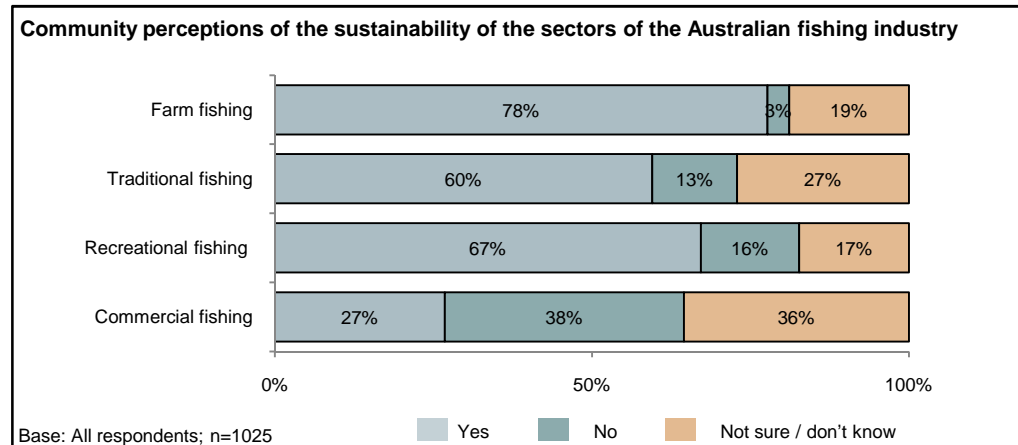
	Frequent fishers	Regular fishers	Occasional / non fishers
n	194	255	576
Is sustainable	57%	41%	29%
Hopeful and confident	9%	26%	26%
Hopeful but not confident	29%	29%	31%
Don't think it can ever be sustainable	1%	3%	2%
Not sure/don't know	2%	1%	12%

What we asked:

Do you think Australia's fishing industry is **sustainable**? That is, does the industry have the necessary practices and policies in place that ensure the future of fish species and the marine environment while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?

Do you think Australia's fishing industry can be sustainable?

community perceptions of the sustainability of Australia's fishing industry



Segmentation tables

% agreeing with the sustainability of the sectors

	Frequent eaters	Regular eaters	Occasional / non eaters
n	611	310	100
Farm fishing	81%	76%	68%
Traditional fishing	60%	57%	62%
Recreational fishing	69%	68%	58%
Commercial fishing	28%	29%	15%

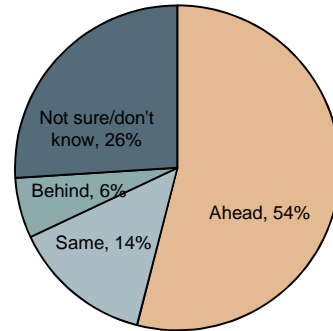
	Frequent fishers	Regular fishers	Occasional / non fishers
n	194	255	576
Farm fishing	79%	84%	74%
Traditional fishing	54%	64%	59%
Recreational fishing	66%	78%	63%
Commercial fishing	32%	30%	24%

What we asked:

Do you think the following sectors of the Australian fishing industry are sustainable?

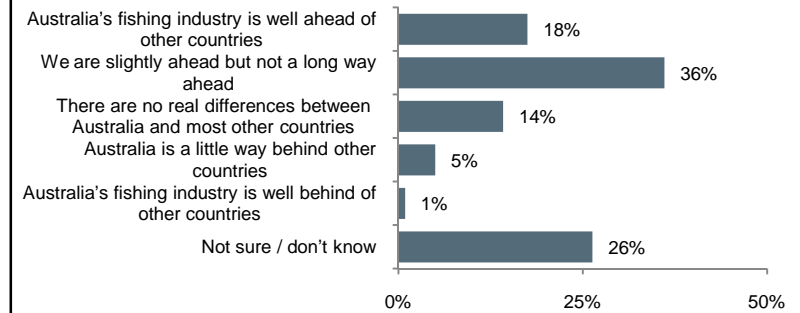
community perceptions of the sustainability of Australia's fishing industry

Community perceptions of Australia's fishing industry's practices around sustainability'



Base: All respondents; n=1025

Comparison of practices followed by Australian fishing industry to those overseas



Base: All respondents; n=1025

Segmentation tables

	Frequent eaters	Regular eaters	Occasional / non eaters
n	611	310	100
Australia's fishing industry is well ahead of other countries	20%	15%	12%
We are slightly ahead but not a long way ahead	40%	35%	23%
There are no real differences between Australia and most other countries	14%	14%	17%
Australia is a little way behind other countries	5%	5%	6%
Australia's fishing industry is well behind of other countries	1%	1%	0%
Not sure / don't know	20%	30%	43%

	Frequent fishers	Regular fishers	Occasional / non fishers
n	194	255	576
Australia's fishing industry is well ahead of other countries	27%	17%	14%
We are slightly ahead but not a long way ahead	44%	45%	29%
There are no real differences between Australia and most other countries	13%	13%	15%
Australia is a little way behind other countries	6%	3%	6%
Australia's fishing industry is well behind of other countries	1%	1%	1%
Not sure / don't know	9%	21%	35%

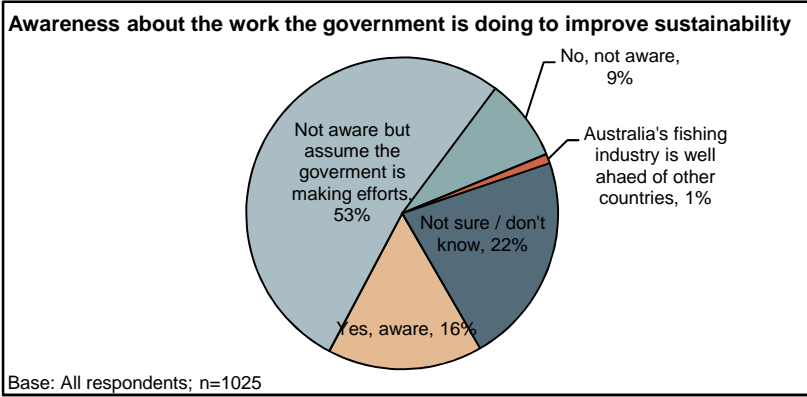
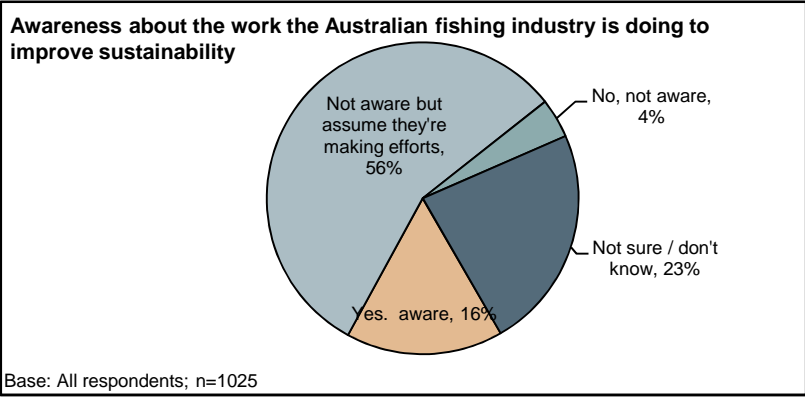
What we asked:

Do you think Australia's fishing industry and their practices around sustainability are better, worse or the same to those used in other countries?



awareness of the work being done to make Australia's fishing industry sustainable

awareness of the work being done to make Australia's fishing industry sustainable



Segmentation tables

	Frequent eaters	Regular eaters	Occasional / Non eaters
n	611	310	100
Yes, aware	20%	15%	3%
No, not aware but assume they are making efforts	59%	56%	49%
Not, not aware	4%	5%	2%
Not sure / don't know	17%	24%	46%

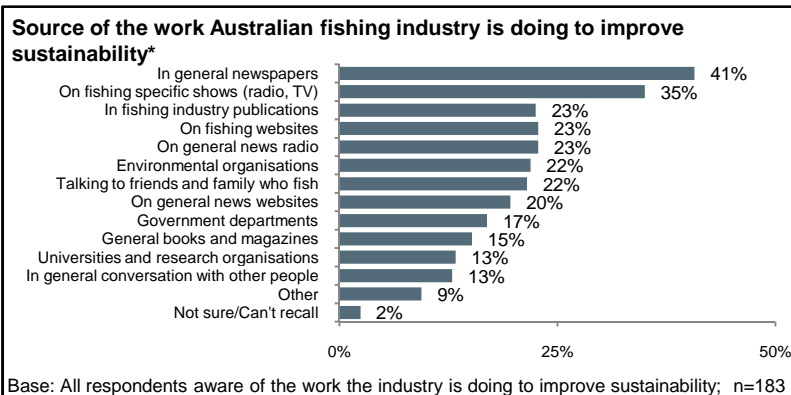
	Frequent eaters	Regular eaters	Occasional / non eaters
n	611	310	100
Yes, aware	20%	13%	7%
No, not aware but assume they are making efforts	54%	55%	41%
Not, not aware	8%	9%	9%
Australia's fishing industry is ahead of other countries	0%	2%	0%
Not sure / don't know	17%	21%	42%

	Frequent fishers	Regular fishers	Occasional / non fishers
n	194	255	576
Yes, aware	30%	19%	10%
No, not aware but assume they are making efforts	52%	59%	57%
Not, not aware	5%	6%	3%
Not sure / don't know	14%	15%	30%

	Frequent fishers	Regular fishers	Occasional / non fishers
n	194	255	576
Yes, aware	27%	19%	11%
No, not aware but assume they are making efforts	51%	57%	51%
Not, not aware	12%	10%	7%
Australia's fishing industry is ahead of other countries	1%	2%	0%
Not sure / don't know	9%	12%	31%

What we asked:
 Do you know if the fishing industry is doing work to improve its level of sustainability?
 Do you know if Government is doing work to improve the sustainability of fisheries?

awareness of the work being done to make Australia's fishing industry sustainable



Segmentation tables

	Frequent eaters	Regular eaters	Occasional / non eaters
n	126	52	5
In general newspapers	35%	58%	9%
On fishing specific shows (radio, TV)	38%	28%	36%
On fishing websites	24%	19%	39%
In fishing industry publications	25%	15%	27%
On general news radio	20%	29%	28%
Environmental organisations	26%	12%	21%
Talking to friends and family who fish	18%	32%	12%
On general news websites	20%	17%	45%
Government departments	22%	7%	0%
General books and magazines	16%	11%	33%
Universities and research org.	17%	6%	0%
Conversation with other people	15%	9%	9%
Other	8%	13%	0%
Can't recall	3%	0%	0%

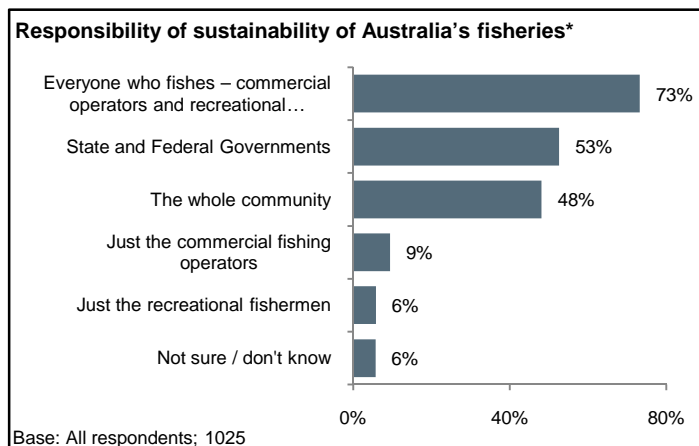
	Frequent eaters	Regular eaters	Occasional / non eaters
n	56	52	75
In general newspapers	28%	58%	37%
On fishing specific shows (radio, TV)	35%	33%	37%
On fishing websites	41%	21%	8%
In fishing industry publications	48%	15%	5%
On general news radio	13%	25%	30%
Environmental organisations	38%	18%	10%
Talking to friends and family who fish	15%	29%	21%
On general news websites	15%	20%	24%
Government departments	26%	20%	6%
General books and magazines	21%	19%	6%
Universities and research org.	27%	4%	8%
Conversation with other people	10%	15%	14%
Other	10%	5%	12%
Can't recall	0%	0%	7%

* Multiple response question. Percentages may not add up to 100.

What we asked:

And where did you hear about the work the fishing industry is doing to improve its level of sustainability?

awareness of the work being done to make Australia's fishing industry sustainable



Segmentation tables

	Frequent eaters	Regular eaters	Occasional / non eaters
n	611	310	100
Everyone who fishes – commercial and recreational	76%	69%	77%
State and Federal Governments	52%	53%	59%
The whole community	48%	46%	52%
Just the commercial fishing operators	9%	10%	8%
Just the recreational fishermen	7%	6%	1%
Not sure / don't know	5%	7%	6%

	Frequent fishers	Regular fishers	Occasional / non fishers
n	194	255	576
Everyone who fishes – commercial and recreational	73%	79%	71%
State and Federal Governments	41%	58%	54%
The whole community	40%	50%	50%
Just the commercial fishing operators	16%	8%	8%
Just the recreational fishermen	14%	4%	4%
Not sure / don't know	6%	3%	7%

* Multiple response question. Percentages may not add up to 100.

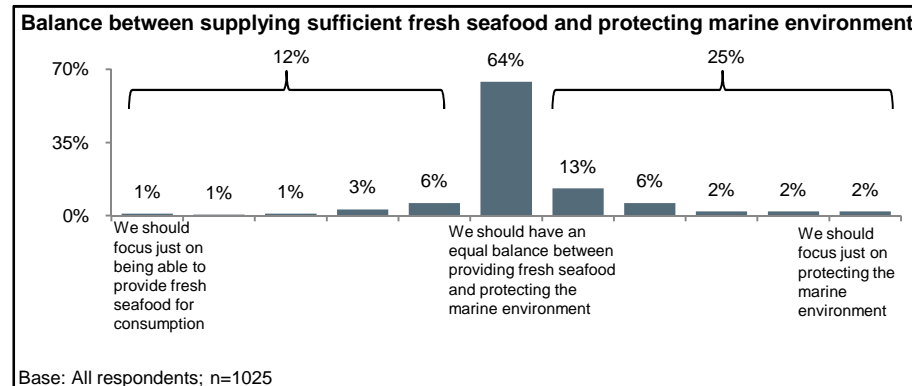
What we asked:

In your view, who is responsible for the sustainability of Australia's fisheries?



balance between seafood for consumption & maritime protection

balance between seafood for consumption & maritime protection



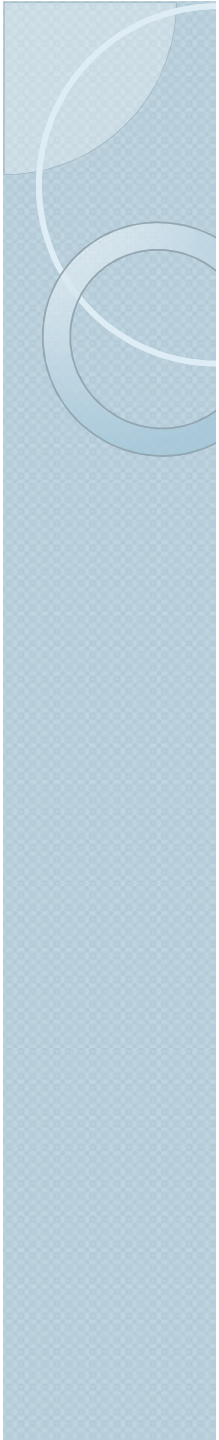
Segmentation tables

	Frequent eaters	Regular eaters	Occasional / non eaters
n	611	310	100
We should focus just on being able to provide fresh seafood for consumption	1%	1%	0%
	1%	0%	1%
	2%	1%	1%
	4%	3%	2%
	7%	6%	4%
We should have an equal balance between providing fresh seafood and protecting the marine environment	63%	67%	60%
	13%	12%	20%
	8%	5%	1%
	2%	2%	3%
	1%	1%	7%
We should focus just on protecting the marine environment	1%	2%	3%

	Frequent eaters	Regular eaters	Occasional / non eaters
n	194	255	576
We should focus just on being able to provide fresh seafood for consumption	2%	1%	1%
	2%	0%	0%
	3%	1%	1%
	5%	3%	3%
	8%	7%	5%
We should have an equal balance between providing fresh seafood and protecting the marine environment	59%	64%	65%
	10%	13%	14%
	7%	7%	5%
	1%	2%	2%
	2%	1%	2%
We should focus just on protecting the marine environment	2%	1%	2%

What we asked:

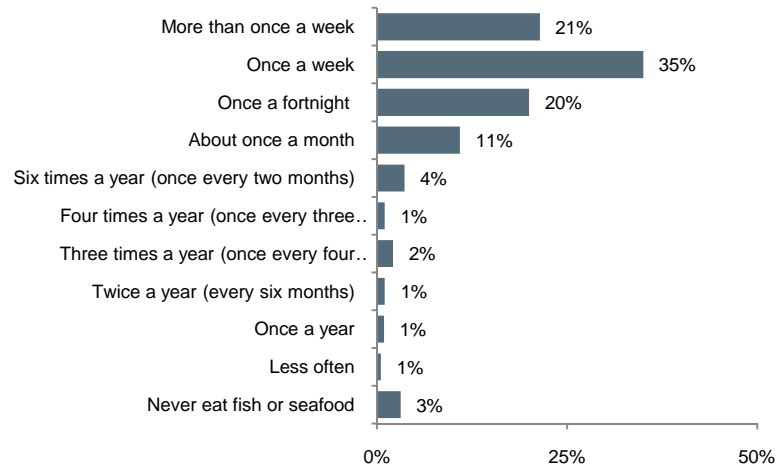
Most Australians acknowledge that its important to have a fishing industry that can supply sufficient fresh seafood so that everyone can buy locally caught seafood for consumption while at the same time having policies and practices that protect the marine environment. In your opinion how would you describe where the balance between these two, at times competing priorities, should be? Please select a position on the scale that best describes your opinion.



about the respondents

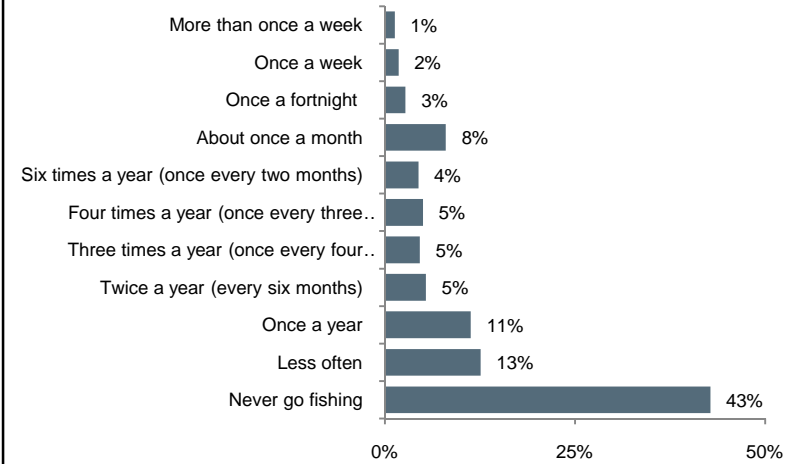
about the respondents

Seafood for consumption



Base: All respondents (excluding 4 don't knows); n=1021

Frequency of going fishing



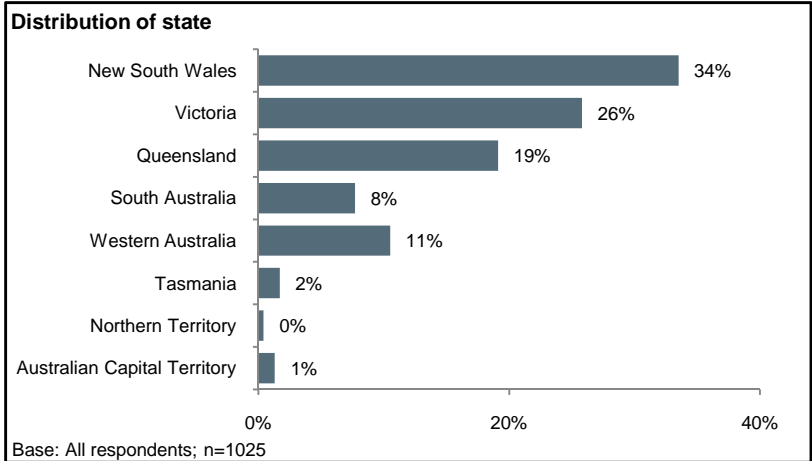
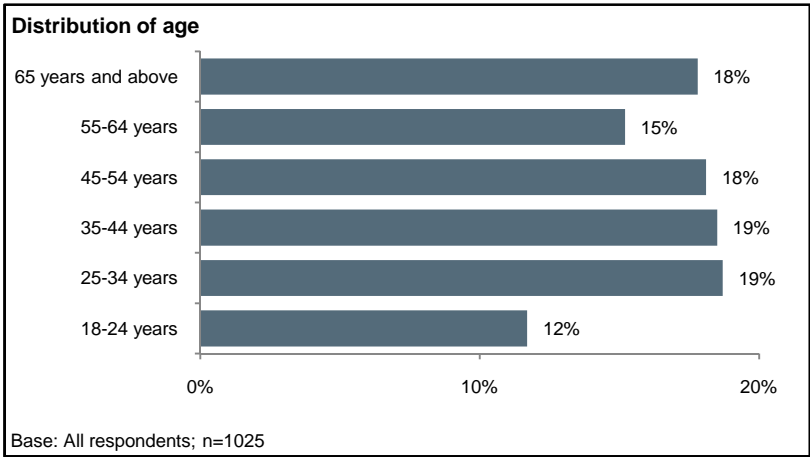
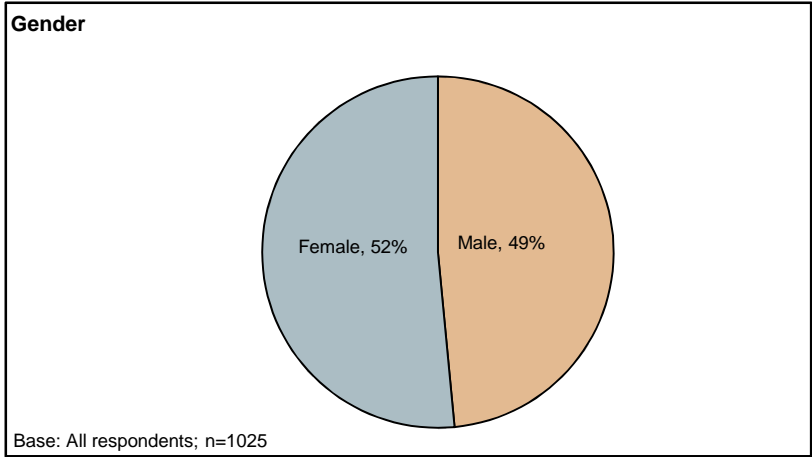
Base: All respondents; n=1025

What we asked:

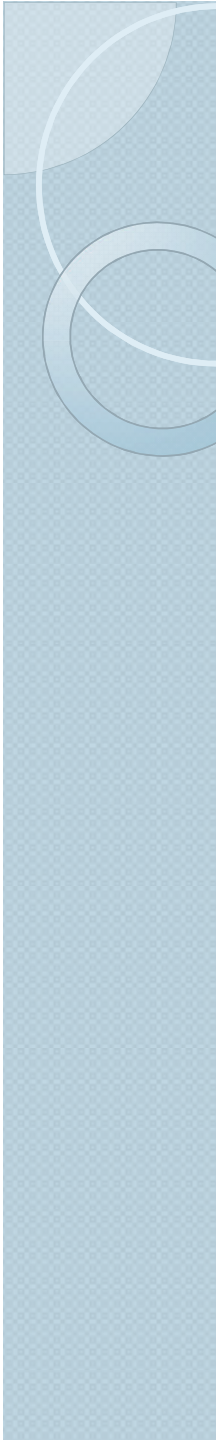
Over the past 12 months, how often would you say that you eat fish or seafood for a main meal?

And again over the past 12 months, how often have you gone fishing? Include any occasion you have gone recreational fishing – by yourself, with friends or family or with others.

demographics



What we asked:
Gender – please select
In which of the following age brackets do you fit into?
In which state do you live?



research design

research design

Methodology

An online survey was sent to an online panel above the age of 18 years. The sample was based on national representative numbers and was drawn randomly. There were no quotas set on age, gender or location.

Sample

In total n = 1025 surveys were completed by participants.

Questionnaire

Participants were asked to complete a 5 min online survey which covered a range of topics relating to their awareness and their thoughts about the Australian fishing Industry.

Weighting

The data was weighted using the estimated resident population 30th June 2010 (*Source: Australian Bureau of Statistics*). The data was weighted on the following variables:

- Age
- Gender
- Location

Timing

The online survey was launched on March 28, 2011 and remained open until April 7, 2011.

Definitions

Eaters

Frequent eaters is defined as those who eat fish or seafood at least once a week.

Regular eaters includes those who eat fish or seafood once a fortnight or once a month.

Occasional /non eaters includes those who eat fish or seafood less frequently or do not eat at all.

Fishers

Frequent fishers is defined as those who go fishing at least six times a year (after every 2 months).

Regular fishers includes those who go fishing either one, two, three or four times a year.

Occasional fishers includes those who go fishing less often and those who never go fishing.

questions asked...

- Over the past 12 months, how often would you say that you eat fish or seafood for a main meal?
- And again over the past 12 months, how often have you gone fishing? Include any occasion you have gone recreational fishing – by yourself, with friends or family or with others.
- Do you think Australia's fishing industry is **sustainable**? That is, does the industry have the necessary practices and policies in place that ensure the future of fish species and the marine environment while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?
- Do you think Australia's fishing industry can be sustainable?
- Do you think the following sectors of the Australian fishing industry are sustainable?
- Do you think Australia's fishing industry and their practices around sustainability are better, worse or the same to those used in other countries?
- Do you know if the fishing industry is doing work to improve its level of sustainability?
- Do you know if Government is doing work to improve the sustainability of fisheries?
- And where did you hear about the work the fishing industry is doing to improve its level of sustainability?
- In your view, who is responsible for the sustainability of Australia's fisheries?
- Most Australians acknowledge that its important to have a fishing industry that can supply sufficient fresh seafood so that everyone can buy locally caught seafood for consumption while at the same time having policies and practices that protect the marine environment. In your opinion how would you describe where the balance between these two, at times competing priorities, should be? Please select a position on the scale that best describes your opinion.
- Gender – please select
- In which of the following age brackets do you fit into?
- In which state do you live?



Community perceptions of the sustainability of the fishing industry in Australia

October 2013

Prepared for: Peter Horvat
Communications Manager
Fisheries Research and Development Corporation



Prepared by: Michael Sparks
Director
Intuitive Solutions
Our reference: P4587



research context

Sustainability remains an ongoing challenge and key area of focus for the Australian fishing industry. All sectors, including both industry and Government, continue to invest time and resources into improving the sustainability of the industry. In parallel, efforts are directed at ensuring the broader Australian community is informed about and engaged with industry's progress (in regards achieving sustainability). The level of awareness and engagement remains one important 'marker' of success for the industry.

In 2011 and again this year research has been undertaken to gauge community perceptions about the achievements and ongoing investment the industry is making into achieving long term sustainability. An online survey of a nationally representative sample of n=1,025 randomly selected adult Australians (aged 18 years and over) was conducted to provide robust measures of community perceptions.

The 2013 research was conducted in late August with results from the survey weighted using the ABS population estimates to ensure the final results appropriately reflected the current size and structure of the Australian population. The key results from this research are now presented.

does the Australian community believe the industry is sustainable?

For the purposes of this research sustainability was defined as *"the industry having the necessary practices and policies in place that ensure the future of fish species and the marine environment while at the same time providing sufficient supply of fish for commercial and recreational fishing needs"*.

The results from the 2013 research indicate that the views of the Australian community continue to be somewhat fragmented with:

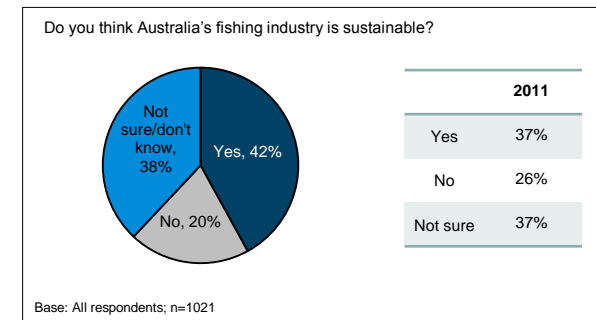
- just over four in ten (42%) believing the industry was sustainable;
- one in five (20%) believing the industry was not sustainable; while
- the remaining 38% just not sure if the industry was sustainable or not.

Pleasingly however the proportion of Australians who believe the industry is sustainable has increased since 2011 (up 5% from 37%); this is a statistically significant increase and indicates opinions are changing albeit slowly.

Among those who were uncertain or dismissive that the industry was currently sustainable (58%), there is a clear sense of pessimism with more than half (52% of these people) not confident the industry will become sustainable.

perceptions vary across the community

As noted in the 2011 study, people who fish regularly and/or eat seafood regularly were more likely to believe the industry was sustainable. However the level of support even amongst these arguably advocate groups suggests further work is required to strengthen perception around sustainability.



	Australia's fishing industry is sustainable % agree	Aware of the work Australia's fishing industry is doing % agree	Aware of the work the Government is doing % agree
<i>Frequency of seafood consumption</i>			
Frequent eaters	44%	24%	18%
Regular eaters	46%	17%	14%
Occasional / non eaters	28%	12%	7%
<i>Frequency of going fishing</i>			
Frequent fishers	61%	33%	27%
Regular fishers	41%	19%	10%
Occasional / non fishers	35%	15%	13%

While some improvements have been evident there remains an ongoing challenge to continue to inform, educate and influence community perceptions about the long term sustainability of the fishing industry.

The results were also reported across the different sectors of the industry. As can be seen from the figures opposite:

- There is a stronger level of confidence across the community about the sustainability of aquaculture (76%, down 2% from 2011) and recreational fishing (69% up 2% from 2011); whereas
- While perceptions continue to be weaker in regards community perceptions for commercial fishing (just 30% believing it's sustainable, up 3% from 2011) the improvement is a positive one.
- These results and indeed looking back to an earlier FRDC study (2003) indicate that progress in changing community perceptions is itself a long term project. It is also likely to be one that will require ongoing effort, communication and engagement.

Sustainability of fishing sectors	2013 (% agree)	2011 (% agree)
Farm fishing	76%	78%
Traditional fishing	58%	60%
Recreational fishing	69%	67%
Commercial fishing	30%	27%

These results suggest that community perceptions around the sustainability of commercial fishing are a key driver of their perceptions of the industry as a whole. Focus on improving this specific result may well help drive improvements in the 'whole of industry' result.

is the community aware that industry and Government working towards sustainability?

While the overall results indicate that visibility of the efforts undertaken by Government and industry remains low, the results from the 2013 research are instructive.

- When asked just 15% of people reported they were aware of the efforts being undertaken by Government; whereas
- One in five people (20% up 4% from 2011) reported they were aware of the efforts being undertaken by industry.

So while the overall awareness results points to the need for a continued focus on driving community awareness of the efforts being made, the result suggest there has been a limited but positive response and acknowledgement of the efforts undertaken by industry in this regard. This should provide encouragement for continued investment in and engagement with the community in 'telling the story' of the journey to sustainability.

On a more positive note the majority of adult Australians assume industry (58% up 2%) and Government (52%, down 1%) are working to make improvements in this area.

The challenge going forward then is to ensure major investments and achievements by both industry and Government receive sufficient community visibility – this should then have a positive down stream effect on the key indicators of sustainability for the industry.

by comparison to other countries

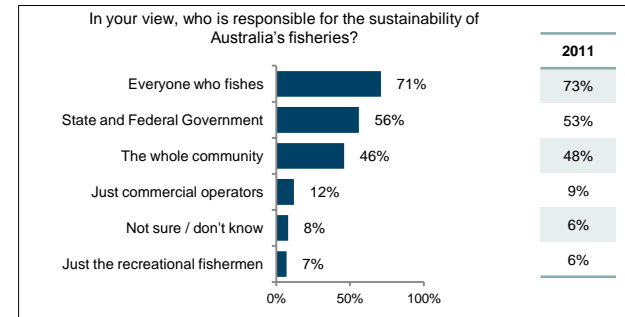
More than one in two adult Australians (56%) believe the Australian fishing industry is ahead of other countries in regards sustainability (17% reporting Australia was well ahead and 39% slightly ahead). There has been little change in this sentiment since the 2011 study. Given the high level of uncertainty about exactly what the Government and industry are doing here in Australia this result should be treated with some caution.

Awareness of work to improve	2013 (% aware)	2011 (% aware)
Fishing industry	20%	16%
Government	15%	16%

so who is responsible for the sustainability of Australian fisheries?

Australians continue to hold the view that achieving sustainability is a shared responsibility.

The results again support the position that suggests 'industry' as a collective (everyone who fishes) is the predominant 'custodian' for sustainability. The results clearly indicate that Australians consider that Government and indeed the broader community has a role to play in these efforts. Clearly however the industry will need to be a leading advocate and driver of change and improvements to the sustainability of the industry.

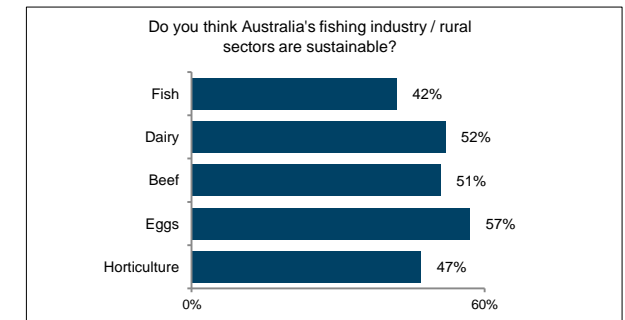


Base: All respondents; n=1021

how does the fishing industry compare to other sectors?

Australians hold different views of the sustainability of different sectors.

The results as shown in the chart opposite, provide an indication that there are different perceptions of the sustainability of various rural sectors. Interestingly perceptions of the fishing industry are lower than that of other sectors most notably eggs, dairy and beef. It may well be the recent intense focus on the egg industry in particular has created a higher visibility for this sector than others.



Base: All respondents; n=1021

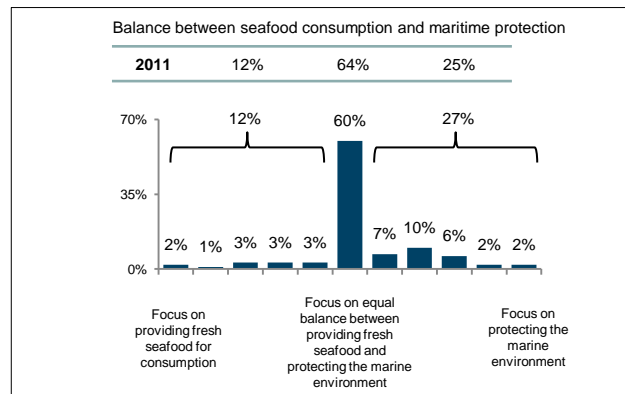
where is the balance between environment and supply pressures?

As in 2011 a measure of the balance between supply and the environment was undertaken. The results from this study suggest the majority of Australians (60%, down 4% from 2011) continue to believe the industry and Government should achieve an equal balance between supply of fresh fish for consumption and the delicate environmental needs of the marine environment.

We would note a slight (but not significant) shift in community views towards protecting the marine environment. Despite this small realignment the results remain largely consistent with the 2011 study. As noted then, while this provides some licence for both protecting marine areas and at the same time ensuring recreational and commercial fishing is catered for there is likely to be a delicate balance – in some respects a discussion of one cannot be held without reference to the other.

Moving forward FRDC will need to remain cognisant of the need to continually balance environmental and supply issues.

The detailed results from the research now follow.

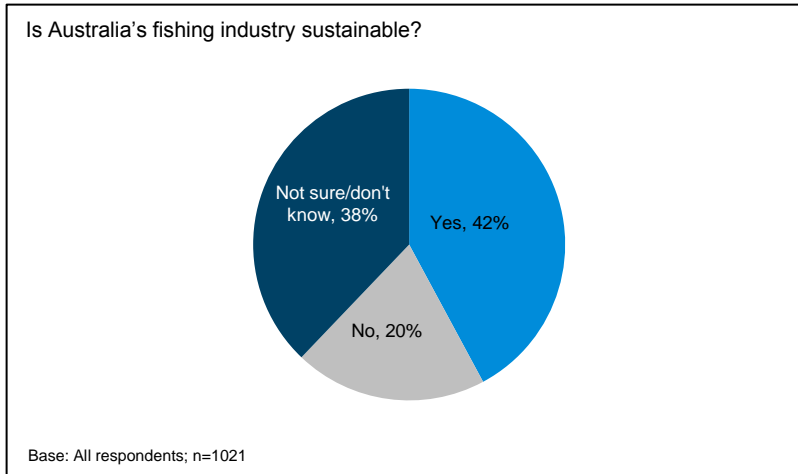


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community perceptions of the sustainability of Australia's fishing industry

community perceptions of the sustainability of Australia's fishing industry



	2013	2011	95% CI
n	1021	1025	
Yes †	42%	37%	(39.1%,45.1%)
No †	20%	26%	(17.5%,22.5%)
Not sure/don't know	38%	37%	(34.9%,40.9%)

† Denotes the 2013 result is statistically significant result to the 2011 result at the 0.05 level of significance.

Segment results

	Frequent eaters	Regular eaters	Occasional / non eaters
n	487	347	182
Yes	44%	46%	28%
No	21%	17%	25%
Not sure/don't know	36%	37%	47%

Note: The definitions of frequent, regular, occasional / non fishers and eaters is presented in the research design section of the report.

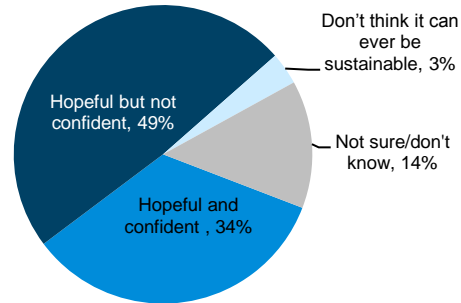
	Frequent fishers	Regular fishers	Occasional / non fishers
n	235	262	524
Yes	61%	41%	35%
No	17%	27%	18%
Not sure/don't know	22%	32%	47%

What we asked:

Do you think Australia's fishing industry is **sustainable**? That is, does the industry have the necessary practices and policies in place that ensure the future of fish species and the marine environment, while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?

community perceptions of the sustainability of Australia's fishing industry

Do you think Australia's fishing industry can be sustainable?



Base: All respondents who are either feel that the Australian fishing industry is not sustainable or are unsure about it; n=613

	2013	2011	95% CI
n	613	625	
Hopeful and confident	34%	37%	(30.2%,37.6%)
Hopeful but not confident	49%	48%	(44.8%,52.8%)
Don't think it can ever be sustainable	3%	4%	(2.0%,5.0%)
Not sure/don't know	14%	11%	(11.1%,16.5%)

Segment results

	Frequent eaters	Regular eaters	Occasional / non eaters
n	266	209	133
Hopeful and confident	39%	29%	28%
Hopeful but not confident	50%	50%	43%
Don't think it can ever be sustainable	4%	4%	2%
Not sure/don't know	7%	17%	26%

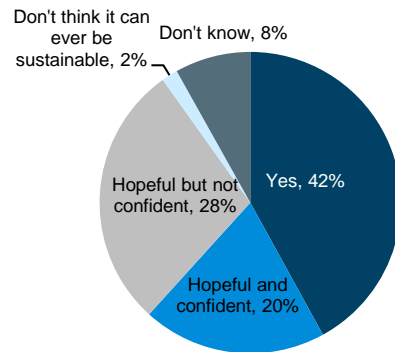
	Frequent fishers	Regular fishers	Occasional / non fishers
n	92	151	370
Hopeful and confident	34%	36%	33%
Hopeful but not confident	56%	56%	44%
Don't think it can ever be sustainable	5%	2%	4%
Not sure/don't know	5%	5%	20%

What we asked:

Do you think Australia's fishing industry can be sustainable?

community perceptions of the sustainability of Australia's fishing industry

Is Australia's fishing industry sustainable, or can it be sustainable?



Base: All respondents; n=1021

	2013	2011
n	1021	1025
Yes †	42%	37%
Hopeful and confident	20%	23%
Hopeful but not confident	28%	30%
Don't think it can ever be sustainable	2%	3%
Not sure/don't know	8%	7%

† Denotes the 2013 result is statistically significant result to the 2011 result at the 0.05 level of significance.

Segment results

	Frequent eaters	Regular eaters	Occasional / non eaters
n	487	347	182
Is sustainable	44%	46%	28%
Hopeful and confident	22%	16%	20%
Hopeful but not confident	28%	27%	31%
Don't think it can ever be sustainable	2%	2%	1%
Not sure/don't know	4%	9%	19%

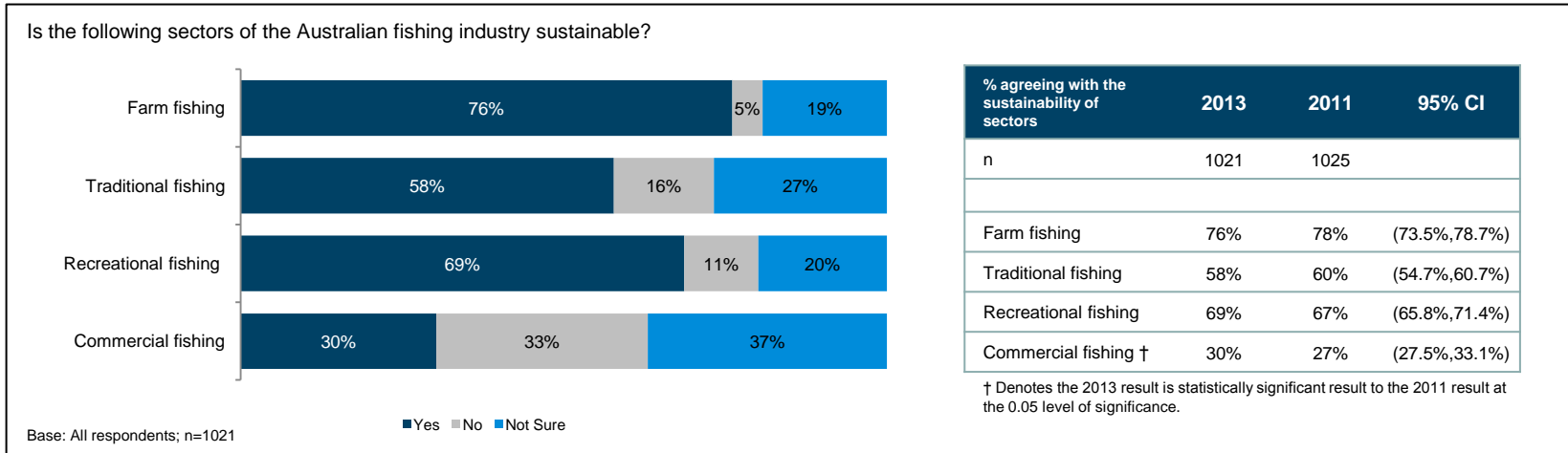
	Frequent fishers	Regular fishers	Occasional / non fishers
n	235	262	524
Is sustainable	61%	41%	35%
Hopeful and confident	13%	21%	21%
Hopeful but not confident	22%	33%	29%
Don't think it can ever be sustainable	2%	1%	3%
Not sure/don't know	2%	3%	13%

What we asked:

Do you think Australia's fishing industry is **sustainable**? That is, does the industry have the necessary practices and policies in place that ensure the future of fish species and the marine environment while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?

Do you think Australia's fishing industry can be sustainable?

community perceptions of the sustainability of Australia's fishing industry



Segment results

% agreeing with the sustainability of sectors

	Frequent eaters	Regular eaters	Occasional / non eaters
n	487	347	182
Farm fishing	80%	75%	68%
Traditional fishing	57%	61%	53%
Recreational fishing	68%	75%	58%
Commercial fishing	33%	28%	27%

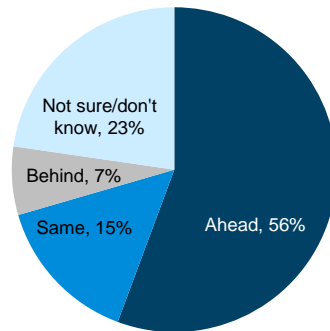
	Frequent fishers	Regular fishers	Occasional / non fishers
n	235	262	524
Farm fishing	77%	81%	74%
Traditional fishing	58%	58%	58%
Recreational fishing	74%	75%	64%
Commercial fishing	43%	26%	27%

What we asked:

Do you think the following sectors of the Australian fishing industry are sustainable?

community perceptions of the sustainability of Australia's fishing industry

Comparison of Australia's fishing industry's practices around sustainability to those overseas



Base: All respondents; n=1021

Comparison of practices followed by Australian fishing industry to those overseas	2013	2011	95% CI
n	1021	1025	
Australia's fishing industry is well ahead of other countries	17%	18%	(14.2%,18.8%)
We are slightly ahead but not a long way ahead	39%	36%	(36.1%,42.1%)
There are no real differences between Australia and most other countries	15%	14%	(12.6%,17.0%)
Australia is a little way behind other countries	5%	5%	(3.9%,6.7%)
Australia's fishing industry is well behind of other countries	2%	1%	(.8%,2.2%)
Not sure / don't know †	23%	26%	(20.1%,25.3%)

† Denotes the 2013 result is statistically significant result to the 2011 result at the 0.05 level of significance.

Segment results

	Frequent eaters	Regular eaters	Occasional / non eaters
n	487	347	182
Australia's fishing industry is well ahead of other countries	21%	16%	4%
We are slightly ahead but not a long way ahead	40%	38%	39%
There are no real differences between Australia and most other countries	15%	14%	15%
Australia is a little way behind other countries	6%	4%	6%
Australia's fishing industry is well behind of other countries	1%	2%	2%
Not sure / don't know	17%	26%	35%

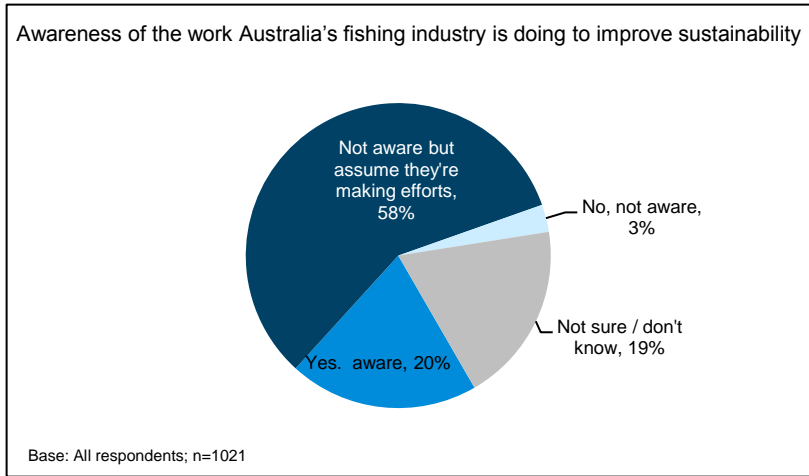
	Frequent fishers	Regular fishers	Occasional / non fishers
n	235	262	524
Australia's fishing industry is well ahead of other countries	21%	15%	15%
We are slightly ahead but not a long way ahead	46%	43%	35%
There are no real differences between Australia and most other countries	19%	10%	16%
Australia is a little way behind other countries	6%	6%	5%
Australia's fishing industry is well behind of other countries	<1%	4%	1%
Not sure / don't know	8%	23%	29%

What we asked:

Do you think Australia's fishing industry and their practices around sustainability are better, worse or the same to those used in other countries?

awareness of the work being done to make Australia's fishing industry sustainable

awareness of the work being done to make Australia's fishing industry sustainable



	2013	2011	95% CI
n	1021	1025	
Yes, aware †	20%	16%	(17.6%,22.6%)
No, not aware but assume they are making efforts	58%	56%	(54.8%,60.8%)
Not, not aware	3%	4%	(1.9%,3.9%)
Not sure / don't know †	19%	23%	(16.8%,21.6%)

† Denotes the 2013 result is statistically significant result to the 2011 result at the 0.05 level of significance.

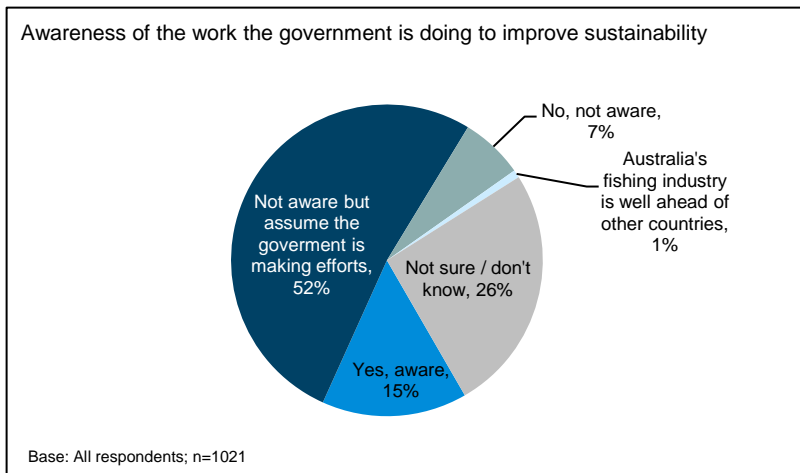
Segment results

	Frequent eaters	Regular eaters	Occasional / Non eaters
n	487	347	182
Yes, aware	24%	17%	12%
No, not aware but assume they are making efforts	58%	61%	51%
Not, not aware	3%	2%	4%
Not sure / don't know	15%	20%	33%

	Frequent fishers	Regular fishers	Occasional / non fishers
n	235	262	524
Yes, aware	33%	19%	15%
No, not aware but assume they are making efforts	53%	69%	55%
Not, not aware	4%	<1%	4%
Not sure / don't know	10%	11%	26%

What we asked:
Do you know if the fishing industry is doing work to improve its level of sustainability?

awareness of the work being done to make Australia's fishing industry sustainable



	2013	2011	95% CI
n	1021	1025	
Yes, aware	15%	16%	(12.9%,17.3%)
No, not aware but assume they are making efforts	52%	53%	(48.9%,55.1%)
Not, not aware †	7%	9%	(5.0%,8.0%)
Australia's fishing industry is ahead of other countries	1%	1%	(.3%,1.3%)
Not sure / don't know †	26%	22%	(22.9%,28.3%)

† Denotes the 2013 result is statistically significant result to the 2011 result at the 0.05 level of significance.

Segment results

	Frequent eaters	Regular eaters	Occasional / non eaters
n	487	347	182
Yes, aware	18%	14%	7%
No, not aware but assume they are making efforts	55%	53%	37%
Not, not aware	6%	7%	8%
Australia's fishing industry is ahead of other countries	1%	<1%	0%
Not sure / don't know	20%	25%	49%

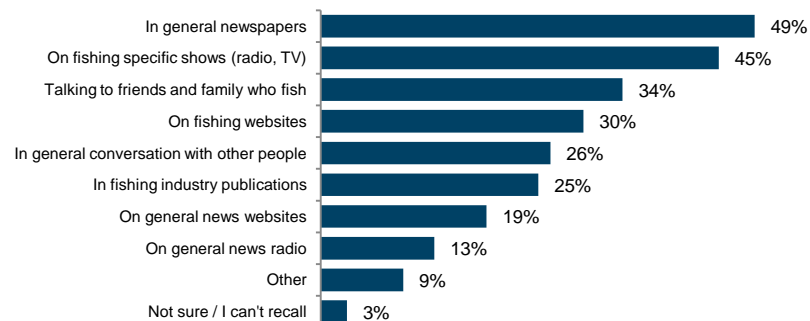
	Frequent fishers	Regular fishers	Occasional / non fishers
n	235	262	524
Yes, aware	27%	10%	13%
No, not aware but assume they are making efforts	50%	65%	47%
Not, not aware	6%	7%	7%
Australia's fishing industry is ahead of other countries	2%	0%	1%
Not sure / don't know	16%	19%	33%

What we asked:

Do you know if Government is doing work to improve the sustainability of fisheries?

awareness of the work being done to make Australia's fishing industry sustainable

Source they used to become aware of the work Australia's fishing industry is doing to improve sustainability*



Base: All respondents aware of the work the industry is doing to improve sustainability; n=187

Source they used to become aware	2013	2011	95% CI
n	187	183	
In general newspapers	49%	41%	(41.9%,56.3%)
On fishing specific shows (radio, TV) †	45%	35%	(38.0%,52.2%)
Talking to friends and family who fish †	34%	22%	(27.4%,41.0%)
On fishing websites	30%	23%	(23.2%,36.2%)
In general conversation with other people †	26%	13%	(19.7%,32.3%)
In fishing industry publications	25%	23%	(18.4%,30.8%)
On general news websites	19%	20%	(13.2%,24.4%)
On general news radio †	13%	23%	(8.1%,17.7%)
Other	9%	9%	(5.1%,13.5%)
Not sure / I can't recall	3%	2%	(.6%,5.4%)

* Multiple response question. Percentages may add to more than 100%.

† Denotes the 2013 result is statistically significant result to the 2011 result at the 0.05 level of significance.

Segment results

	Frequent eaters	Regular eaters	Occasional / non eaters
n	114	51	22
In general newspapers	53%	49%	20%
On fishing specific shows (radio, TV)	48%	39%	42%
Talking to friends and family who fish	33%	39%	29%
On fishing websites	27%	43%	7%
In general conversation with other people	29%	22%	18%
In fishing industry publications	28%	21%	9%
On general news websites	20%	16%	16%
On general news radio	13%	10%	18%
Other	10%	3%	22%
Not sure / I can't recall	4%	0%	4%

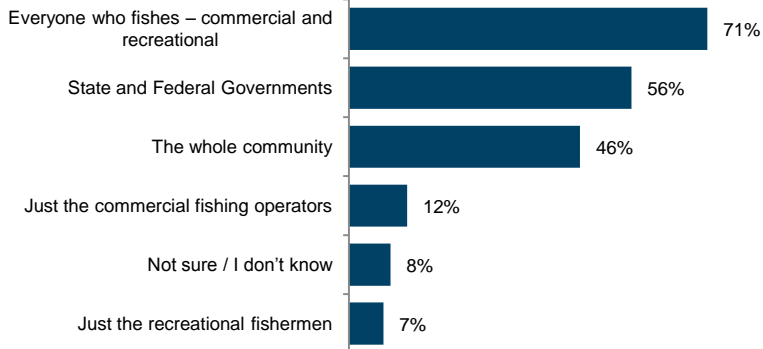
	Frequent eaters	Regular eaters	Occasional / non eaters
n	82	47	58
In general newspapers	45%	41%	58%
On fishing specific shows (radio, TV)	45%	45%	45%
Talking to friends and family who fish	34%	38%	32%
On fishing websites	43%	27%	18%
In general conversation with other people	19%	37%	27%
In fishing industry publications	33%	17%	21%
On general news websites	21%	13%	20%
On general news radio	15%	18%	8%
Other	7%	11%	10%
Not sure / I can't recall	7%	0%	1%

What we asked:

And where did you hear about the work the fishing industry is doing to improve its level of sustainability?

awareness of the work being done to make Australia's fishing industry sustainable

Who is responsible for the sustainability of Australia's fisheries*



Base: All respondents; n=1021

Responsibility for the sustainability	2013	2011	95% CI
n	1021	1025	
Everyone who fishes – commercial and recreational	71%	73%	(68.4%,74.0%)
State and Federal Governments	56%	53%	(53.1%,59.1%)
The whole community	46%	48%	(42.8%,49.0%)
Just the commercial fishing operators	12%	9%	(9.5%,13.5%)
Not sure / I don't know	8%	6%	(6.5%,9.9%)
Just the recreational fisherman †	7%	6%	(5.3%,8.5%)

* Multiple response question. Percentages may add to more than 100%.

† Denotes the 2013 result is statistically significant result to the 2011 result at the 0.05 level of significance.

Segment results

	Frequent eaters	Regular eaters	Occasional / non eaters
n	487	347	182
Everyone who fishes – commercial and recreational	70%	76%	68%
State and Federal Governments	54%	60%	57%
The whole community	47%	44%	47%
Just the commercial fishing operators	12%	12%	9%
Not sure / I don't know	6%	7%	17%
Just the recreational fishermen	6%	9%	5%

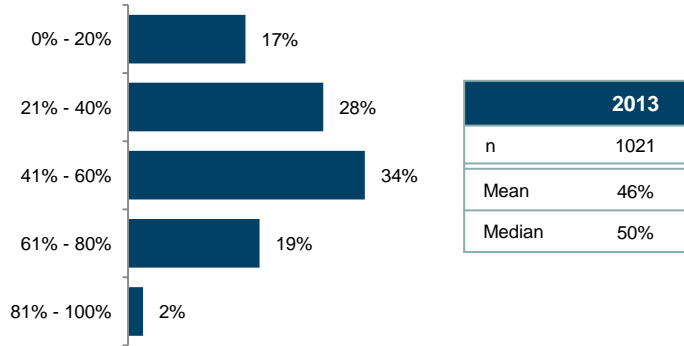
	Frequent fishers	Regular fishers	Occasional / non fishers
n	235	262	524
Everyone who fishes – commercial and recreational	77%	74%	68%
State and Federal Governments	57%	56%	56%
The whole community	41%	49%	47%
Just the commercial fishing operators	17%	11%	9%
Not sure / I don't know	3%	3%	13%
Just the recreational fishermen	10%	7%	6%

What we asked:

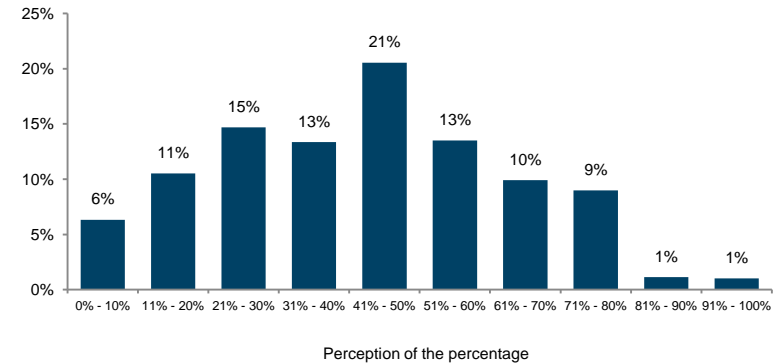
In your view, who is responsible for the sustainability of Australia's fisheries?

awareness of the work being done to make Australia's fishing industry sustainable

Perception of the percentage of fish consumed by Australians grown and caught in Australia



Base: All respondents; n=1021



Segment results

	Frequent eaters	Regular eaters	Occasional / non eaters
n	487	347	182
0% - 20%	14%	20%	20%
21% - 40%	30%	24%	29%
41% - 60%	37%	31%	28%
61% - 80%	17%	22%	20%
81% - 100%	1%	3%	3%
Mean	46%	47%	45%
Median	50%	50%	50%

	Frequent fishers	Regular fishers	Occasional / non fishers
n	487	347	182
0% - 20%	20%	17%	15%
21% - 40%	33%	34%	23%
41% - 60%	28%	30%	38%
61% - 80%	17%	17%	21%
81% - 100%	1%	2%	2%
Mean	43%	44%	48%
Median	40%	40%	50%

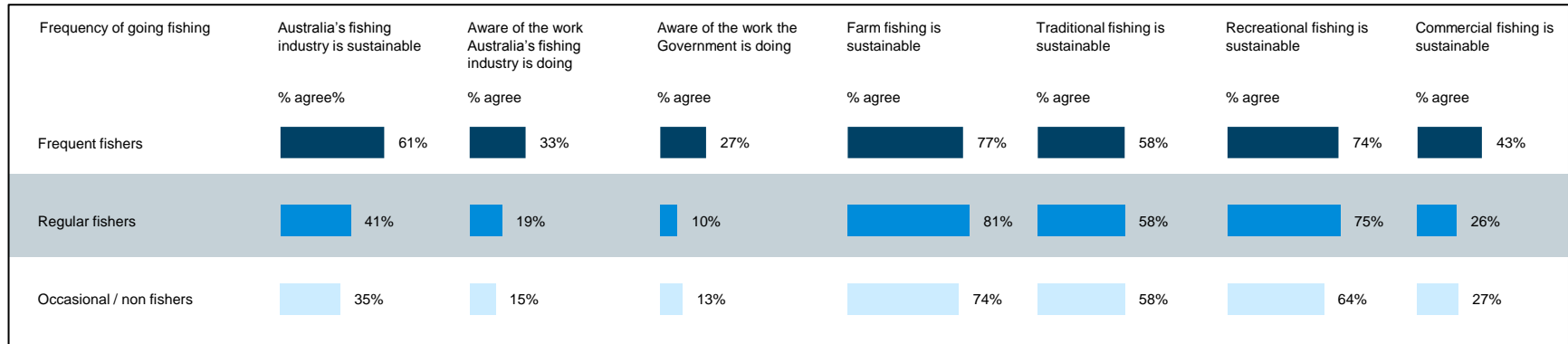
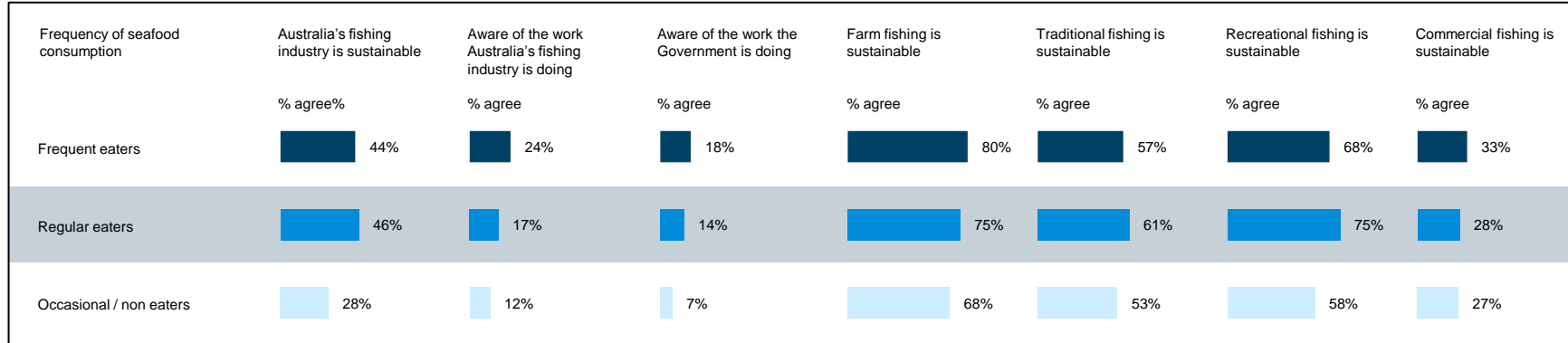
What we asked:

From what you know or have seen, heard or read, what percentage of the fish consumed by Australians is actually grown and caught in Australia, that is not imported from overseas?

a snapshot across different community segments

a snapshot across different community segments

The following analysis examines some of the key results across the fishing and seafood consumption segments identified earlier in this report.



What we asked:

Do you think Australia's fishing industry is **sustainable**? That is, does the industry have the necessary practices and policies in place that ensure the future of fish species and the marine environment, while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?

Do you know if the fishing industry is doing work to improve its level of sustainability?

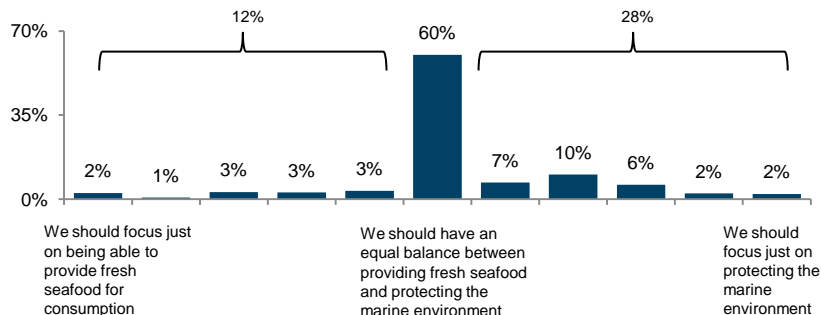
Do you know if Government is doing work to improve the sustainability of fisheries?

Do you think the following sectors of the Australian fishing industry are sustainable?

balance between seafood for consumption & maritime protection

balance between seafood for consumption & maritime protection

Balance between supplying sufficient fresh seafood and protecting marine environment



Base: All respondents; n=1021

Balance between supplying fresh seafood and protecting the marine environment	2013	2011	95% CI
n	1021	1025	
Providing fresh seafood for consumption †	2%	1%	(1.5%,3.5%)
†	1%	1%	(.2%,1.2%)
†	3%	1%	(2.0%,4.0%)
†	3%	3%	(1.8%,3.8%)
†	3%	6%	(2.3%,4.5%)
Equal balance †	60%	64%	(57.0%,63.0%)
†	7%	13%	(5.3%,8.5%)
†	10%	6%	(8.4%,12.2%)
†	6%	2%	(4.5%,7.5%)
†	2%	2%	(1.5%,3.3%)
Protecting the marine environment	2%	2%	(1.2%,3.0%)

Segment results

	Frequent eaters	Regular eaters	Occasional / non eaters
n	487	347	182
We should focus just on being able to provide fresh seafood for consumption	4%	2%	3%
	1%	<1%	1%
	3%	4%	3%
	3%	3%	3%
	2%	5%	3%
We should have an equal balance between providing fresh seafood and protecting the marine environment	57%	62%	60%
	5%	10%	7%
	13%	7%	10%
	9%	4%	6%
	3%	2%	2%
We should focus just on protecting the marine environment	2%	2%	2%

† Denotes the 2013 result is statistically significant result to the 2011 result at the 0.05 level of significance.

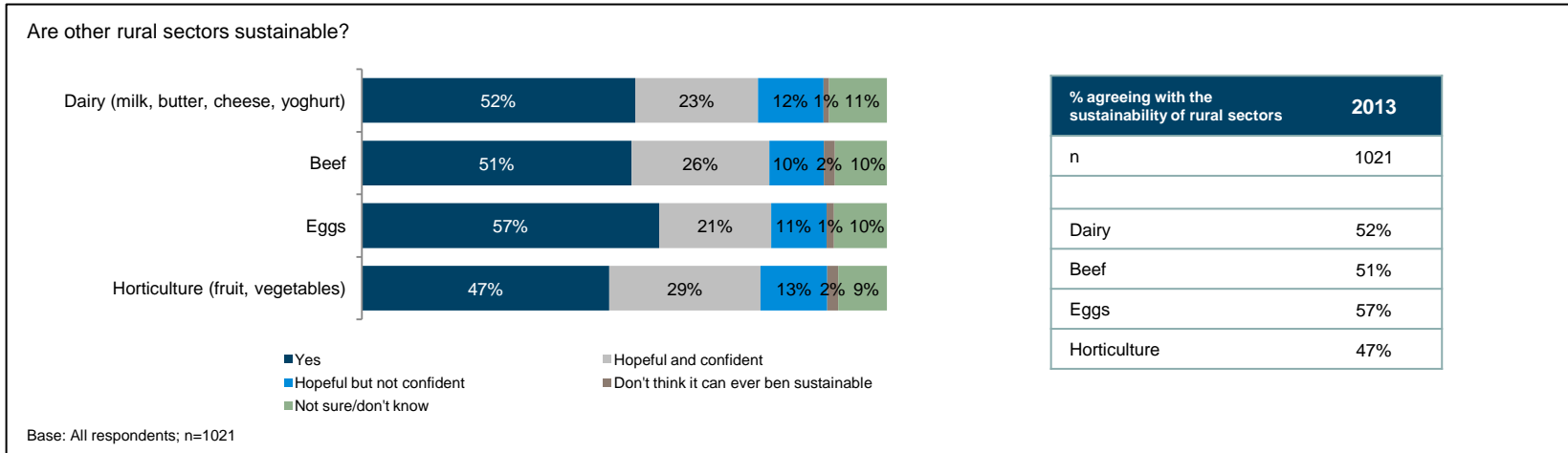
	Frequent eaters	Regular eaters	Occasional / non eaters
n	235	262	524
We should focus just on being able to provide fresh seafood for consumption	1%	3%	3%
	1%	0%	1%
	2%	4%	3%
	4%	2%	3%
	2%	2%	5%
We should have an equal balance between providing fresh seafood and protecting the marine environment	57%	56%	63%
	6%	9%	6%
	11%	12%	9%
	10%	8%	3%
	5%	2%	2%
We should focus just on protecting the marine environment	2%	3%	2%

What we asked:

Most Australians acknowledge that its important to have a fishing industry that can supply sufficient fresh seafood so that everyone can buy locally caught seafood for consumption while at the same time having policies and practices that protect the marine environment. In your opinion how would you describe where the balance between these two, at times competing priorities, should be? Please select a position on the scale that best describes your opinion.

views on sustainability of other rural sectors

views on sustainability of other rural sectors



Segment results

% agreeing with the sustainability of sectors

	Frequent eaters	Regular eaters	Occasional / non eaters
n	487	347	182
Dairy	52%	54%	51%
Beef	53%	49%	53%
Eggs	57%	55%	60%
Horticulture	47%	51%	41%

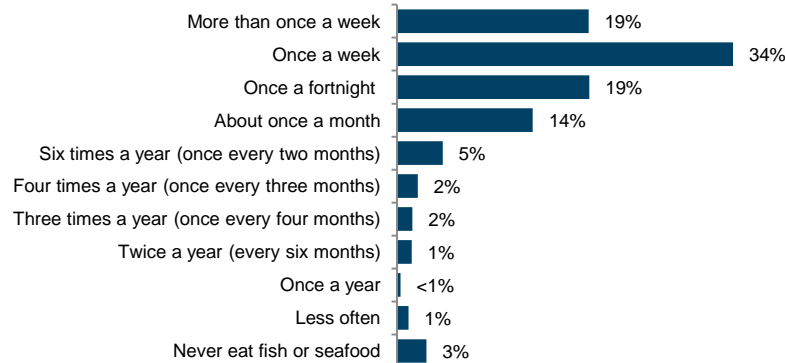
	Frequent fishers	Regular fishers	Occasional / non fishers
n	235	262	524
Dairy	52%	58%	50%
Beef	50%	52%	52%
Eggs	51%	60%	58%
Horticulture	45%	47%	48%

What we asked:

From what you know, do the following rural sectors have the necessary practices and policies in place to ensure the future of the industry and the environment is sustainable, while at the same time providing sufficient supply for Australians?

about the respondents

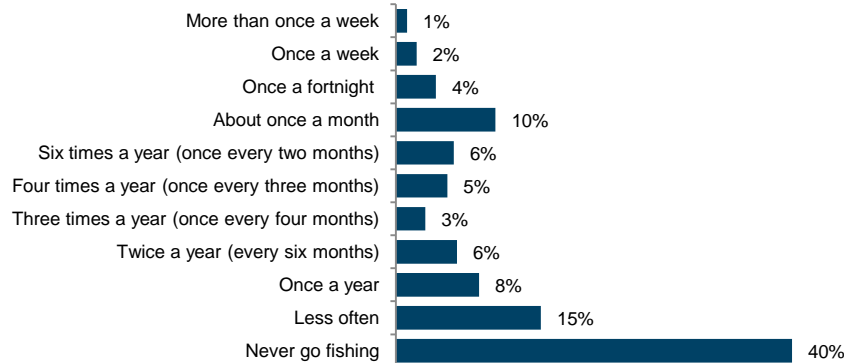
Frequency of seafood consumption



Base: All respondents (excluding 5 don't knows); n=1016

Frequency of seafood consumption	2013	2011
n	1016	1021
More than once a week	19%	21%
Once a week	34%	35%
Once a fortnight	19%	20%
About once a month	14%	11%
Six times a year	5%	4%
Four times a year	2%	1%
Three times a year	2%	2%
Twice a year	1%	1%
Once a year	<1%	1%
Less often	1%	1%
Never eat fish or seafood	3%	3%

Frequency of going fishing



Base: All respondents; n=1021

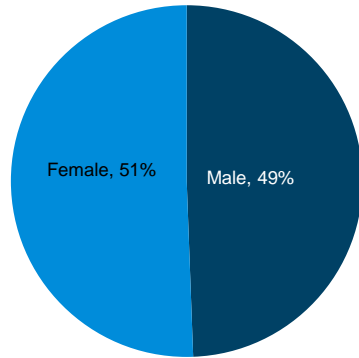
Frequency of going fishing	2013	2011
n	1021	1025
More than once a week	1%	1%
Once a week	2%	2%
Once a fortnight	4%	3%
About once a month	10%	8%
Six times a year	6%	4%
Four times a year	5%	5%
Three times a year	3%	5%
Twice a year	6%	5%
Once a year	8%	11%
Less often	15%	13%
Never go fishing	40%	43%

What we asked:

Over the past 12 months, how often would you say that you eat fish or seafood for a main meal?

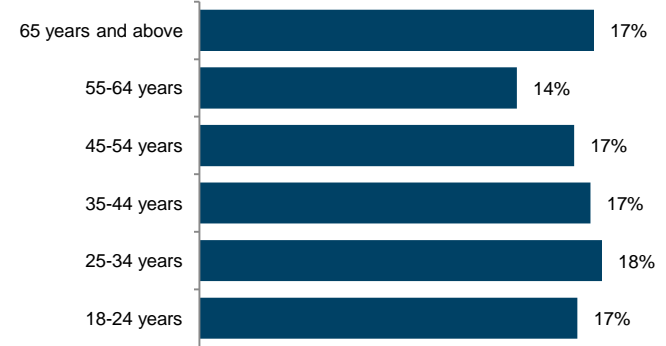
And again over the past 12 months, how often have you gone fishing? Include any occasion you have gone recreational fishing – by yourself, with friends or family or with others.

Gender



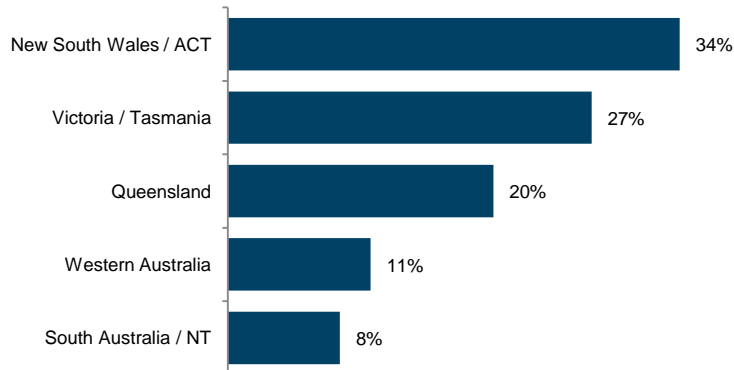
Base: All respondents; n=1021

Distribution of age



Base: All respondents; n=1021

Distribution of state



Base: All respondents; n=1021

What we asked:

Gender – please select

In which of the following age brackets do you fit into?

In which state do you live?

research design

Methodology

An online survey was sent to a commercially available panel of respondents over the age of 18 years. The sample was based on national representative numbers and was drawn randomly.

Sample

In total, n = 1021 surveys were completed by participants.

Questionnaire

Participants were asked to complete a 5 min online survey which covered a range of topics relating to their awareness and their thoughts about the Australian fishing Industry.

Weighting

The data was weighted using the estimated resident population at the 30th June 2012 (*Source: 31010DO001_201303 Australian Demographic Statistics, Mar 2013. Sheet: Table_6*). The data was weighted on the following variables:

- Age (15 – 24, 25 – 34, 35 – 44, 45 – 54, 55 – 64, 65 years and above)
- Gender (Male, Female)
- State (New South Wales / ACT, Victoria / Tasmania, Queensland, Western Australia, South Australia / NT)

Due to nil sample for some combinations of age, gender and state, some categories were merged for weighting purposes.

Timing

The online survey was launched on the 23rd September 2013 and remained open until the 1st October 2013.

Definitions

Eaters

Frequent eaters is defined as those who eat fish or seafood at least once a week.

Regular eaters includes those who eat fish or seafood once a fortnight or once a month.

Occasional /non eaters includes those who eat fish or seafood less frequently or do not eat at all.

Fishers

Frequent fishers is defined as those who go fishing at least six times a year (after every 2 months).

Regular fishers includes those who go fishing either one, two, three or four times a year.

Occasional fishers includes those who go fishing less often and those who never go fishing.

As the estimates in this report are based on information relating to a sample of the population, rather than a full enumeration, they are subject to sampling variability. That is, they may differ from the estimates that would have been produced if the information had been obtained from the whole population. This difference, called sampling error, should not be confused with inaccuracy that may occur because of imperfections in reporting by respondents or in processing. Such inaccuracy is referred to as non-sampling error and may occur in any enumeration whether it be a full count or sample. Efforts have been made to reduce non-sampling error by careful design of questionnaires, detailed checking of returns and quality control of processing.

The sampling error associated with any estimate can be estimated from the sample results. One measure of sampling error is given by the standard error, which indicates the degree to which an estimate may vary from the value which would have been obtained from a full enumeration (the 'true value'). There are about two chances in three that a sample estimate differs from the true value by less than one standard error, and about 19 chances in 20 that the difference will be less than two standard errors.

The reliability of estimates can also be assessed in terms of a confidence interval. Confidence intervals represent the range in which the population value is likely to lie. They are constructed using the estimate of the population value and its associated standard error. For example, there is approximately a 95% chance (i.e. 19 chances in 20) that the population value lies within two standard errors of the estimates, so the 95% confidence interval is equal to the estimate plus or minus two standard errors.



Community perceptions of the sustainability of the Australian fishing industry

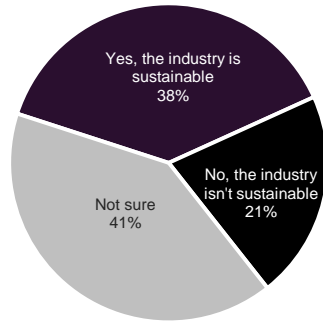
Detailed report

September 2015

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community perceptions of the sustainability of Australia's fishing industry	3
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a snapshot across different community segments	15
about the respondents	18
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research design	41

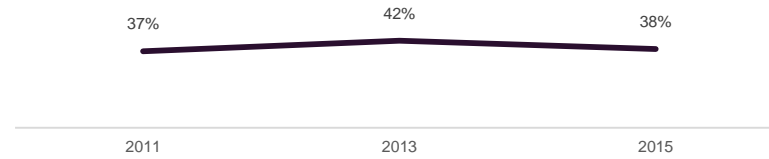
community perceptions of the sustainability of Australia's fishing industry

sustainability of the industry



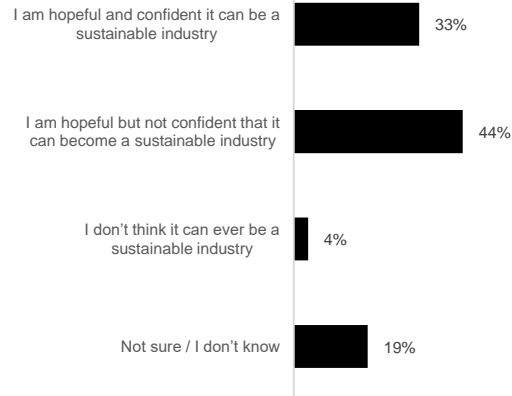
Base: All respondents n= 1507

sustainability of the industry – tracking those who agree

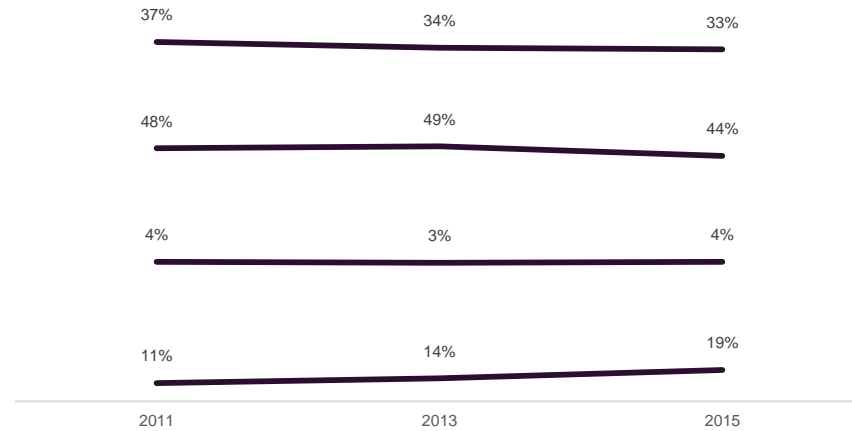


Base: All respondents n= 1507

can it become sustainable



Base: Respondents who do not believe/ unsure of the sustainability of the industry; n= 934



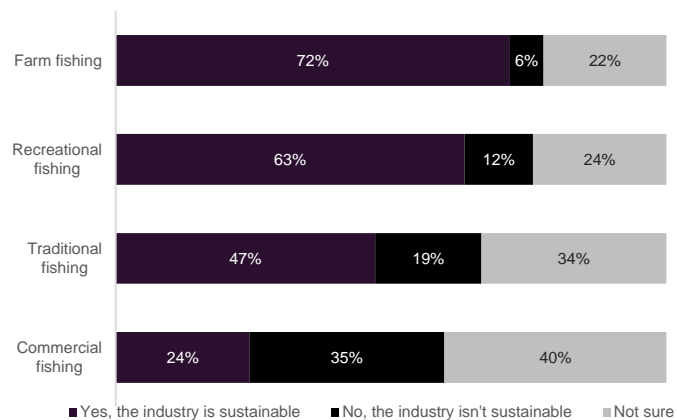
What we asked:

Do you think Australia's fishing industry is sustainable? That is, does the industry have the necessary practices/policies in place that ensure the future of fish species and the marine environment, while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?

Do you think Australia's fishing industry can be sustainable?

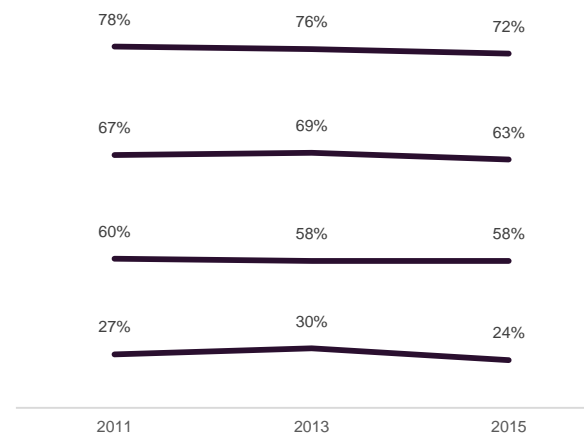
Do you think the following sectors of the Australian fishing industry are sustainable?

sustainability of sections of the industry

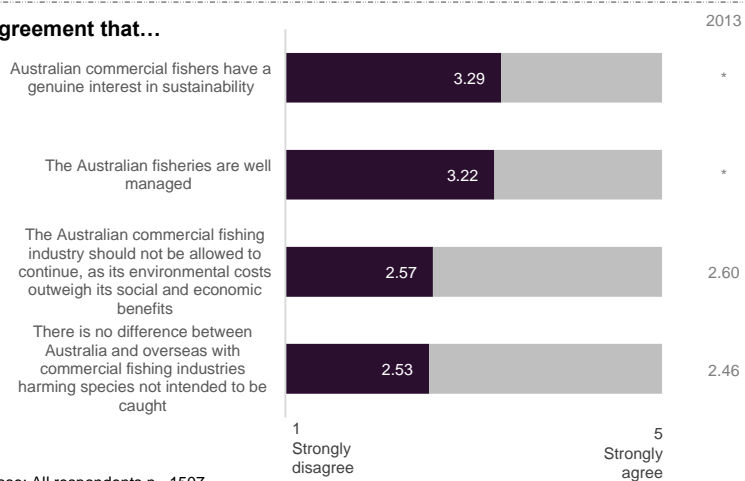


Base: All respondents n= 1507

sustainability of sections of the industry – tracking those who agree

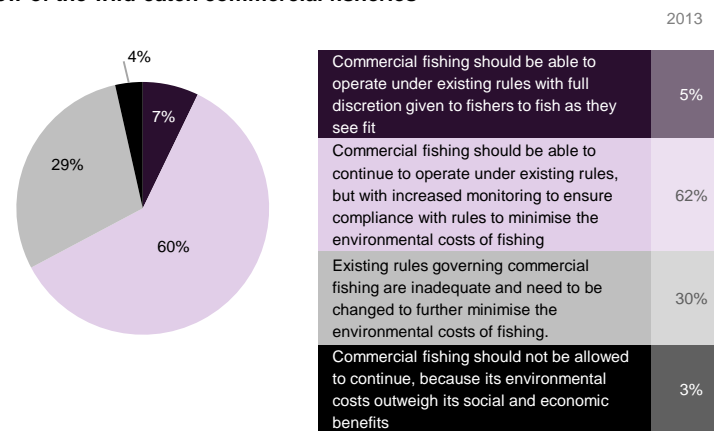


agreement that...



Base: All respondents n= 1507

view of the wild-catch commercial fisheries



Base: All respondents n= 1507

* Question not asked in 2013

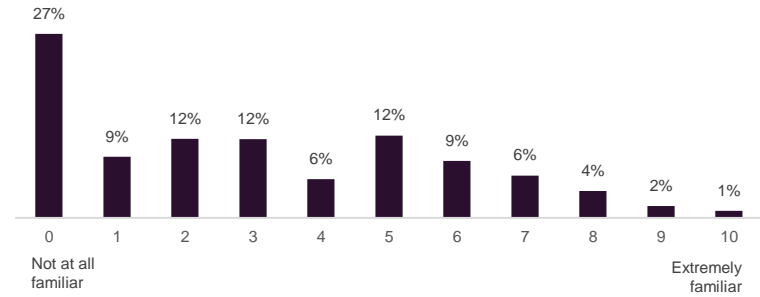
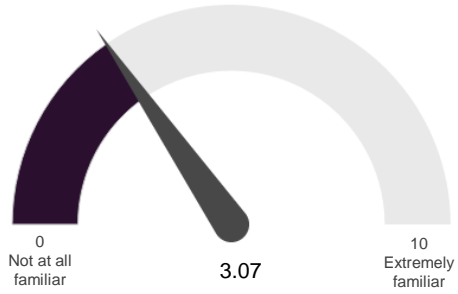
What we asked:

Do you think the following sectors of the Australian fishing industry are sustainable?

Do you agree or disagree with the following?

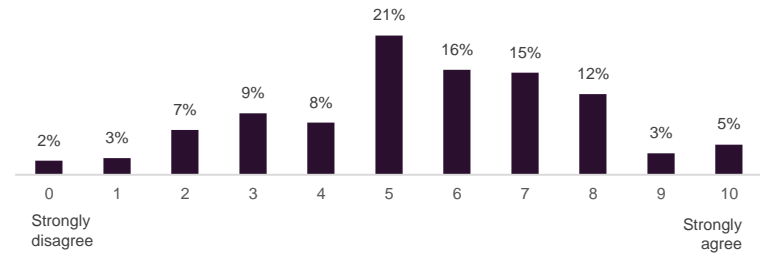
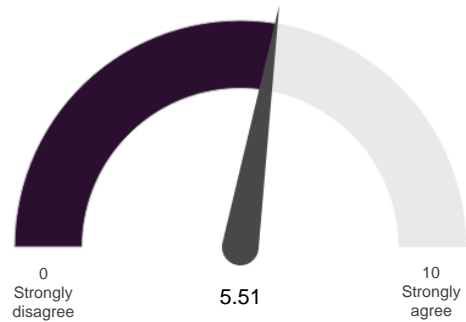
Below is a set of statements about Australia's management of wild-catch commercial fisheries. Please examine each statement in the table and select ONE statement that best matches your view.

familiarity with how the industry is managed



Base: All respondents n= 1507

agreement that the industry is sustainable



Base: All respondents n= 1507

What we asked:

There are both state and national bodies that manage Australia's fisheries to ensure Australian fish stocks and our fishing industry are viable now and in the future. How familiar would you say you are with how the Australian fishing industry is managed?

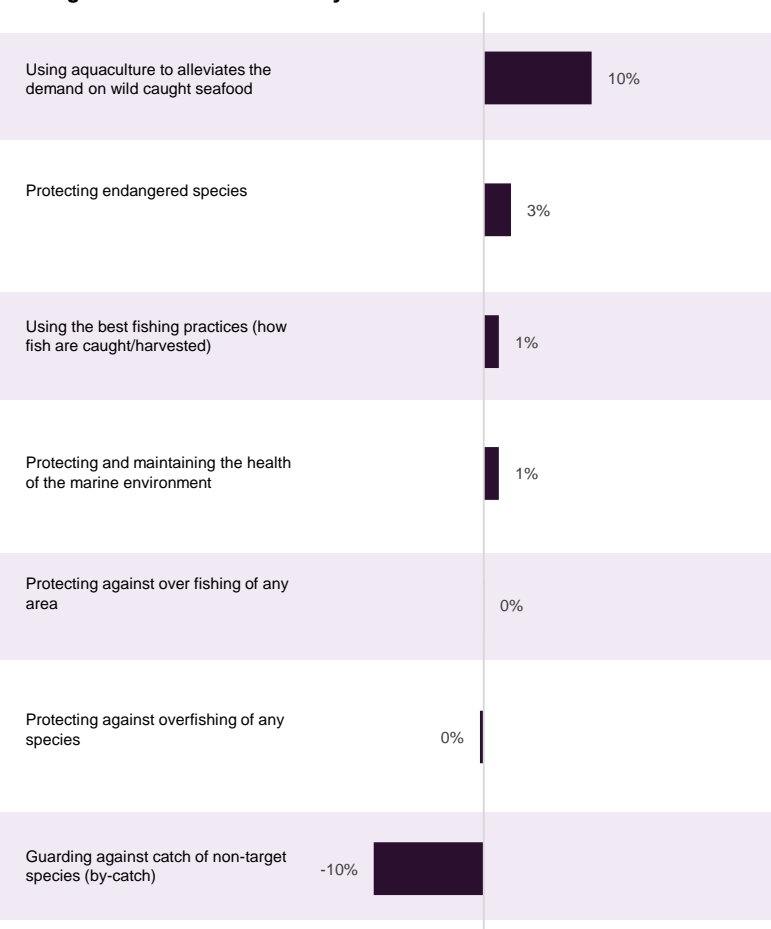
Do you agree or disagree that the Australia's fishing industry is sustainable?

agreement that the industry is sustainable 5.51

How familiar would you say you with how the Australian fishing industry is managed?	25%
Country of origin labeling allows you to make a more informed choice about the seafood you buy	17%
That's certified (i.e MSC, ASC and Friend of the sea) gives you confidence that the seafood is sustainable	13%
Using aquaculture to alleviates the demand on wild caught seafood	11%
Using the best fishing practices (how fish are caught/harvested)	7%
Protecting endangered species	7%
Protecting and maintaining the health of the marine environment	6%
Guarding against catch of non-target species (by-catch)	6%
Protecting against over fishing of any area	5%
Protecting against overfishing of any species	4%

Adjusted R² = 46.8%

net agreement* that the industry is...



Base: All respondents n= 1507

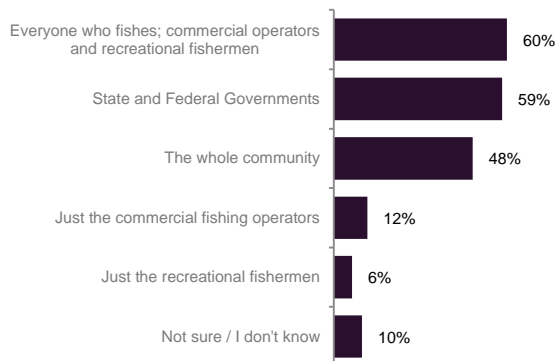
*Net agreement calculated by:
% strongly agree (8-10) minus % strongly disagree (0-4)

What we asked:

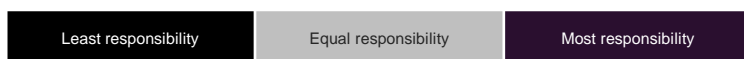
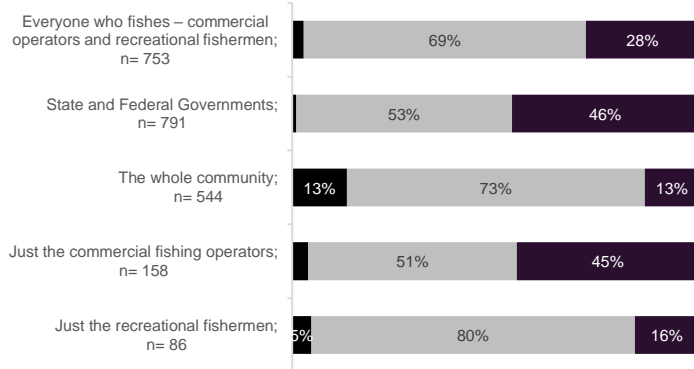
Do you agree or disagree that the Australia's fishing industry is sustainable?

Do you agree or disagree that the Australian fishing industry, that is the management of our fisheries and the commercial fishers who operate in these fisheries are....

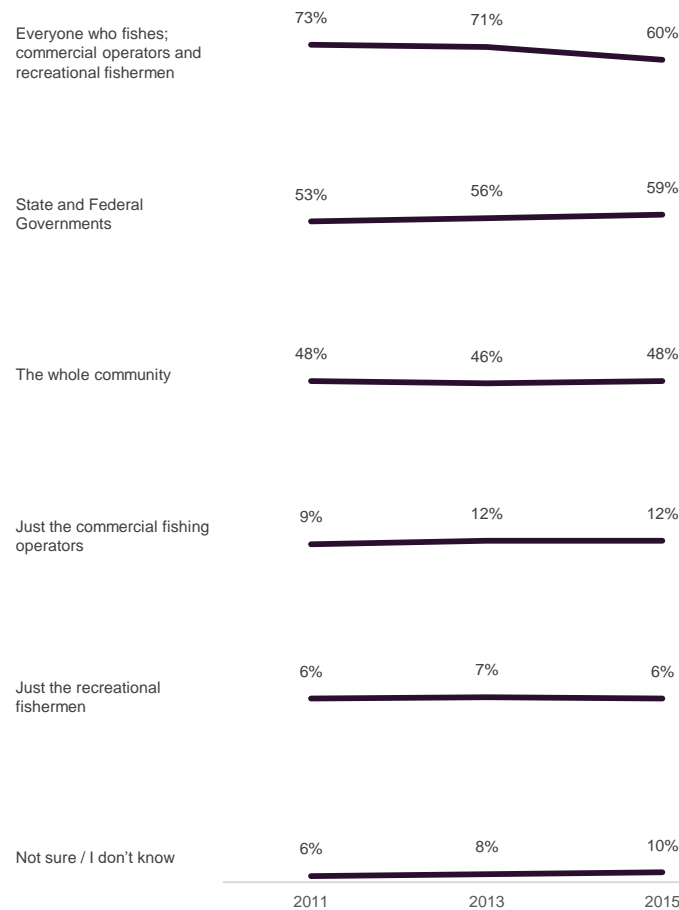
responsibility for sustainability



Base: All respondents n= 1507



responsibility for sustainability – tracking total

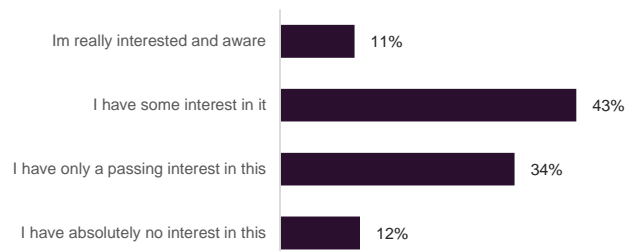


What we asked:

In your view, who is responsible for the sustainability of Australia's fisheries?
Please select all that apply.

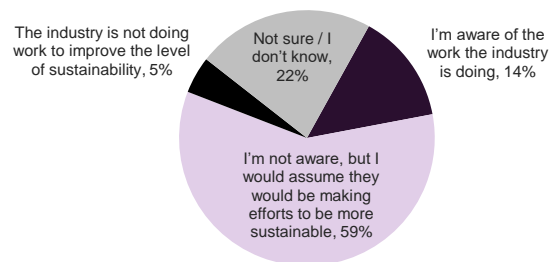
And what sort of responsibility does each of these have?

interest and awareness of sustainability issues facing the industry

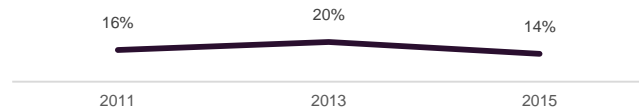


Base: All respondents n= 1507

awareness of the work being done by industry

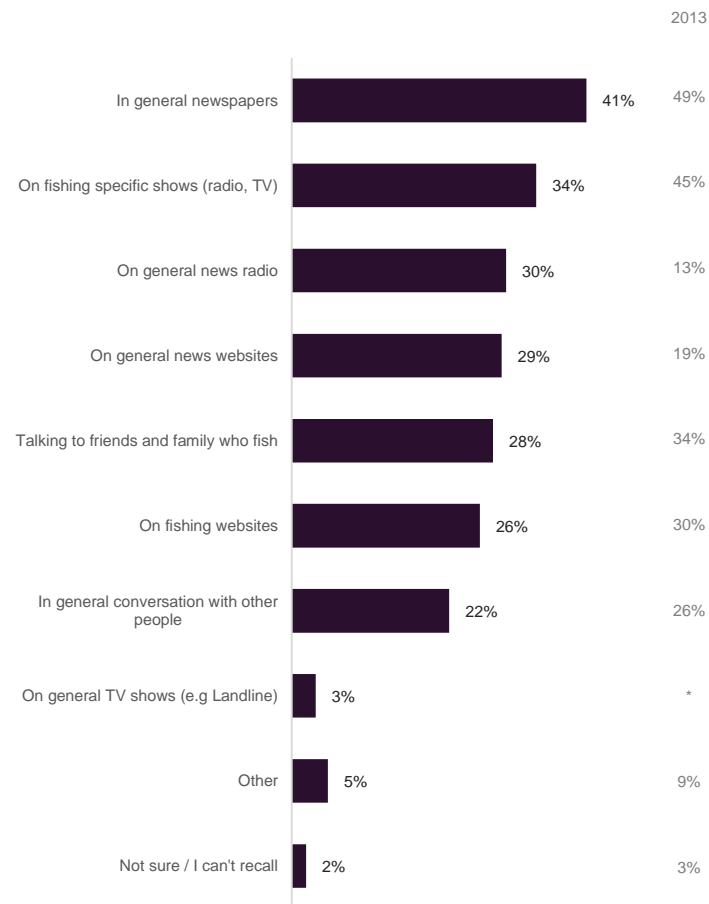


awareness of the work being done by industry – tracking those aware



Base: All respondents n= 1507

sources of information



Base: Respondents aware of the work the industry is doing; n= 212

* Question not asked in 2013

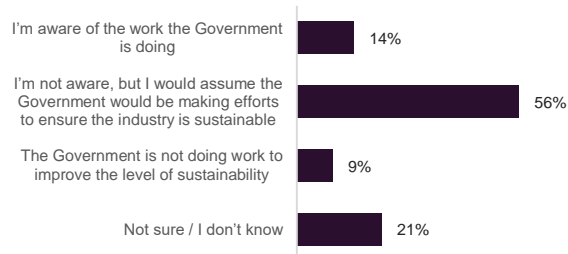
What we asked:

Which of the following best describes your interest in and awareness of the sustainability issues of the fishing industry in Australia?

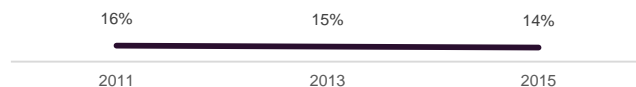
Do you know if the fishing industry is doing work to improve its level of sustainability?

And where did you hear about the work the fishing industry is doing to improve its level of sustainability? Please select all that apply.

awareness of the work being done by Government

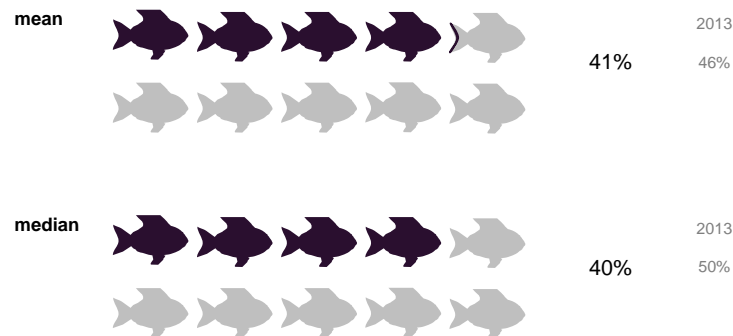


awareness of the work being done by Government – tracking those aware

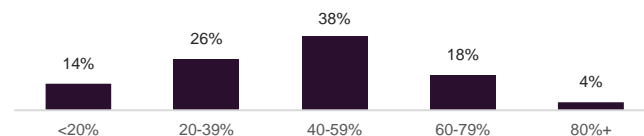


Base: All respondents n= 1507

Perception of the percentage of fish consumed by Australians grown and caught in Australia



distribution



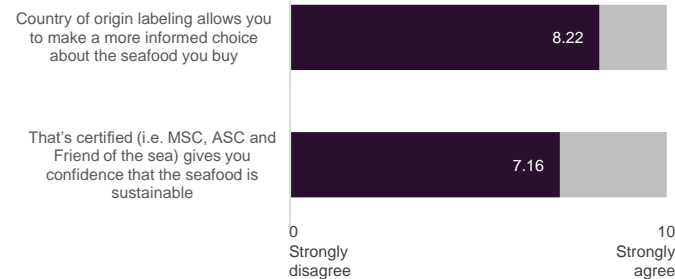
Base: All respondents n= 1507

Australia's industry as compared to other countries



Base: All respondents n= 1507

agreement that...



Base: All respondents n= 1507

What we asked:

Do you know if the Government is doing work to improve the sustainability of fisheries?

Do you think Australia's fishing industry and their practices around sustainability are better, worse, or the same to those used in other countries?

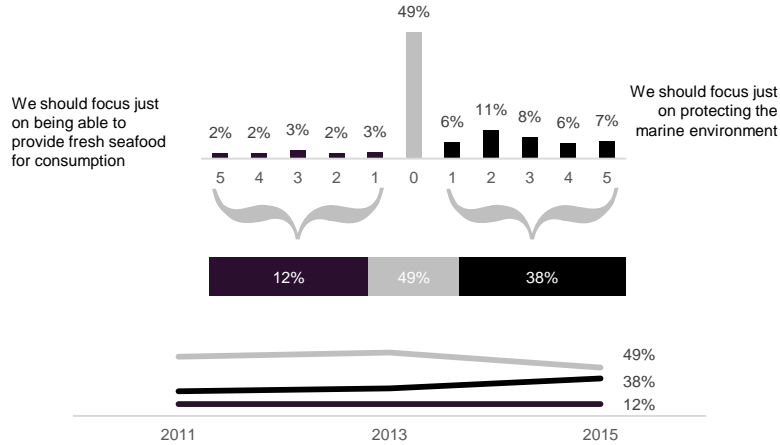
From what you know or have seen, heard or read, what percentage of the fish consumed by Australians is actually grown and caught in Australia, that is not imported from overseas?

Do you agree or disagree that buying seafood with ...

balance between seafood for consumption & maritime protection

balance between economic considerations and environmental considerations

Balance between supplying sufficient fresh seafood and protecting marine environment



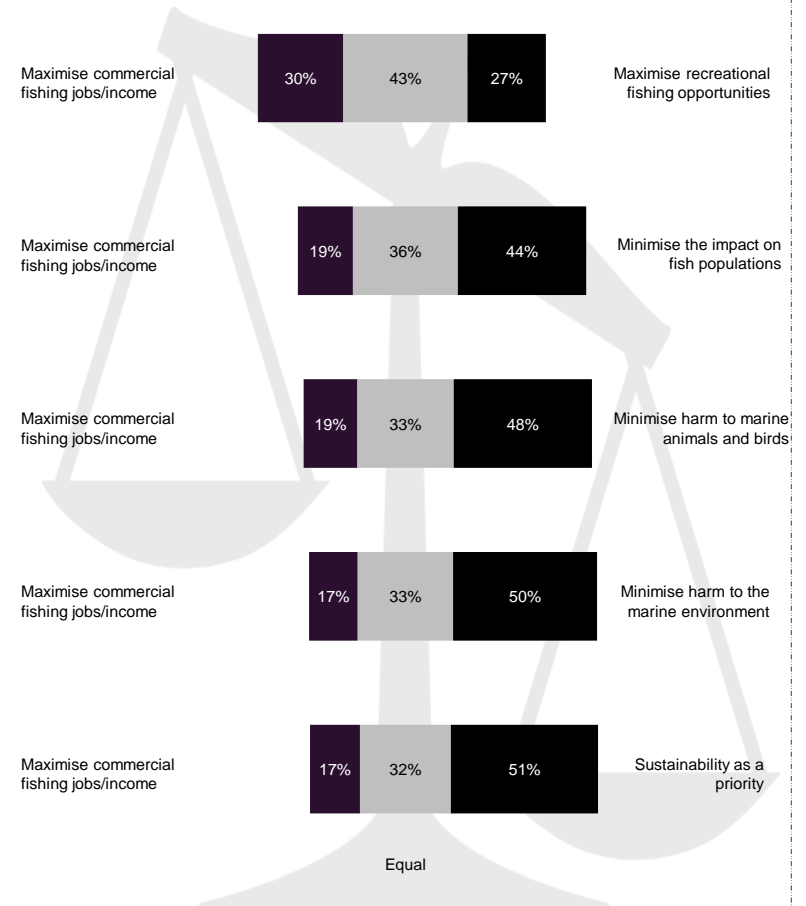
Base: All respondents n= 1507

Balance between price and sustainably caught seafood



Base: All respondents n= 1507

balance between environmental considerations and social/ economic considerations



Base: All respondents n= 1507

What we asked:

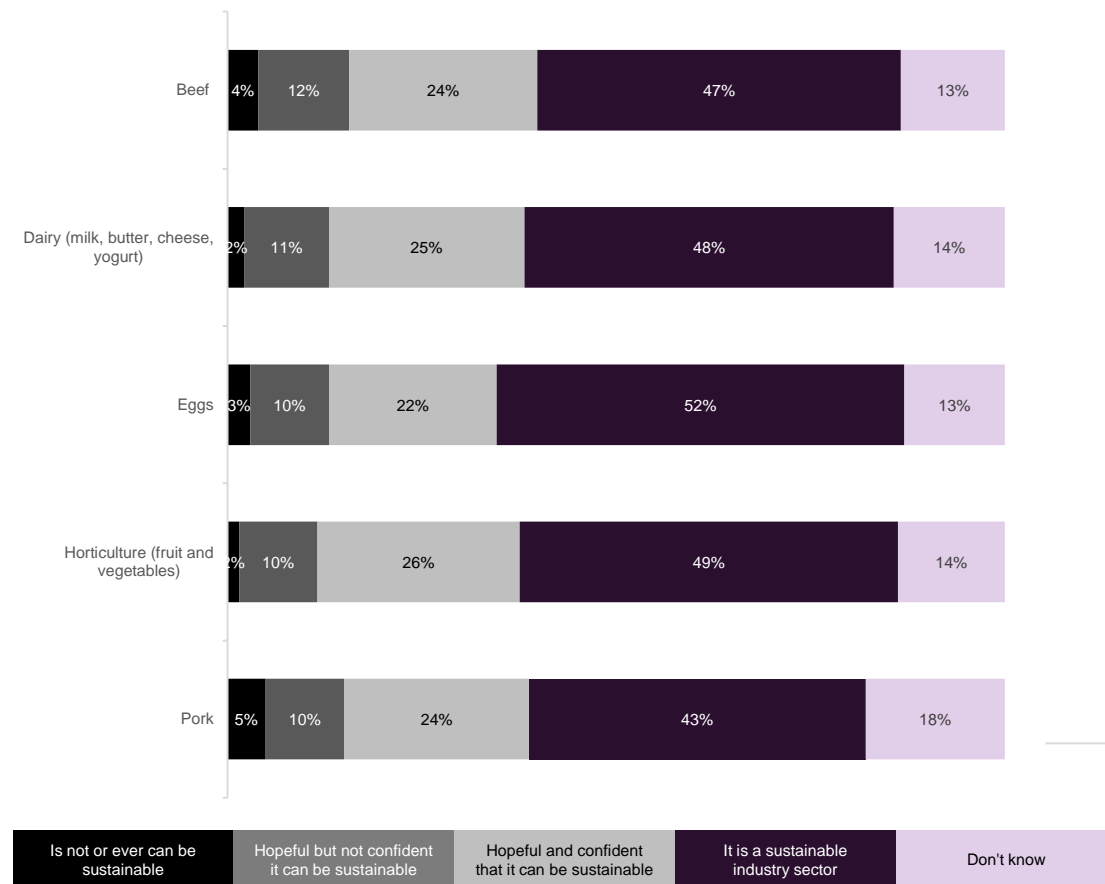
In your opinion how would you describe where the balance between these two, at times competing priorities, should be? Please select a position on the scale that best describes your opinion.

Where do you think the balance between these potentially conflicting values should be in the future? Please select the number that best matches your position on each of the scales below.

When you are buying seafood, which is more important, price or sustainably caught seafood?

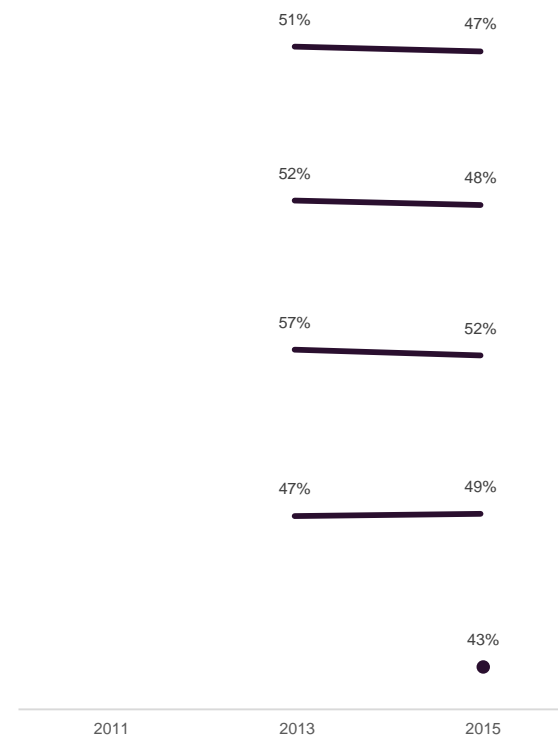
views on sustainability of other rural sectors

sustainability of...



Base: All respondents n= 1507

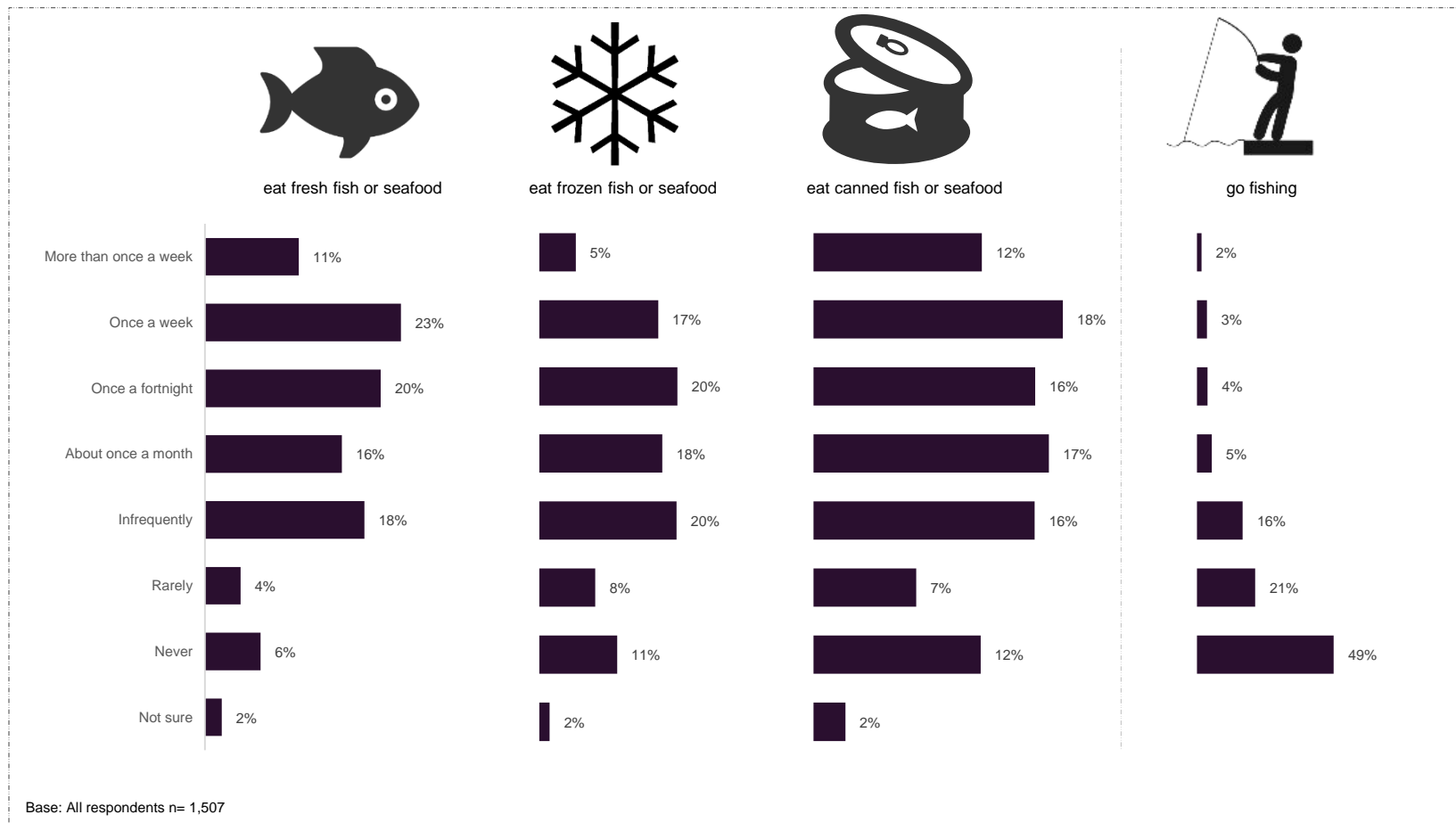
sustainability – tracking those who believe the industry to be sustainable



What we asked:

From what you know, do the rural sectors (listed below) have the necessary practices and policies in place that ensure the future of the industry and the environment is sustainable, while at the same time providing sufficient supply for Australians?

a snapshot across different community segments



Definitions:

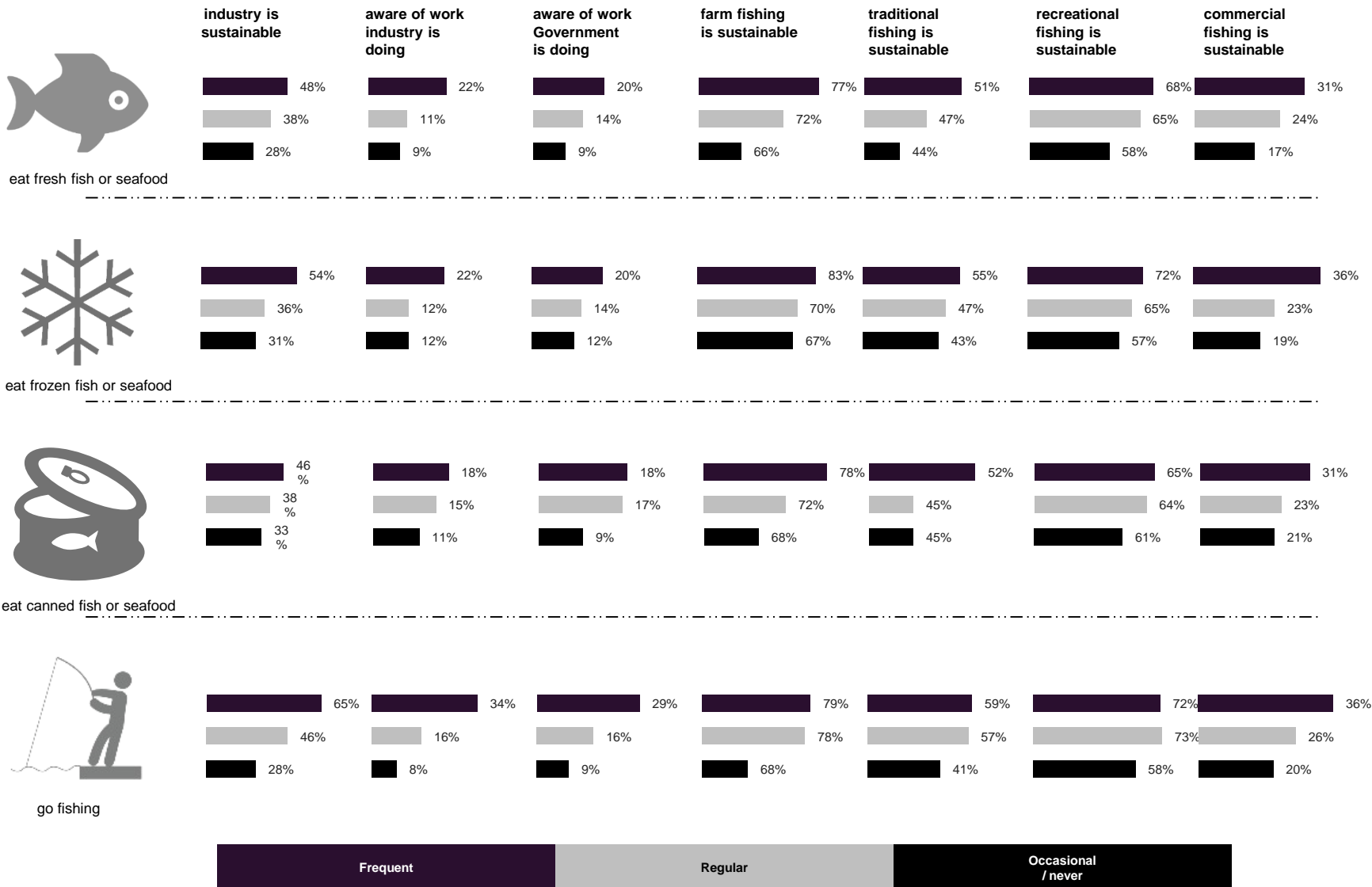
Infrequently: "Six times a year (once every two months)" + "Four times a year (once every three months)" + "Three times a year (once every four months)" + "Twice a year (every six months)"

Rarely: "Once a year" + "Less often"

What we asked:

Over the past 12 months, how often would you say that you have eaten the following for a main meal?

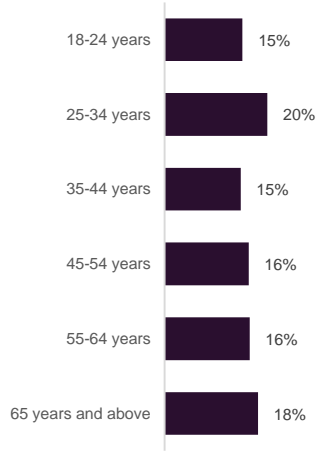
And again over the past 12 months, how often have you gone fishing? Include any occasion you have gone recreational fishing – by yourself, with friends or family, or with others.



about the respondents

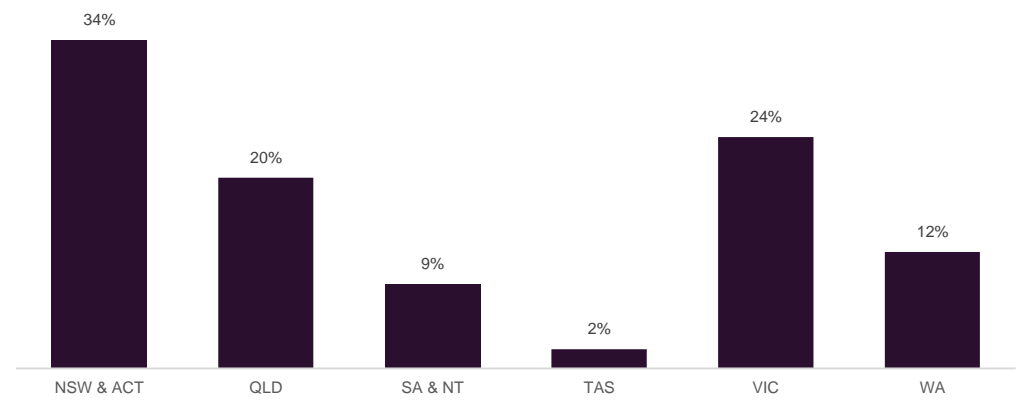
demographics of survey respondents

age



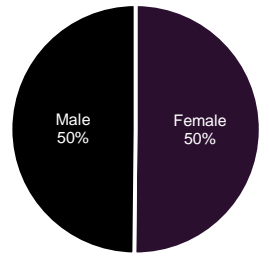
Base: All respondents n= 1507

state



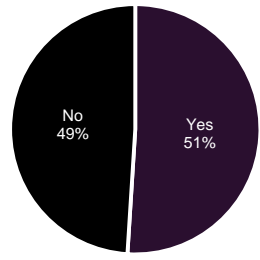
Base: All respondents n= 1507

gender



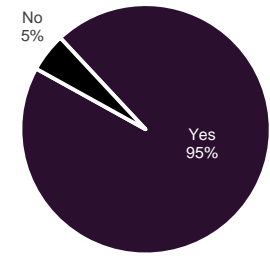
Base: All respondents n= 1507

go fishing



Base: All respondents n= 1507

eat fish or seafood as a main meal (any type)



Base: All respondents n= 1507

detailed segment tables

Do you think Australia's fishing industry is sustainable?

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Yes I do	38%	48%	38%	28%	54%	36%	31%	46%	38%	33%
No, I don't	21%	21%	20%	23%	16%	22%	24%	18%	21%	24%
Not sure / I don't know	41%	31%	42%	49%	30%	42%	45%	35%	41%	43%

	Go Fishing			Familiarity with fishery management				cluster		
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Yes I do	65%	46%	28%	28%	55%	73%	62%	25%	26%	66%
No, I don't	21%	23%	21%	19%	27%	22%	9%	33%	21%	10%
Not sure / I don't know	14%	31%	51%	54%	18%	5%	29%	42%	53%	24%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Yes I do	48%	29%	42%	44%	40%	36%	38%	31%	46%	31%	42%	34%	38%	42%
No, I don't	20%	22%	22%	17%	22%	22%	17%	26%	20%	21%	24%	30%	21%	20%
Not sure / I don't know	32%	49%	36%	38%	38%	42%	45%	44%	34%	48%	34%	36%	41%	38%

detailed segments for results on page 4

Do you think Australia's fishing industry can be sustainable?

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	934	263	335	310	157	365	394	236	311	358
Yes, I am hopeful and confident it can be a sustainable industry	33%	38%	34%	28%	42%	33%	29%	39%	31%	30%
I am hopeful but not confident that it can become a sustainable industry	44%	46%	47%	41%	37%	49%	44%	45%	47%	43%
No, I don't think it can ever be a sustainable industry	4%	3%	2%	6%	4%	1%	5%	3%	2%	5%
Not sure / I don't know	19%	14%	17%	24%	17%	17%	21%	13%	19%	22%

	Go Fishing			Familiarity with fishery management				cluster		
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	98	168	668	615	221	25	103	401	343	87
Yes, I am hopeful and confident it can be a sustainable industry	37%	40%	30%	34%	33%	49%	59%	26%	29%	46%
I am hopeful but not confident that it can become a sustainable industry	47%	47%	43%	43%	54%	29%	35%	55%	38%	35%
No, I don't think it can ever be a sustainable industry	2%	3%	4%	3%	4%	10%	0%	6%	3%	3%
Not sure / I don't know	15%	10%	22%	20%	8%	11%	6%	14%	30%	16%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	386	548	145	161	135	149	153	191	105	235	18	87	190	299
Yes, I am hopeful and confident it can be a sustainable industry	37%	29%	29%	36%	35%	31%	32%	33%	28%	29%	32%	35%	37%	34%
I am hopeful but not confident that it can become a sustainable industry	40%	47%	45%	38%	32%	52%	45%	51%	54%	49%	53%	39%	37%	42%
No, I don't think it can ever be a sustainable industry	5%	3%	6%	3%	8%	4%	1%	1%	3%	3%	0%	6%	3%	4%
Not sure / I don't know	18%	20%	20%	23%	25%	13%	22%	15%	15%	19%	15%	20%	22%	19%

detailed segments for results on page 5

Do you think the following sectors of the Australian fishing industry are sustainable?

Farm fishing

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535	
Yes	72%	77%	72%	66%	83%	70%	67%	78%	72%	68%	
No	6%	5%	5%	9%	4%	7%	6%	5%	7%	6%	
Not sure	22%	18%	22%	26%	13%	22%	27%	17%	21%	27%	

	Go Fishing		Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Yes	79%	78%	68%	69%	78%	86%	88%	68%	61%	81%
No	7%	6%	6%	5%	8%	7%	2%	9%	7%	3%
Not sure	14%	16%	27%	26%	13%	8%	10%	23%	32%	15%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Yes	76%	68%	53%	69%	67%	75%	78%	83%	75%	71%	75%	68%	72%	71%
No	6%	7%	15%	5%	9%	5%	3%	2%	3%	6%	7%	9%	6%	6%
Not sure	19%	26%	32%	26%	24%	20%	19%	15%	21%	23%	18%	23%	22%	23%

Traditional fishing

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535	
Yes	47%	51%	47%	44%	55%	47%	43%	52%	45%	45%	
No	19%	23%	17%	19%	24%	18%	18%	22%	18%	19%	
Not sure	34%	25%	37%	37%	21%	35%	39%	27%	37%	36%	

	Go Fishing		Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Yes	59%	57%	41%	42%	56%	65%	61%	35%	39%	73%
No	24%	18%	18%	19%	20%	27%	13%	28%	19%	8%
Not sure	17%	25%	41%	39%	23%	8%	26%	36%	42%	19%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Yes	53%	41%	49%	50%	46%	49%	47%	43%	42%	42%	65%	45%	51%	50%
No	18%	21%	20%	21%	21%	19%	17%	17%	20%	20%	14%	18%	21%	19%
Not sure	29%	38%	31%	29%	33%	32%	36%	41%	38%	39%	21%	37%	29%	31%

Do you think the following sectors of the Australian fishing industry are sustainable?

Recreational fishing

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	
Base	1507	503	545	427	330	580	570	434	501	535	
Yes	63%	68%	65%	58%	72%	65%	57%	65%	64%	61%	
No	12%	14%	12%	12%	10%	14%	12%	13%	12%	12%	
Not sure	24%	19%	24%	30%	17%	21%	31%	21%	24%	26%	

	Go Fishing		Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
Base	265	305	937	864	469	90	270	516	475	246
Yes	72%	73%	58%	61%	69%	74%	82%	56%	54%	77%
No	16%	12%	12%	11%	15%	17%	6%	18%	13%	7%
Not sure	12%	16%	30%	28%	16%	9%	12%	26%	32%	16%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
Base	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Yes	70%	57%	55%	60%	61%	66%	67%	69%	60%	63%	73%	61%	66%	63%
No	11%	14%	18%	13%	13%	14%	6%	11%	14%	11%	2%	13%	14%	12%
Not sure	19%	30%	26%	27%	26%	20%	27%	20%	26%	26%	25%	26%	20%	24%

Commercial fishing

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	
Base	1507	503	545	427	330	580	570	434	501	535	
Yes	24%	31%	24%	17%	36%	23%	19%	31%	23%	21%	
No	35%	34%	33%	40%	33%	34%	38%	34%	35%	37%	
Not sure	40%	34%	43%	43%	30%	43%	43%	34%	42%	42%	

	Go Fishing		Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
Base	265	305	937	864	469	90	270	516	475	246
Yes	36%	26%	20%	19%	30%	52%	36%	10%	21%	47%
No	41%	40%	32%	35%	39%	35%	28%	54%	29%	18%
Not sure	22%	34%	47%	45%	31%	13%	36%	35%	50%	35%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
Base	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Yes	29%	20%	22%	27%	26%	23%	24%	24%	25%	18%	30%	22%	29%	26%
No	33%	38%	39%	38%	37%	37%	32%	30%	41%	37%	31%	33%	35%	33%
Not sure	38%	42%	39%	36%	37%	41%	44%	46%	34%	44%	39%	45%	35%	41%

detailed segments for results on page 5

Do you agree or disagree with the following? – mean value

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
The Australian fisheries are well managed	3.22	3.28	3.24	3.12	3.35	3.21	3.15	3.27	3.23	3.17
There is no difference between Australia and overseas when it comes to commercial fishing industries harming species (fish, marine animals) not intended to be caught	2.53	2.58	2.49	2.49	2.64	2.49	2.49	2.46	2.59	2.50
The Australian commercial fishing industry should not be allowed to continue, because its environmental costs outweigh its social and economic benefits	2.57	2.55	2.50	2.64	2.61	2.53	2.58	2.50	2.51	2.66
Australian commercial fishers have a genuine interest in sustainability	3.29	3.32	3.37	3.18	3.31	3.37	3.20	3.33	3.38	3.18

	Go Fishing			Familiarity with fishery management				cluster		
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventions	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
The Australian fisheries are well managed	3.30	3.28	3.17	3.17	3.23	3.57	4.05	2.75	2.83	4.07
There is no difference between Australia and overseas when it comes to commercial fishing industries harming species (fish, marine animals) not intended to be caught	2.72	2.41	2.51	2.49	2.49	2.91	2.36	2.55	2.66	2.38
The Australian commercial fishing industry should not be allowed to continue, because its environmental costs outweigh its social and economic benefits	2.77	2.47	2.54	2.51	2.52	2.97	2.42	2.69	2.65	2.31
Australian commercial fishers have a genuine interest in sustainability	3.31	3.39	3.25	3.24	3.36	3.54	3.70	2.94	3.18	3.80

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
The Australian fisheries are well managed	3.25	3.19	3.08	3.24	3.17	3.23	3.31	3.25	3.20	3.17	3.32	3.21	3.19	3.27
There is no difference between Australia and overseas when it comes to commercial fishing industries harming species (fish, marine animals) not intended to be caught	2.53	2.52	2.83	2.65	2.60	2.44	2.37	2.34	2.63	2.54	2.39	2.40	2.51	2.53
The Australian commercial fishing industry should not be allowed to continue, because its environmental costs outweigh its social and economic benefits	2.52	2.62	2.87	2.77	2.74	2.42	2.34	2.32	2.60	2.59	2.48	2.71	2.46	2.58
Australian commercial fishers have a genuine interest in sustainability	3.32	3.26	3.00	3.27	3.24	3.37	3.46	3.34	3.18	3.27	3.39	3.33	3.35	3.29

Below is a set of statements about Australia's management of wild-catch commercial fisheries. Please examine each statement in the table and select ONE statement that best matches your view.

Statement 1	Commercial fishing should be able to operate under existing rules with full discretion given to fishers to fish as they see fit
Statement 2	Commercial fishing should be able to continue to operate under existing rules, but with increased monitoring to ensure compliance with rules to minimise the environmental costs of fishing
Statement 3	Existing rules governing commercial fishing are inadequate and need to be changed to further minimise the environmental costs of fishing
Statement 4	Commercial fishing should not be allowed to continue, because its environmental costs outweigh its social and economic benefits

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
Base	1507	503	545	427	330	580	570	434	501	535
Statement 1	7%	9%	6%	7%	10%	6%	6%	8%	6%	8%
Statement 2	60%	62%	64%	54%	62%	63%	57%	62%	63%	56%
Statement 3	29%	27%	28%	32%	26%	29%	32%	27%	30%	30%
Statement 4	4%	2%	2%	6%	2%	2%	5%	2%	2%	5%

	Go Fishing			Familiarity with fishery management				cluster		
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
Base	265	305	937	864	469	90	270	516	475	246
Statement 1	16%	6%	5%	5%	8%	27%	4%	3%	9%	17%
Statement 2	59%	62%	60%	62%	61%	44%	74%	44%	63%	73%
Statement 3	23%	29%	31%	31%	28%	25%	21%	48%	24%	9%
Statement 4	3%	2%	4%	3%	4%	4%	1%	5%	5%	1%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
Base	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Statement 1	8%	6%	12%	11%	7%	7%	3%	3%	6%	5%	8%	5%	9%	8%
Statement 2	61%	59%	52%	58%	55%	64%	63%	66%	56%	53%	45%	64%	63%	65%
Statement 3	27%	31%	26%	29%	31%	28%	31%	30%	37%	37%	45%	23%	25%	24%
Statement 4	3%	4%	9%	2%	7%	2%	2%	1%	2%	5%	2%	8%	3%	3%

detailed segments for results on page 6

There are both state and national bodies that manage Australia's fisheries to ensure Australian fish stocks and our fishing industry are viable now and in the future. How familiar would you say you with how the Australian fishing industry is managed? – mean value

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
mean	3.07	3.80	3.00	2.32	3.67	3.17	2.65	3.40	3.32	2.59

	Go Fishing		Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
mean	5.27	3.42	2.29	1.13	5.47	8.57	4.15	2.76	2.46	3.71

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
mean	3.50	2.63	3.39	3.40	3.24	2.76	2.56	3.02	3.58	2.66	4.04	3.50	3.04	3.06

Do you agree or disagree that the Australia's fishing industry is sustainable? – mean value

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
mean	5.51	5.84	5.50	5.12	5.95	5.41	5.32	5.81	5.57	5.20

	Go Fishing		Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
mean	6.18	5.60	5.23	5.00	5.80	7.73	6.62	4.52	4.92	6.98

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
mean	5.80	5.19	5.38	5.74	5.60	5.30	5.57	5.43	5.75	5.34	6.17	5.48	5.48	5.54

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Do you agree or disagree that the Australian fishing industry, that is the management of our fisheries and the commercial fishers who operate in these fisheries are... – mean value

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			
	Total	Frequent	Regular	Occasional	Frequent	Regular	Occasional	Frequent	Regular	Occasional
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Protecting against overfishing of any species	5.82	6.04	5.85	5.55	6.18	5.79	5.64	5.95	5.90	5.63
Protecting endangered species	6.00	6.20	6.13	5.60	6.19	6.01	5.88	6.10	6.06	5.83
Protecting against over fishing of any area	5.86	6.01	5.96	5.59	5.98	5.85	5.80	6.04	5.89	5.67
Using the best fishing practices (how fish are caught/harvested)	5.91	5.98	6.02	5.70	6.09	5.93	5.76	6.21	5.93	5.62
Using aquaculture to alleviate the demand on wild caught seafood	6.23	6.59	6.23	5.76	6.53	6.20	6.06	6.41	6.37	5.90
Protecting and maintaining the health of the marine environment	5.92	6.20	5.96	5.52	6.22	5.99	5.66	6.07	5.94	5.76
Guarding against catch of non-target species (by-catch)	5.51	5.67	5.51	5.33	5.76	5.53	5.33	5.67	5.63	5.23

	Go Fishing			Familiarity with fishery management			cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Protecting against overfishing of any species	6.18	5.70	5.75	5.47	6.01	7.44	6.76	4.97	5.41	7.07
Protecting endangered species	6.39	5.95	5.88	5.64	6.14	7.79	6.85	5.17	5.68	7.18
Protecting against over fishing of any area	6.11	5.80	5.79	5.52	6.03	7.32	6.74	5.04	5.50	6.95
Using the best fishing practices (how fish are caught/harvested)	6.20	5.85	5.82	5.56	6.04	7.57	6.78	5.07	5.53	7.12
Using aquaculture to alleviate the demand on wild caught seafood	6.51	6.26	6.10	5.84	6.41	7.81	7.05	5.76	5.70	7.05
Protecting and maintaining the health of the marine environment	6.31	5.93	5.78	5.56	6.11	7.49	6.82	5.07	5.55	7.13
Guarding against catch of non-target species (by-catch)	6.01	5.41	5.36	5.07	5.69	7.36	6.22	4.76	5.19	6.66

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Protecting against overfishing of any species	5.95	5.69	5.78	5.94	5.69	5.57	5.89	6.03	6.15	5.71	6.42	5.80	5.64	5.87
Protecting endangered species	6.11	5.89	5.87	6.11	5.92	5.80	6.02	6.20	6.21	5.91	6.89	5.63	5.92	6.08
Protecting against over fishing of any area	5.99	5.72	5.93	5.90	5.63	5.75	5.93	6.00	5.91	5.79	6.27	5.90	5.70	5.94
Using the best fishing practices (how fish are caught/harvested)	6.02	5.79	5.65	5.96	5.89	5.80	5.92	6.13	6.16	5.84	6.33	5.88	5.76	5.95
Using aquaculture to alleviate the demand on wild caught seafood	6.39	6.04	5.77	6.14	6.22	6.27	6.34	6.46	6.47	6.18	7.14	6.27	6.05	6.22
Protecting and maintaining the health of the marine environment	6.07	5.76	5.79	5.91	5.77	5.76	5.96	6.23	6.03	5.88	6.71	5.95	5.66	6.00
Guarding against catch of non-target species (by-catch)	5.59	5.42	5.48	5.76	5.43	5.19	5.43	5.69	5.70	5.47	6.28	5.47	5.21	5.61

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In your view, who is responsible for the sustainability of Australia's fisheries? Please select all that apply.

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Everyone who fishes	60%	60%	63%	58%	57%	61%	62%	60%	59%	62%
State and Federal Governments	59%	60%	57%	61%	57%	59%	61%	60%	59%	58%
The whole community	48%	52%	48%	46%	51%	51%	46%	54%	49%	44%
Just the commercial fishing operators	12%	14%	11%	9%	16%	12%	9%	14%	13%	9%
Just the recreational fishermen	6%	8%	6%	6%	6%	8%	5%	8%	7%	5%
Not sure / I don't know	10%	6%	9%	13%	6%	8%	12%	6%	9%	12%

	Go Fishing			Familiarity with fishery management				cluster		
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Everyone who fishes	58%	61%	61%	63%	61%	50%	66%	68%	48%	64%
State and Federal Governments	52%	64%	59%	61%	58%	56%	66%	67%	48%	55%
The whole community	46%	53%	48%	48%	51%	50%	56%	52%	39%	53%
Just the commercial fishing operators	21%	15%	8%	8%	16%	26%	15%	11%	10%	11%
Just the recreational fishermen	13%	8%	4%	4%	10%	11%	7%	6%	6%	6%
Not sure / I don't know	5%	5%	13%	10%	6%	5%	1%	6%	21%	6%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Everyone who fishes	58%	62%	61%	61%	55%	56%	63%	66%	62%	61%	54%	56%	61%	61%
State and Federal Governments	61%	56%	55%	57%	59%	57%	57%	66%	54%	60%	60%	63%	60%	58%
The whole community	48%	48%	43%	45%	48%	53%	52%	50%	56%	49%	38%	47%	48%	47%
Just the commercial fishing operators	14%	9%	16%	15%	12%	10%	10%	8%	13%	12%	16%	15%	10%	11%
Just the recreational fishermen	8%	5%	11%	11%	6%	4%	5%	2%	5%	7%	1%	9%	6%	6%
Not sure / I don't know	7%	13%	11%	13%	14%	9%	7%	5%	10%	7%	20%	12%	11%	10%

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And what sort of responsibility does each of these have? – Most responsibility

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base*</i>										
Everyone who fishes	28%	32%	25%	27%	29%	29%	26%	30%	26%	28%
Just the commercial fishing operators	4%	7%	2%	2%	11%	1%	1%	0%	8%	3%
Just the recreational fishermen	51%	51%	47%	57%	50%	48%	59%	48%	54%	51%
State and Federal Governments	45%	42%	52%	42%	40%	51%	40%	52%	37%	46%
The whole community	5%	5%	5%	4%	5%	6%	3%	3%	5%	7%

	Go Fishing			Familiarity with fishery management				cluster		
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base*</i>										
Everyone who fishes	24%	31%	28%	26%	27%	49%	26%	32%	20%	31%
Just the commercial fishing operators	11%	3%	0%	1%	1%	24%	10%	1%	4%	0%
Just the recreational fishermen	52%	46%	54%	50%	53%	54%	52%	41%	64%	50%
State and Federal Governments	37%	51%	46%	50%	46%	22%	37%	57%	33%	50%
The whole community	3%	4%	6%	8%	2%	0%	0%	9%	3%	5%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>														
Everyone who fishes	24%	31%	32%	29%	34%	24%	28%	22%	22%	25%	27%	39%	24%	31%
Just the commercial fishing operators	46%	43%	37%	45%	50%	45%	51%	42%	51%	50%	78%	45%	46%	35%
Just the recreational fishermen	18%	12%	12%	16%	23%	26%	14%	0%	0%	35%	0%	0%	14%	10%
State and Federal Governments	52%	40%	41%	45%	48%	42%	50%	49%	53%	47%	36%	36%	46%	45%
The whole community	14%	12%	11%	9%	16%	11%	18%	14%	9%	15%	0%	22%	14%	12%

* Base changes with response to previous question.

Which of the following best describes your interest in and awareness of the sustainability issues of the fishing industry in Australia?

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
I'm really interested and aware	11%	19%	9%	5%	20%	9%	8%	18%	10%	6%
I have some interest in it	43%	50%	48%	32%	46%	49%	37%	50%	48%	34%
I have only a passing interest in this	34%	27%	34%	43%	31%	31%	39%	27%	34%	41%
I have absolutely no interest in this	12%	4%	10%	21%	3%	10%	17%	5%	8%	19%

	Go Fishing			Familiarity with fishery management				cluster		
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
I'm really interested and aware	30%	10%	6%	5%	14%	54%	12%	12%	7%	16%
I have some interest in it	58%	52%	36%	36%	60%	41%	54%	41%	37%	49%
I have only a passing interest in this	10%	31%	42%	44%	22%	5%	31%	37%	37%	28%
I have absolutely no interest in this	2%	7%	16%	14%	5%	0%	3%	10%	20%	8%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
I'm really interested and aware	12%	10%	7%	13%	17%	10%	6%	10%	12%	9%	15%	14%	13%	9%
I have some interest in it	45%	41%	39%	41%	38%	39%	50%	52%	42%	41%	45%	48%	43%	44%
I have only a passing interest in this	33%	35%	34%	32%	27%	42%	38%	33%	39%	39%	36%	25%	31%	34%
I have absolutely no interest in this	9%	14%	20%	14%	17%	10%	6%	5%	6%	12%	4%	14%	13%	13%

Do you know if the fishing industry is doing work to improve its level of sustainability?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Yes, I'm aware of the work the industry is doing	14%	22%	11%	9%	22%	12%	12%	18%	15%	11%
I'm not aware, but I would assume they would be making efforts	59%	59%	62%	56%	59%	61%	57%	61%	60%	58%
The industry is not doing work to improve the level of sustainability	5%	5%	3%	6%	5%	5%	4%	5%	5%	4%
Not sure / I don't know	22%	14%	24%	29%	14%	22%	26%	16%	21%	27%

	Go Fishing			Familiarity with fishery management			cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Yes, I'm aware of the work the industry is doing	34%	16%	8%	5%	22%	63%	27%	10%	6%	25%
I'm not aware, but I would assume they would be making efforts	52%	64%	59%	63%	63%	27%	66%	62%	51%	60%
The industry is not doing work to improve the level of sustainability	6%	6%	4%	4%	6%	4%	1%	6%	7%	2%
Not sure / I don't know	8%	15%	29%	28%	9%	7%	7%	23%	36%	12%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Yes, I'm aware of the work the industry is doing	17%	11%	11%	17%	17%	13%	10%	14%	20%	10%	12%	15%	17%	13%
I'm not aware, but I would assume they would be making efforts to be more sustainable	59%	59%	59%	54%	50%	63%	68%	62%	59%	58%	62%	55%	57%	61%
No, the industry is not doing work to improve the level of sustainability	4%	5%	9%	4%	7%	3%	2%	3%	3%	7%	2%	8%	3%	4%
Not sure / I don't know	20%	25%	21%	24%	26%	21%	19%	22%	17%	25%	24%	22%	23%	22%

detailed segments for results on page 9

And where did you hear about the work the fishing industry is doing to improve its level of sustainability? Please select all that apply.

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	212	111	65	36	69	73	70	78	74	59
On fishing websites	26%	35%	23%	5%	32%	28%	18%	29%	36%	10%
On fishing specific shows (radio, TV)	34%	35%	29%	40%	26%	33%	44%	23%	37%	46%
Talking to friends and family who fish	28%	30%	26%	25%	25%	33%	27%	23%	32%	30%
In general newspapers	41%	44%	43%	28%	38%	42%	43%	50%	44%	26%
On general news websites	29%	33%	23%	27%	27%	33%	28%	43%	19%	23%
On general news radio	30%	34%	28%	22%	34%	31%	25%	36%	29%	23%
In general conversation with other people	22%	27%	19%	14%	28%	29%	9%	24%	29%	9%
On general TV shows (e.g Landline)	3%	3%	4%	3%	1%	3%	6%	5%	0%	5%
Other	5%	4%	9%	2%	0%	4%	11%	5%	6%	5%
Not sure / I can't recall	2%	0%	5%	3%	0%	5%	1%	0%	3%	4%

	Go Fishing			Familiarity with fishery management				cluster		
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	91	49	72	47	105	56	69	51	32	60
On fishing websites	46%	18%	7%	11%	19%	50%	33%	15%	37%	22%
On fishing specific shows (radio, TV)	33%	44%	29%	41%	39%	23%	38%	33%	24%	35%
Talking to friends and family who fish	30%	39%	19%	33%	27%	27%	29%	24%	17%	35%
In general newspapers	37%	47%	43%	30%	45%	45%	42%	42%	40%	40%
On general news websites	23%	37%	32%	23%	36%	24%	36%	28%	6%	34%
On general news radio	28%	29%	32%	26%	30%	34%	29%	27%	22%	38%
In general conversation with other people	23%	19%	23%	21%	18%	31%	27%	21%	19%	19%
On general TV shows (e.g Landline)	1%	6%	4%	4%	2%	3%	2%	3%	7%	4%
Other	3%	6%	6%	1%	8%	3%	6%	8%	0%	4%
Not sure / I can't recall	0%	6%	2%	2%	2%	0%	1%	0%	7%	2%

	Gender		Age bracket					State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base*</i>	131	81	24	54	37	32	28	37	32	41	3**	20	46	70
On fishing websites	27%	26%	16%	39%	32%	19%	15%	21%	40%	25%	-	5%	20%	32%
On fishing specific shows (radio, TV)	40%	26%	8%	24%	39%	40%	29%	54%	33%	35%	-	22%	44%	31%
Talking to friends and family who fish	22%	38%	25%	23%	30%	33%	37%	26%	31%	35%	-	9%	32%	23%
In general newspapers	49%	29%	49%	29%	38%	31%	35%	68%	40%	26%	-	42%	47%	43%
On general news websites	30%	29%	20%	28%	30%	41%	13%	35%	26%	29%	-	30%	33%	24%
On general news radio	33%	25%	35%	29%	25%	25%	32%	37%	25%	27%	-	35%	29%	30%
In general conversation with other people	23%	21%	37%	14%	25%	15%	26%	24%	20%	26%	-	39%	19%	20%
On general TV shows (e.g Landline)	3%	4%	0%	0%	0%	10%	10%	4%	5%	0%	-	18%	3%	1%
Other	2%	9%	0%	7%	5%	4%	7%	6%	9%	2%	-	7%	4%	5%
Not sure / I can't recall	2%	1%	0%	0%	4%	4%	0%	3%	4%	0%	-	0%	0%	4%

*Caution small sample size; results are indicative only.
** n<10 results not shown

From what you know or have seen, heard or read, what percentage of the fish consumed by Australians is actually grown and caught in Australia, that is not imported from overseas?

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood				Consumption of canned fish/seafood					
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters				
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535				
mean	41%	43%	40%	40%	40%	41%	42%	41%	41%	41%				
	Go Fishing			Familiarity with fishery management				cluster						
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non- interventionist	Cynical and Negative	Whatever				
<i>Base</i>	265	305	937	864	469	90	270	516	475	246				
mean	40%	42%	41%	41%	42%	41%	42%	41%	39%	44%				
	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
mean	42%	40%	40%	41%	42%	42%	42%	39%	39%	39%	45%	45%	42%	42%

Do you know if the Government is doing work to improve the sustainability of fisheries?

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood				Consumption of canned fish/seafood					
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters				
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535				
I'm aware of the work the Government is doing	14%	20%	14%	9%	20%	14%	12%	18%	17%	9%				
I'm not aware, but I would assume the Government would be making efforts	56%	57%	59%	51%	58%	58%	53%	57%	58%	54%				
No the Government is not doing	9%	9%	7%	11%	10%	8%	9%	10%	7%	9%				
Not sure / I don't know	21%	13%	21%	29%	12%	20%	26%	15%	18%	27%				
	Go Fishing			Familiarity with fishery management				cluster						
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non- interventionist	Cynical and Negative	Whatever				
<i>Base</i>	265	305	937	864	469	90	270	516	475	246				
I'm aware of the work the Government is doing	29%	16%	9%	6%	23%	51%	28%	8%	6%	28%				
I'm not aware, but I would assume the Government would be making efforts	50%	60%	56%	60%	58%	35%	64%	58%	50%	55%				
No the Government is not doing work	10%	9%	9%	8%	12%	6%	3%	12%	11%	4%				
Not sure / I don't know	11%	15%	26%	26%	8%	8%	5%	22%	33%	13%				
	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
I'm aware of the work the Government is doing	18%	10%	8%	14%	16%	15%	13%	17%	15%	9%	13%	26%	15%	14%
I'm not aware, but I would assume the Government would be making efforts	54%	57%	53%	53%	51%	58%	63%	57%	56%	58%	48%	42%	55%	58%
No the Government is not doing work	10%	8%	15%	7%	10%	7%	6%	9%	9%	9%	10%	10%	12%	7%
Not sure / I don't know	18%	25%	24%	26%	23%	20%	17%	16%	21%	23%	29%	23%	18%	21%

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Do you agree or disagree that buying seafood with... - mean

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			
	Total	Frequent	Regular	Occasional	Frequent	Regular	Occasional	Frequent	Regular	Occasional
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Country of origin labelling	8.22	8.34	8.31	7.96	8.23	8.28	8.19	8.26	8.23	8.22
That's certified	7.16	7.47	7.18	6.76	7.31	7.21	7.03	7.29	7.29	6.93

	Go Fishing			Familiarity with fishery management			cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Country of origin labelling	7.79	8.27	8.33	8.27	8.01	8.45	8.78	8.22	7.69	8.59
That's certified	7.06	7.12	7.21	7.07	7.07	8.00	7.80	6.77	6.86	7.80

	Gender		Age bracket					State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Country of origin labelling	8.15	8.28	6.81	7.75	8.08	8.56	8.76	8.95	8.43	7.97	8.42	8.12	8.63	8.10
That's certified	7.06	7.27	6.47	7.23	7.14	7.06	7.38	7.51	7.24	7.15	7.65	6.86	7.06	7.24

Do you think Australia's fishing industry and their practices around sustainability are better, worse, or the same to those used in other countries?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Ahead of other countries	66%	73%	69%	55%	71%	68%	61%	74%	66%	60%
There are no real differences between Australia and most other countries	16%	16%	14%	19%	17%	15%	17%	14%	18%	16%
Behind other countries	7%	8%	6%	8%	9%	7%	7%	7%	7%	8%
Don't know	11%	4%	11%	18%	3%	11%	15%	5%	9%	17%

	Go Fishing			Familiarity with fishery management			cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Ahead of other countries	78%	73%	60%	63%	72%	80%	91%	60%	47%	90%
There are no real differences between Australia and most other countries	15%	15%	16%	17%	17%	5%	7%	20%	21%	7%
Behind other countries	5%	6%	8%	7%	7%	11%	2%	11%	10%	2%
Don't know	3%	5%	15%	13%	4%	3%	0%	9%	23%	2%

	Gender		Age bracket					State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Ahead of other countries	67%	64%	53%	64%	65%	72%	73%	66%	66%	58%	70%	65%	68%	70%
There are no real differences between Australia and most other countries	17%	14%	25%	14%	12%	12%	17%	18%	19%	20%	7%	11%	13%	15%
Behind other countries	7%	7%	8%	6%	10%	6%	5%	9%	5%	8%	6%	11%	9%	5%
Don't know	8%	14%	14%	16%	13%	10%	6%	7%	10%	13%	18%	12%	9%	10%

In your opinion how would you describe where the balance between these two, at times competing priorities, should be?

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Towards providing seafood for consumption	12%	13%	14%	11%	11%	15%	11%	15%	11%	12%
Equal	49%	48%	50%	48%	45%	50%	50%	42%	53%	51%
Towards protecting the marine environment	38%	40%	36%	41%	43%	35%	39%	43%	36%	38%

	Go Fishing			Familiarity with fishery management				cluster		
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Towards providing seafood for consumption	15%	16%	11%	12%	13%	13%	8%	7%	15%	23%
Equal	39%	43%	54%	52%	46%	31%	39%	34%	66%	56%
Towards protecting the marine environment	47%	41%	35%	36%	41%	56%	52%	59%	19%	21%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Towards providing seafood for consumption	14%	10%	13%	15%	12%	14%	13%	9%	9%	14%	7%	15%	12%	12%
Equal	45%	54%	38%	43%	42%	58%	49%	62%	53%	46%	46%	47%	50%	50%
Towards protecting the marine environment	41%	36%	50%	42%	46%	29%	37%	30%	38%	40%	48%	38%	38%	37%

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Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Maximise commercial fishing jobs/income	19%	21%	20%	15%	22%	20%	17%	23%	19%	16%
Equal	36%	35%	38%	35%	33%	39%	36%	31%	39%	38%
Minimise the impact on fish populations	44%	44%	41%	50%	45%	42%	47%	46%	42%	46%

	Go Fishing			Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever	
<i>Base</i>	265	305	937	864	469	90	270	516	475	246	
Maximise commercial fishing jobs/income	27%	21%	16%	20%	18%	24%	8%	5%	28%	41%	
Equal	25%	36%	40%	37%	35%	20%	21%	18%	59%	46%	
Minimise the impact on fish populations	48%	43%	44%	43%	47%	57%	71%	76%	13%	13%	

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Maximise commercial fishing jobs/income	21%	18%	19%	24%	19%	19%	16%	17%	12%	18%	13%	17%	20%	22%
Equal	33%	40%	30%	30%	35%	39%	41%	42%	31%	33%	49%	39%	40%	37%
Minimise the impact on fish populations	46%	43%	51%	46%	46%	42%	43%	41%	58%	49%	38%	44%	40%	40%

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Maximise commercial fishing jobs/income	19%	20%	20%	16%	22%	18%	17%	22%	17%	18%
Equal	33%	32%	35%	32%	32%	35%	32%	30%	34%	33%
Minimise harm to marine animals and birds	48%	48%	45%	53%	46%	46%	51%	48%	49%	49%

	Go Fishing			Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever	
<i>Base</i>	265	305	937	864	469	90	270	516	475	246	
Maximise commercial fishing jobs/income	23%	22%	16%	19%	19%	20%	7%	5%	27%	41%	
Equal	24%	32%	37%	34%	32%	20%	15%	12%	60%	46%	
Minimise harm to marine animals and birds	52%	46%	47%	47%	49%	60%	78%	83%	13%	13%	

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Maximise commercial fishing jobs/income	19%	18%	17%	21%	18%	19%	16%	19%	10%	19%	12%	21%	18%	21%
Equal	31%	36%	30%	28%	32%	38%	34%	38%	26%	31%	38%	28%	39%	35%
Minimise harm to marine animals and birds	50%	46%	53%	50%	50%	43%	50%	43%	64%	50%	50%	52%	43%	43%

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Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Maximise commercial fishing jobs/income	17%	19%	18%	13%	21%	18%	14%	21%	16%	15%
Equal	33%	32%	34%	32%	31%	32%	34%	29%	33%	35%
Minimise harm to the marine environment	50%	49%	48%	55%	48%	50%	52%	50%	51%	50%

	Go Fishing		Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Maximise commercial fishing jobs/income	25%	16%	15%	17%	17%	21%	7%	4%	25%	39%
Equal	24%	31%	36%	33%	32%	23%	13%	9%	61%	46%
Minimise harm to the marine environment	51%	52%	49%	50%	50%	56%	80%	87%	13%	15%

	Gender		Age bracket				State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Maximise commercial fishing jobs/income	18%	16%	15%	21%	17%	17%	15%	16%	13%	14%	11%	16%	17%	21%
Equal	31%	36%	33%	28%	30%	38%	33%	38%	25%	30%	43%	33%	38%	35%
Minimise harm to the marine environment	52%	48%	52%	52%	53%	46%	52%	46%	62%	56%	46%	51%	45%	45%

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Maximise commercial fishing jobs/income	30%	30%	31%	28%	27%	33%	29%	29%	33%	27%
Equal	43%	40%	43%	47%	40%	42%	45%	40%	42%	46%
Maximise recreational fishing opportunities	27%	30%	26%	26%	33%	25%	27%	30%	25%	28%

	Go Fishing		Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Maximise commercial fishing jobs/income	27%	30%	30%	33%	29%	23%	27%	23%	32%	43%
Equal	28%	41%	48%	45%	39%	26%	27%	35%	60%	44%
Maximise recreational fishing opportunities	45%	29%	22%	22%	33%	51%	46%	43%	9%	12%

	Gender		Age bracket				State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Maximise commercial fishing jobs/income	28%	31%	28%	35%	31%	28%	27%	29%	22%	29%	16%	30%	31%	33%
Equal	39%	47%	43%	34%	38%	47%	47%	49%	37%	44%	39%	42%	49%	41%
Maximise recreational fishing opportunities	32%	22%	29%	31%	30%	25%	27%	21%	41%	27%	46%	28%	21%	26%

detailed segments for results on page 12

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Maximise commercial fishing jobs/income	17%	21%	16%	15%	21%	18%	15%	22%	17%	14%
Equal	32%	29%	33%	32%	31%	31%	32%	30%	29%	34%
Sustainability as a priority	51%	50%	51%	53%	48%	51%	53%	48%	54%	52%

	Go Fishing		Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Maximise commercial fishing jobs/income	26%	18%	15%	17%	19%	17%	0%	0%	32%	42%
Equal	25%	30%	34%	31%	30%	25%	0%	0%	68%	58%
Sustainability as a priority	50%	53%	51%	52%	52%	58%	100%	100%	0%	0%

	Gender		Age bracket				State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Maximise commercial fishing jobs/income	19%	16%	17%	23%	20%	17%	12%	14%	12%	15%	21%	16%	21%	19%
Equal	28%	36%	30%	27%	26%	36%	33%	37%	22%	34%	24%	29%	28%	36%
Sustainability as a priority	53%	49%	53%	50%	54%	47%	55%	49%	66%	51%	55%	55%	50%	45%

When you are buying seafood, which is more important, price or sustainably caught seafood?

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Price	24%	22%	23%	28%	24%	26%	23%	26%	23%	24%
Equal	27%	22%	28%	29%	23%	26%	28%	23%	28%	28%
Sustainability	49%	57%	48%	42%	52%	48%	49%	51%	49%	48%

	Go Fishing		Familiarity with fishery management				cluster			
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Price	25%	25%	24%	29%	19%	13%	13%	16%	32%	37%
Equal	17%	25%	30%	26%	26%	16%	18%	16%	41%	28%
Sustainability	58%	50%	46%	45%	55%	70%	69%	68%	27%	34%

	Gender		Age bracket				State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Price	25%	23%	21%	28%	24%	27%	21%	22%	17%	24%	31%	24%	27%	25%
Equal	25%	29%	25%	24%	26%	31%	31%	24%	26%	24%	29%	23%	27%	29%
Sustainability	50%	48%	54%	48%	50%	43%	49%	54%	57%	53%	41%	53%	46%	46%

From what you know, do the rural sectors (listed below) have the necessary practices and policies in place that ensure the future of the industry and the environment is sustainable, while at the same time providing sufficient supply for Australians. - agreement

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters
<i>Base</i>	1507	503	545	427	330	580	570	434	501	535
Dairy (milk, butter, cheese, yogurt)	48%	50%	49%	43%	53%	46%	46%	51%	49%	45%
Beef	47%	47%	51%	43%	53%	48%	42%	51%	49%	43%
Eggs	52%	53%	57%	47%	58%	55%	48%	59%	52%	48%
Horticulture (fruit and vegetables)	49%	48%	51%	47%	52%	49%	47%	50%	49%	49%
Pork	43%	44%	45%	41%	48%	45%	39%	47%	45%	40%

	Go Fishing			Familiarity with fishery management				cluster		
	Frequent	Regular	Occasional	Not familiar	Somewhat familiar	Very familiar	No news is good news	Non-interventionist	Cynical and Negative	Whatever
<i>Base</i>	265	305	937	864	469	90	270	516	475	246
Dairy (milk, butter, cheese, yogurt)	47%	52%	46%	47%	47%	73%	63%	41%	39%	63%
Beef	42%	51%	47%	47%	48%	55%	58%	38%	42%	62%
Eggs	52%	61%	50%	53%	54%	61%	64%	46%	45%	70%
Horticulture (fruit and vegetables)	47%	55%	47%	49%	49%	63%	59%	42%	41%	68%
Pork	43%	49%	41%	42%	45%	56%	56%	33%	40%	57%

	Gender		Age bracket						State					
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	WA	VIC	TAS	SA & NT	QLD	NSW & ACT
<i>Base</i>	751	756	226	298	221	244	247	271	181	359	30	131	296	510
Dairy (milk, butter, cheese, yogurt)	52%	43%	42%	41%	44%	50%	51%	56%	52%	48%	44%	53%	42%	48%
Beef	52%	42%	38%	36%	41%	52%	53%	59%	52%	43%	30%	53%	47%	47%
Eggs	57%	48%	43%	45%	43%	57%	61%	65%	49%	53%	33%	58%	53%	53%
Horticulture (fruit and vegetables)	53%	45%	40%	44%	43%	51%	52%	59%	48%	49%	39%	57%	48%	48%
Pork	49%	38%	31%	35%	39%	45%	51%	56%	42%	42%	28%	50%	43%	44%

research design

Methodology

An online survey was sent to a commercially available panel of respondents over the age of 18 years. The sample was based on national representative numbers and was drawn randomly.

Sample

In total, n = 1,507 surveys were completed by participants.

Questionnaire

Participants were asked to complete a 10 min online survey which covered a range of topics relating to their awareness and their thoughts about the Australian fishing Industry.

Weighting

The data was weighted using the estimated resident population at the 30th December 2014 (*Source: Australian Bureau of Statistics 3101.0 - Australian Demographic Statistics, Dec 2014, release date 25/06/2015*). The data was weighted on the following variables:

- Age (15 – 24, 25 – 34, 35 – 44, 45 – 54, 55 – 64, 65 years and above)
- Gender (Male, Female)
- State (New South Wales / ACT, Victoria / Tasmania, Queensland, Western Australia, South Australia / NT)

Due to nil sample for some combinations of age, gender and state, some categories were merged for weighting purposes.

Timing

The online survey was launched on the 13th August 2015 and remained open until the 19th August 2015.

Definitions

Eat fresh fish or seafood; Eat frozen fish or seafood; Eat canned fish or seafood;

Frequent eaters is defined as those who eat the specified fish or seafood at least once a week.

Regular eaters includes those who eat the specified fish or seafood once a fortnight or once a month.

Occasional / non eaters includes those who eat the specified fish or seafood less frequently or do not eat it at all.

Fishers

Frequent fishers is defined as those who go fishing at least six times a year (after every 2 months).

Regular fishers includes those who go fishing either one, two, three or four times a year.

Occasional fishers includes those who go fishing less often and those who never go fishing.

Familiarity with fishery management

based on the question "How familiar would you say you with how the Australian fishing industry is managed?"

Not familiar – those who rated a 0 - 3

Somewhat familiar – those who rated a 4 - 7

Very familiar – those who rated an 8 - 10.

Clusters

based on those described in: "Community attitudes towards Australian Fisheries Management." *Department of Agriculture.* Quantitative research debrief. June 2015 © essence.



Community perceptions of the sustainability of the Australian fishing industry

June 2017

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background

Sustainability remains an ongoing challenge and key area of focus for the Australian fishing industry. All sectors, including both industry and Government, continue to invest time and resources into improving the sustainability of the industry. In parallel, efforts are directed at ensuring the broader Australian community is informed about and engaged with industry's progress (in regards to achieving sustainability). The level of awareness and engagement remains one important 'marker' of success for the industry.

To this end, FRDC has conducted a biannual sustainability omnibus (in its current form) since 2011 to gauge the community's perceptions about the achievements and ongoing investment the industry is making into achieving long term sustainability. While there have been some slight changes over this time, the core design and metrics have remained unchanged. This has provided continuity in the information available through the program as well as trend information across a number of key metrics.

With that as context, we move to provide an overview of the 2017 design.

about the research

The aim of the research was to track a range of measures including among other things:

- Whether the industry is sustainable;
- How the fishing industry benchmarks against other countries and industries; and
- Knowledge and awareness of the efforts being made.

The quantitative research involved an online survey of a nationally representative* sample of randomly selected adult Australians (aged 18 years and over) . The survey took approximately 10 minutes to complete.

In total, n = 1,002 surveys were completed over the period to provide robust measures of community perceptions. The research was conducted over the period 8th June to 15th June 2017.

Respondent demographics from the survey were representative of ABS population estimates across age, gender and location to ensure the final results appropriately reflected the current size and structure of the Australian population.

The key findings from the research now follow.

*ABS population estimates Source: Australian Bureau of Statistics 3101.0 - Australian Demographic Statistics, Dec 2014, release date 25/06/2015



management summary

there has been a increase in the proportion of Australian who think the industry is sustainable

For the purposes of this research, sustainability was defined as “the industry having the necessary practices and policies in place that ensure the future of fish species and the marine environment while at the same time providing sufficient supply of fish for commercial and recreational fishing needs”.

The results from the 2017 research show that:

- 41% of all Australians believe that the industry (as a whole) is sustainable; (Perceptions of the individual sectors of the fishing industry are shown later in the report.)
- 21% believe it is not sustainable; while
- the remaining 38% are just unsure whether the industry is sustainable.

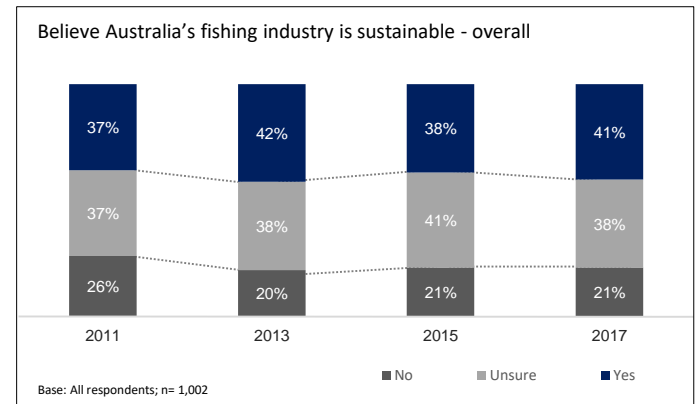
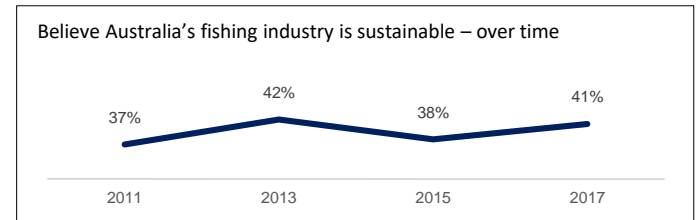
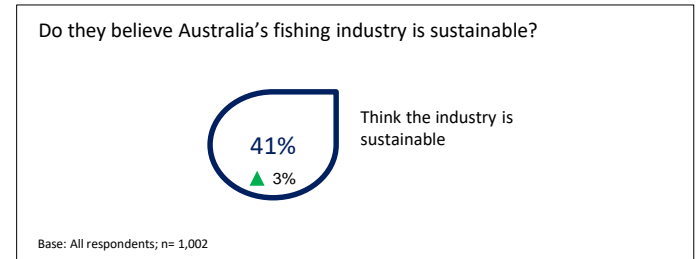
The results over the last six years show that there has been a strong uplift in the proportion of Australian who believe the industry is sustainable (41% up from 37% in 2011).

The improvement over the last two years has the level of acceptance within the community back to the level reported in 2013 and near the all time high mark for this measure.

What remains clear is that:

- There is a consistent cohort (around one in five people) who hold a view that the industry is not sustainable. This result has remained largely unchanged over the past six years.
- There is a further two in five of the Australian community who are unsure or uncertain as to the sustainability of the fishing industry. Whilst this cohort report they are unsure about sustainability, their rating and attitudes suggest that they are more closely linked to those who believe the industry is not sustainable than those that do. This presents as a challenge for industry to provide sufficiently compelling advice and education around sustainability of the industry.

As we understand it the industry has invested strongly in building its credentials in the area of sustainability. The results suggest this focus and investment has delivered a dividend. The rate of change in acceptance across the Australian community reflects the size of this challenge both to sustain this current level and further improve community perceptions.



The following analysis identified that community views about the sustainability of the fishing industry vary. Different segments with the community hold different views.

females continue to be less convinced about the sustainability of the industry

The results again in 2017 suggest that females are:

- less likely than males to believe the industry is sustainable; and
- more critical across most other measures in the research.

As shown opposite, the perception of the sustainability of the Australian fishing industry among males remained largely unchanged since the 2013 research, while the result for females has seen some improvement over the past two years (up to 4 points to 33%). So while the difference between males and females remains, the 'gap' has now narrowed (16 points compared to 19 points in 2015).

The change in the response from females was consistently reported across all age groups and across all geographies. The results emphasise the need to continue a focus on the female audiences within the community.

improvement across most age groups other than young people where a decline was evidenced

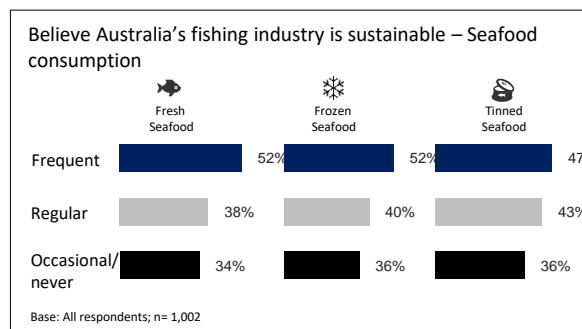
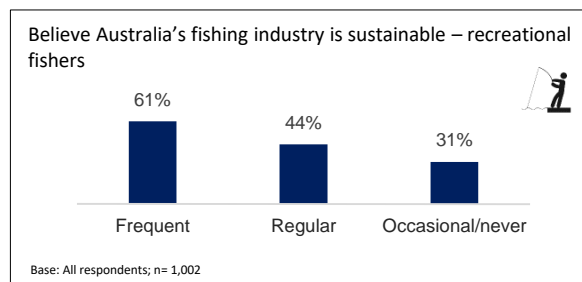
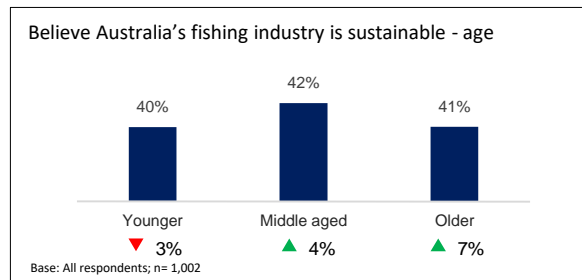
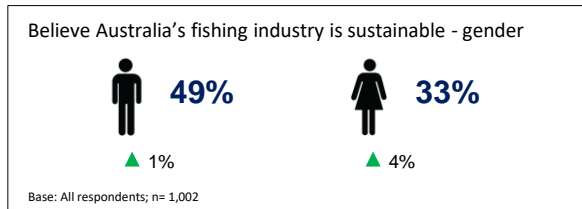
The results opposite show improvements in perceptions across all aged 35+. The perceptions of people aged under 35 fell this year. Further analysis highlights that people aged 18-24 and in particular females in that age cohort are far less engaged, far less familiar and as a result far less likely to believe the industry is sustainable.

The decline in the results from 2015 indicates some ground has been lost with this younger cohort of the community.

the strongest results are evident among those more 'engaged'

Not surprisingly the more 'engaged' people are with the industry the stronger perceptions there are around sustainability.

So the more regular seafood consumers and the more regular recreational fishers are clearly those more likely to consider the fishing industry as sustainable. While being more engaged is likely to present more opportunities to 'talk directly' to these consumers, the challenge will be to ensure in the longer term the information and evidence around sustainability of the fishing industry reaches the broader community, in particular those that have less involvement and connection to the industry.



there are opportunities to grow the proportion of the community who think the fishing industry is sustainable

Among those people who were uncertain or did not believe the industry was sustainable, there were sufficient signals to indicate that there is an anticipation the industry can and will move to a stronger position around sustainability with the survey indicating, among these groups:

- most (76%) were hopeful that it could be sustainability; however
- a smaller group (30%) reported that they were confident that it could be.

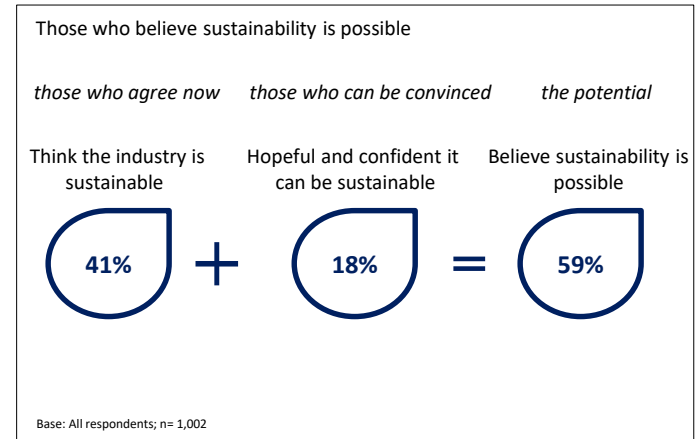
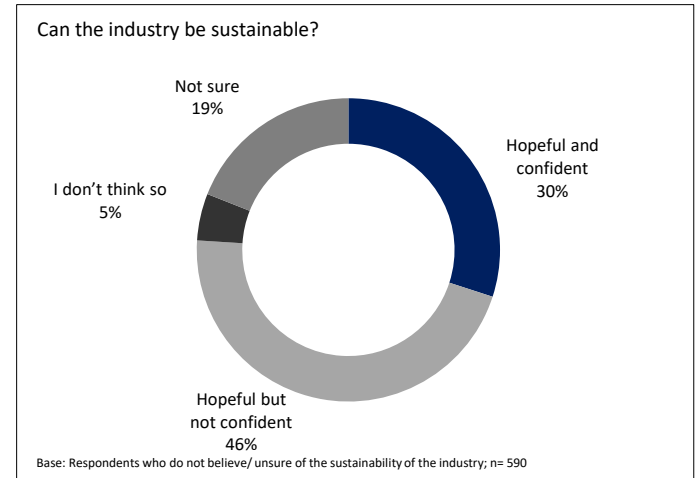
Collectively then there are four primary clusters in the community:

- those that think the industry is sustainable now;
- those that are confident the industry can become sustainable;
- those that are not confident the industry can become sustainable; and
- those that don't think the industry is or can become sustainable.

The first two of these clusters represent arguably the first focus for the industry. This will likely involve providing evidence and communication to instil confidence that the industry is sustainable.

If this can be achieved and sustained then the majority of the Australian community (59%) will hold the view that the industry is sustainable.

The remaining clusters are likely to require substantial more work and effort to shift the current views about the industry.



a lack of engagement with the commercial sector is impacting community perceptions of the industry overall

The previous research (in 2015) identified the impact of awareness and views of the commercial sector on people's overall perceptions of the industry.

From the results this year we note that:

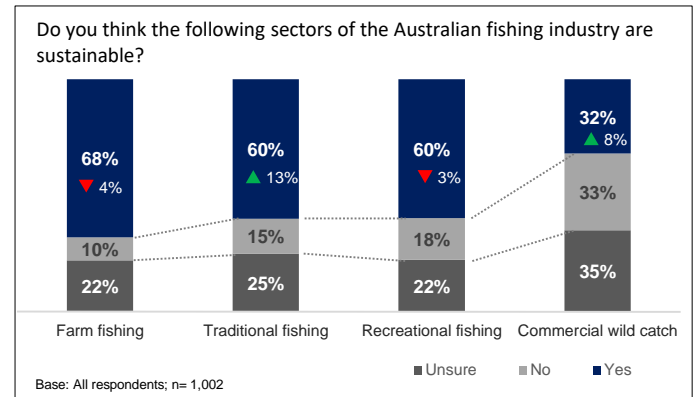
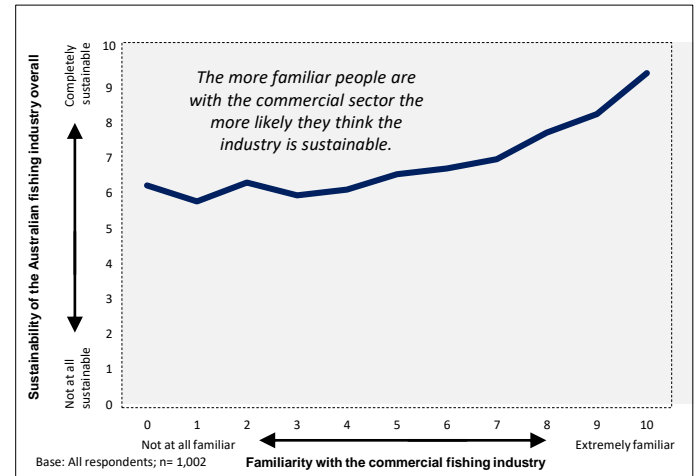
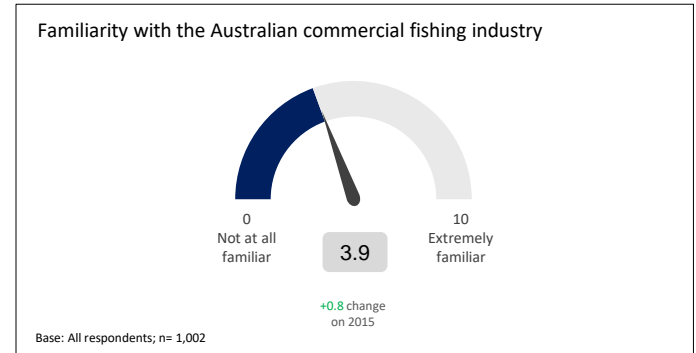
- the community is unfamiliar with the commercial sector. 67% of people rated their familiarity at less than 6.
- there is a clear correlation between familiarity with the commercial sector and perceptions of sustainability of the industry overall. The more familiar people are the more likely they are to think the industry overall is sustainable.

The challenge in driving overall community perceptions of sustainability will then likely reside in the industry's ability to build a stronger awareness of and engagement with the commercial sector.

These results are best illustrated when exploring the perceptions of sustainability of the different sectors of the industry. As shown opposite:

- there is a stronger level of confidence across the community about the sustainability of aquaculture, traditional and recreational fishing; we note that there has been a small decline reported in both these sectors but the majority of people still confirm that they perceive these sectors to be sustainable; whereas
- a comparatively lower level of confidence was reported for the wild catch sector (32%) although we do note this result has improved from 2015 (up 8 points).

As noted in the chart of results opposite, there has been a softening of the perceptions across all sectors of the fishing industry.



the commercial wild catch sector has been identified as a key influencer of overall sustainability

As discussed above perceptions around the commercial sector have a strong influence on perceptions of the industry overall.

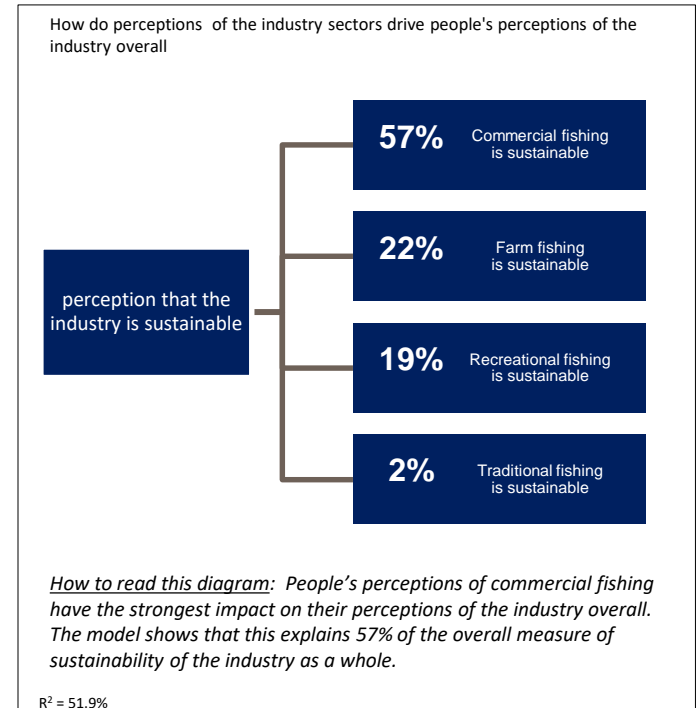
The results of a regression analysis are shown opposite. This analysis was used analysis shown opposite was used to measure the influence of perceptions across each of the four sectors measured. The model was constrained to just these sectors, so will not explain all of the variance. The model results are shown opposite and confirm that:

- the commercial wild catch sector as having the largest influence on overall industry sustainability (normalised impact score of 57%);
- the other sectors of the industry indicated smaller, but still important influences on how people view the industry overall.

The challenge then will be to better understand the obstacles preventing people from considering the commercial wild catch sector to be sustainable.

When asked about the challenges people saw facing the commercial sectors (wild catch and farm fishing) four primary themes emerged. These themes provide some insight into the views and opinions of the Australian community around the commercial sector.

This perhaps provides a focus for communications and information sharing about the commercial sectors with the broader Australian community.



The key issues people see impacting on sustainability of the wild catch sector.

Theme 1: If we keep up our current practices, we will run out of fish

Theme 2: There are too many people illegally fishing/have no regard for the environment

Theme 3: Our current fishing practices are causing damage to the environment

Theme 4: Australian Commercial Fishers are unable to turn over a profits

Five further insights from the research. . . .

1 Australians continue to believe sustainability is a shared responsibility

Within the research, respondents held the view that the responsibility for the sustainability of the Australian fishing industry is shared across all of the community, commercial fishers and the government.

Whilst the responsibility was seen to be shared, governments and commercial fishing operators were considered the custodians. This assignment of responsibility to commercial fishers (among other stakeholders) again re-iterates the influencing role they can and do play in shaping people's views of the sustainability of the industry overall.

2 Country of origin labelling empowers customers to make more informed decisions about seafood

While this result does not relate to any one specific sector or part of the supply chain, the 2017 research confirms the result (seen in the 2015 research) that the community believe country of origin labelling (as a general mechanism) is empowering. More than 70% rated their agreement at 8 or above (out of a possible 10) while less than 7% rated their agreement lower than a '5'.

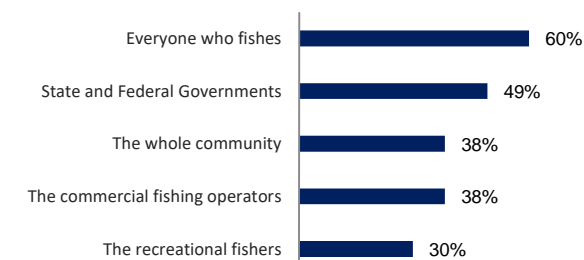
The results indicate a very high level of agreement with this result replicated across all segments (age, gender, location).

The results continue to indicate the community see the COO labelling as an important (and perhaps one of the few) signposts in their purchasing decisions.

3 Certification provides confidence

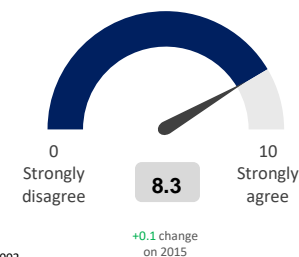
Consumer support for certification systems received good support in the most recent research. The majority of consumers agree that certification systems provide confidence that the seafood is sustainable. We also note that this result has improved since the 2015 research (up 0.2). This should provide further encouragement to continue to support certification across the fresh seafood sector.

Who is responsible for sustainability?



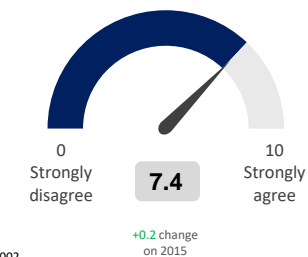
Base: All respondents; n= 1,002

Agreement that country of origin labelling allows you to make a more informed choice about the seafood you buy



Base: All respondents; n= 1,002

Agreement that certified (i.e. MSC, ASC and Friend of the Sea) gives you confidence that the seafood is sustainable



Base: All respondents; n= 1,002

4

The community believe the Australian fishing industry is ahead of other countries

Almost two in three people (64%) believe Australia's fishing industry is more sustainable than other countries.

This result consistent with that reported in 2015 (66%) indicates a widespread view that comparatively the Australian industry is more sustainable.

5

The view of the fishing industry remains behind that of other sectors but has improved over the last 2 years

Australians continue to hold different views on sustainability across the various rural sectors. Again in the 2017 research, the eggs sector was seen to be the benchmark in the strength of community perceptions around sustainability.

Perceptions of the fishing industry have improved and now see it placed comparatively ahead of some more well established sectors (pork and dairy).

The fishing industry was one of only two sectors to report an increase since 2015, highlighting the ongoing and significant challenges all sectors face in engaging, impacting and sustaining community perceptions around sustainability.

This now concludes the management summary for this study.

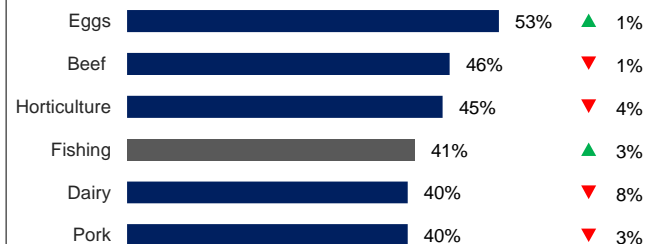
Australia's industry as compared to other countries



Base: All respondents; n= 1,002

Sustainability across other rural sectors

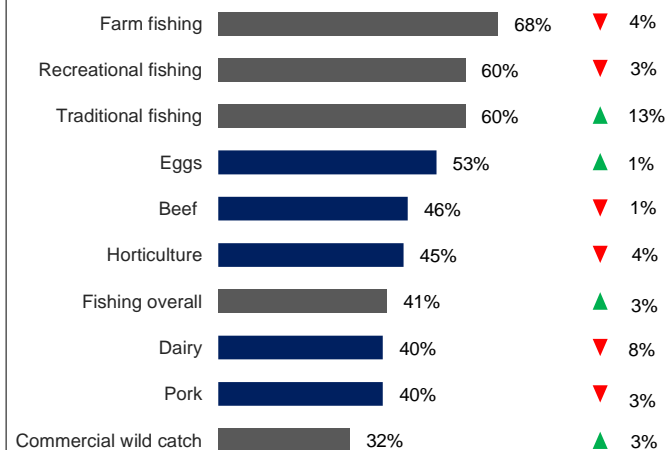
Change on 2015



Base: All respondents; n= 1,002

Sustainability across other rural sectors

Change on 2015

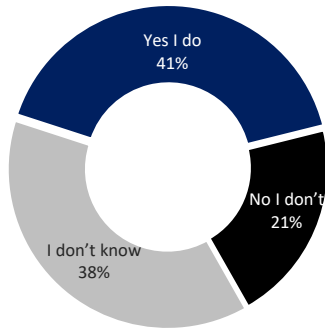


Base: All respondents; n= 1,002

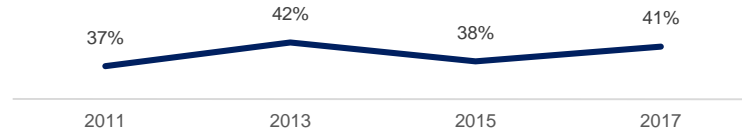


detailed findings

Do you think Australia's fishing industry is sustainable?



Base: All respondents; n= 1,002



An analysis of the percentage of those who agree the Australian fishing industry is sustainable across selected consumption and demographic segments

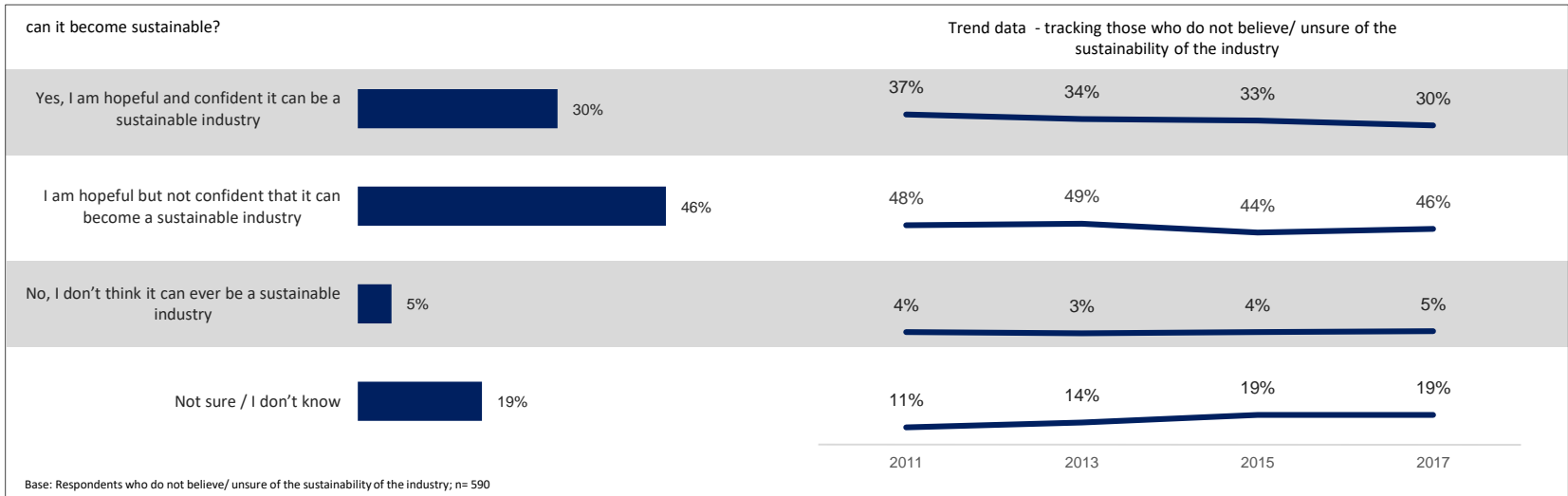
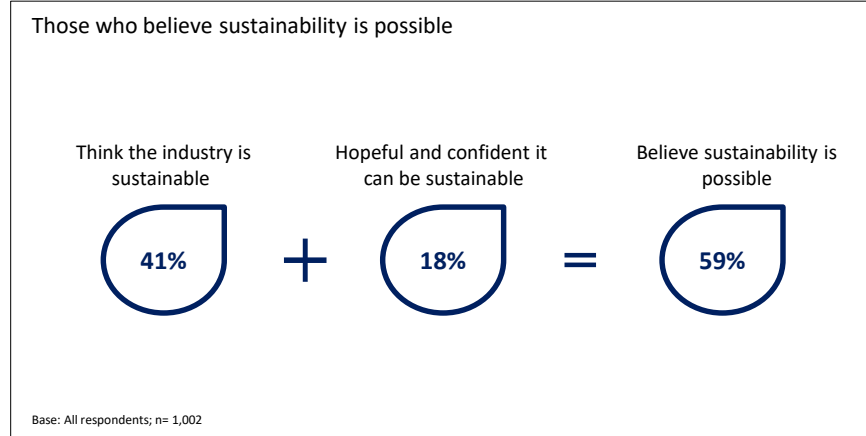
How to read the chart:

The chart below shows that 52% of people who consume fresh seafood frequently believe the industry is sustainable. This compares to just 41% nationally, across all consumers and 38% among people who consume fresh seafood regularly.

	<u>Fresh seafood consumption</u>	<u>Frozen seafood consumption</u>	<u>Tinned seafood consumption</u>	<u>Recreational Fishing</u>	<u>Gender</u>	<u>Age</u>
Above average				Frequent: 61%		65+: 43%
National	Frequent: 52%	Frequent: 52%	Frequent: 47% Regular: 43%	Regular: 44%	Male: 49%	45-54: 43%
Average 41%	Regular: 38%	Regular: 40%	Occasional/never: 36%	Occasional/never: 31%	Female: 33%	35-44: 41%
Below average	Occasional/never: 34%	Occasional/never: 36%	Occasional/never: 36%			55-64: 37%
						18-24: 37%

What we asked:

Do you think Australia's fishing industry is sustainable? That is, does the industry have the necessary practices/policies in place that ensure the future of fish species and the marine environment, while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?

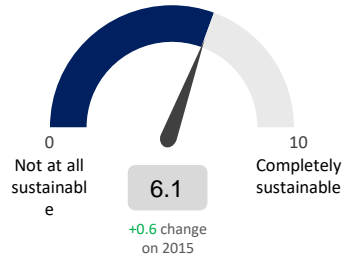


What we asked:

Do you think Australia's fishing industry can be sustainable?

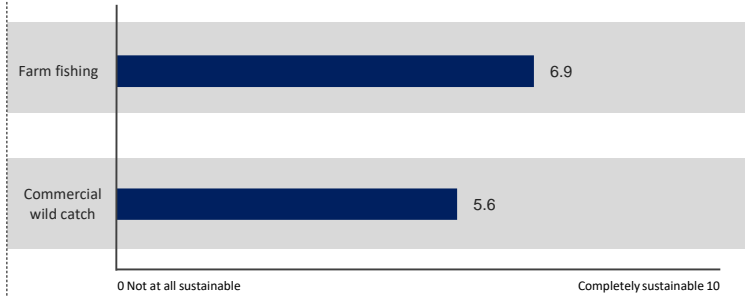


sustainability of the Australian commercial fishing industry overall

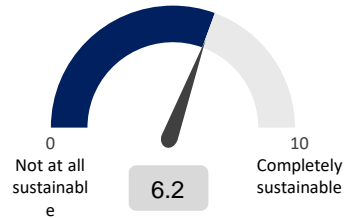


Base: All respondents; n= 1,002

sustainability of industry sectors



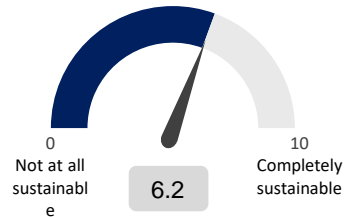
sustainability of the recreational fishing sector



Base: All respondents; n= 1,002



sustainability of traditional fishing sector



Base: All respondents; n= 1,002

What we asked:

With that in mind, on a scale of 0 to 10, how sustainable do you think Australian commercial fishing industry is overall?

The commercial fishing industry is made up of different sectors. Do you think the following sectors of the Australian fishing industry are sustainable?

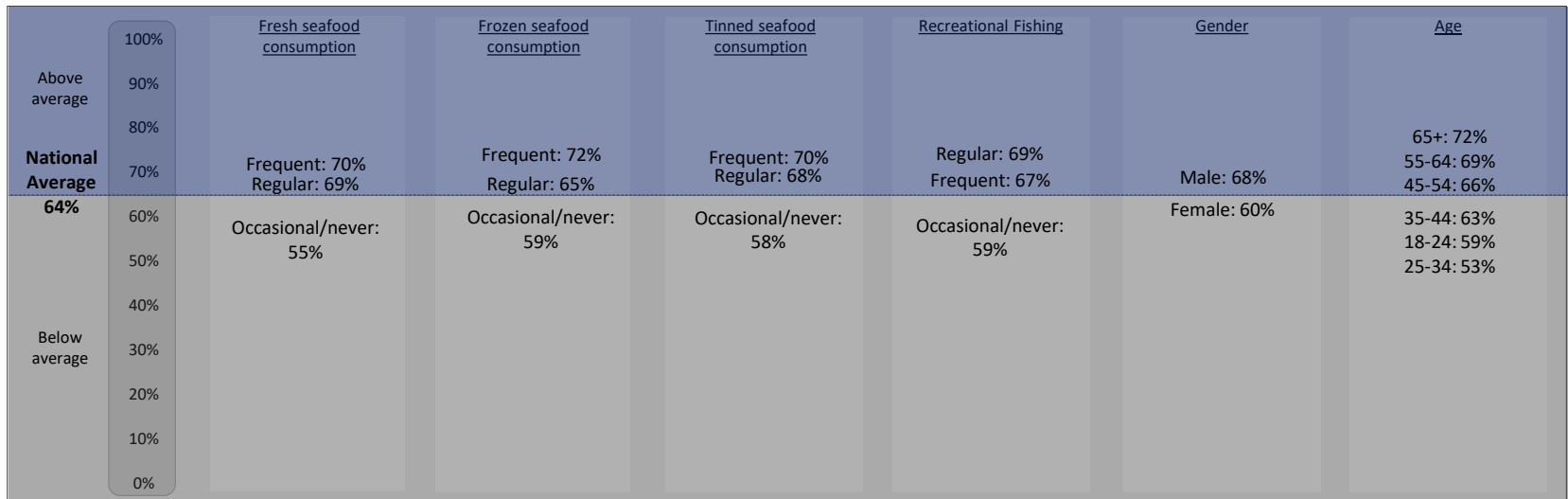
perceptions of sustainability: comparisons to other countries

Australia's industry as compared to other countries



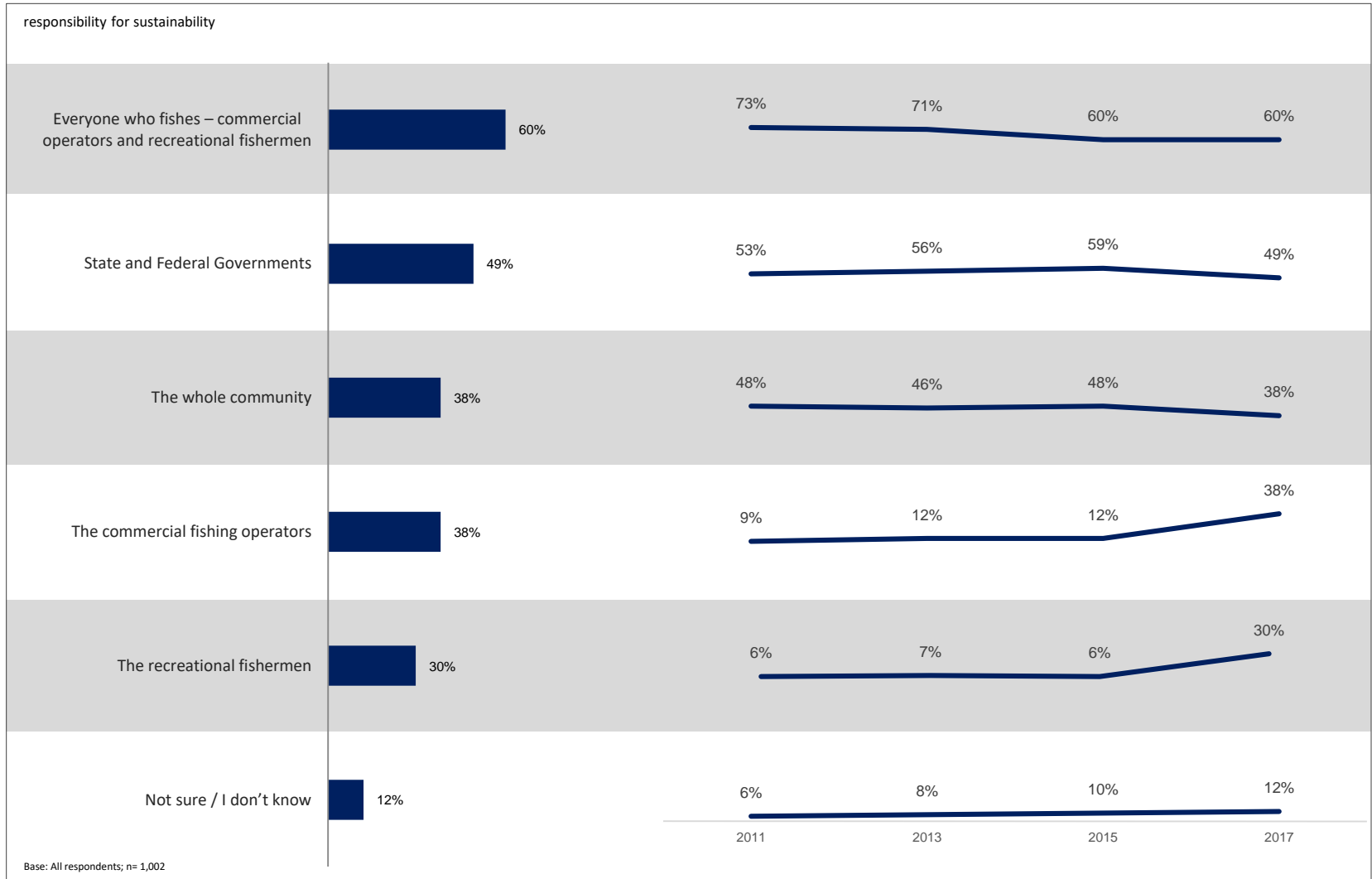
Base: All respondents; n= 1,002

those who think Australia is Ahead of other countries across demographic segments



What we asked:

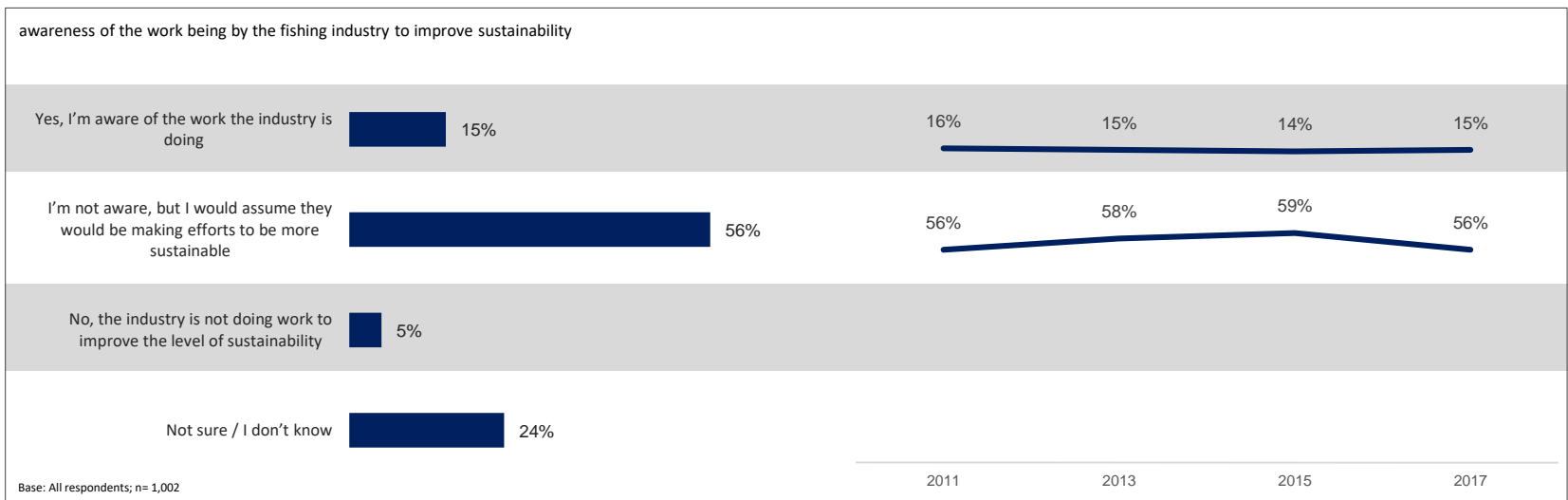
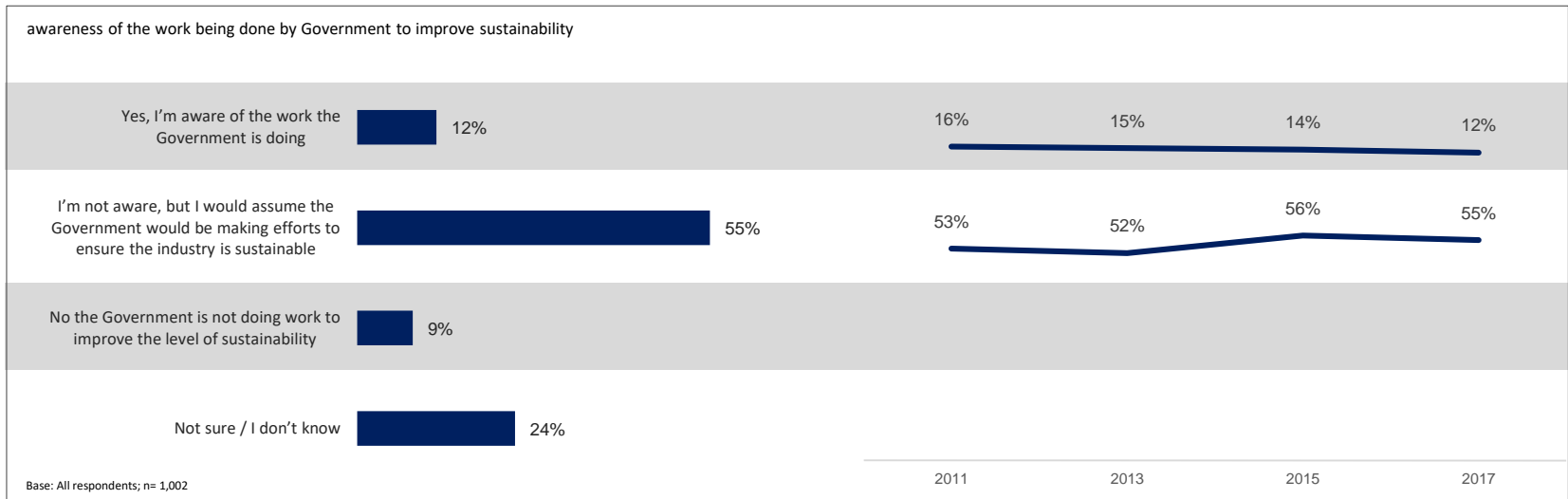
Do you think Australia's fishing industry and their practices around sustainability are better, worse, or the same to those used in other countries?



What we asked:

In your view, who is responsible for the sustainability of Australia's fisheries?

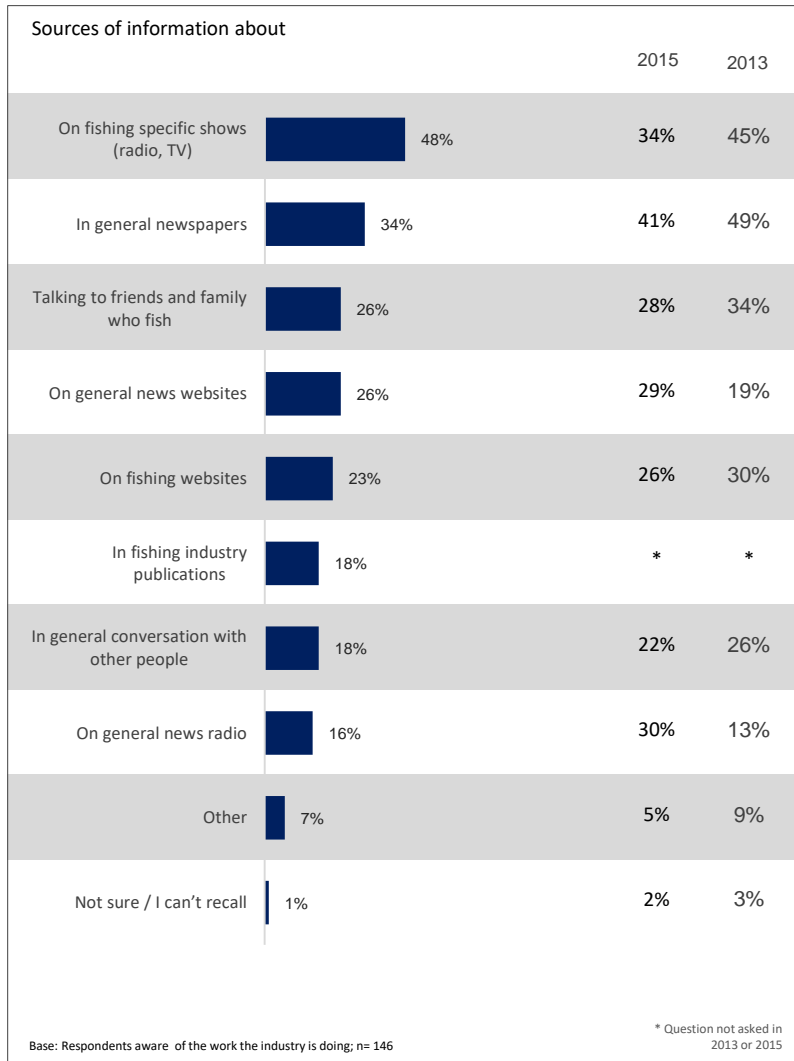
awareness of the work being done to make Australia's fishing industry sustainable



What we asked:

Do you know if the Government is doing work to improve the sustainability of fisheries?

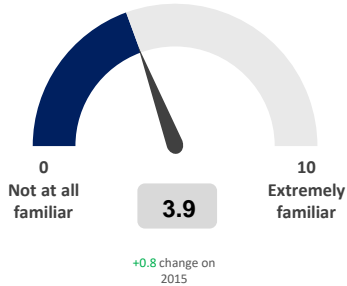
Do you know if the fishing industry is doing work to improve its level of sustainability?



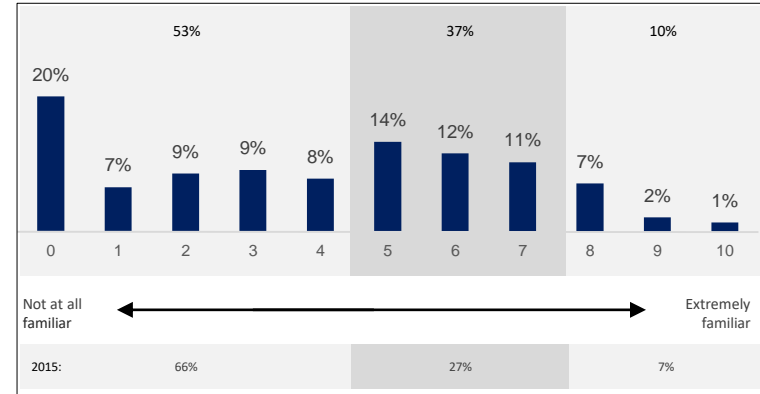
What we asked:

And where did you hear about the work the fishing industry is doing to improve its level of sustainability?

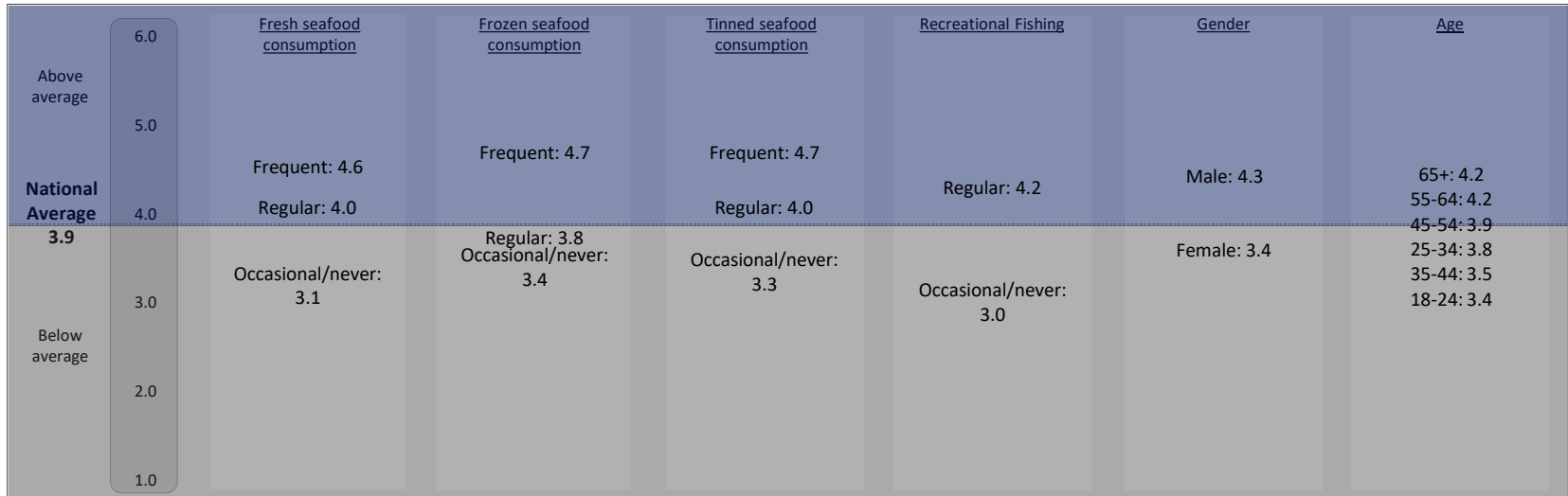
familiarity with the Australian commercial fishing industry



Base: All respondents; n= 1,002



those who think Australia is Ahead of other countries across demographic segments

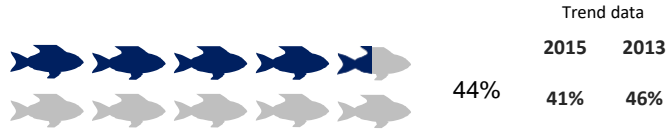


What we asked:

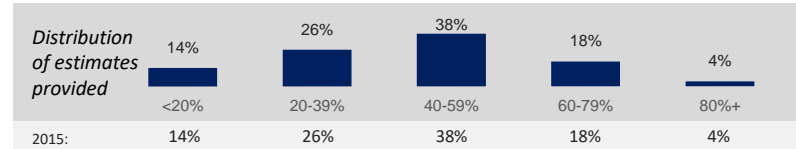
How familiar would you say you with how the **commercial fishing industry** – for example in how big it is, where its located, what commercial fishers fish for, how they fish and how they operate?

how much of what we consume is grown and caught in Australia

Perception of the percentage of fish consumed by Australians grown and caught in Australia



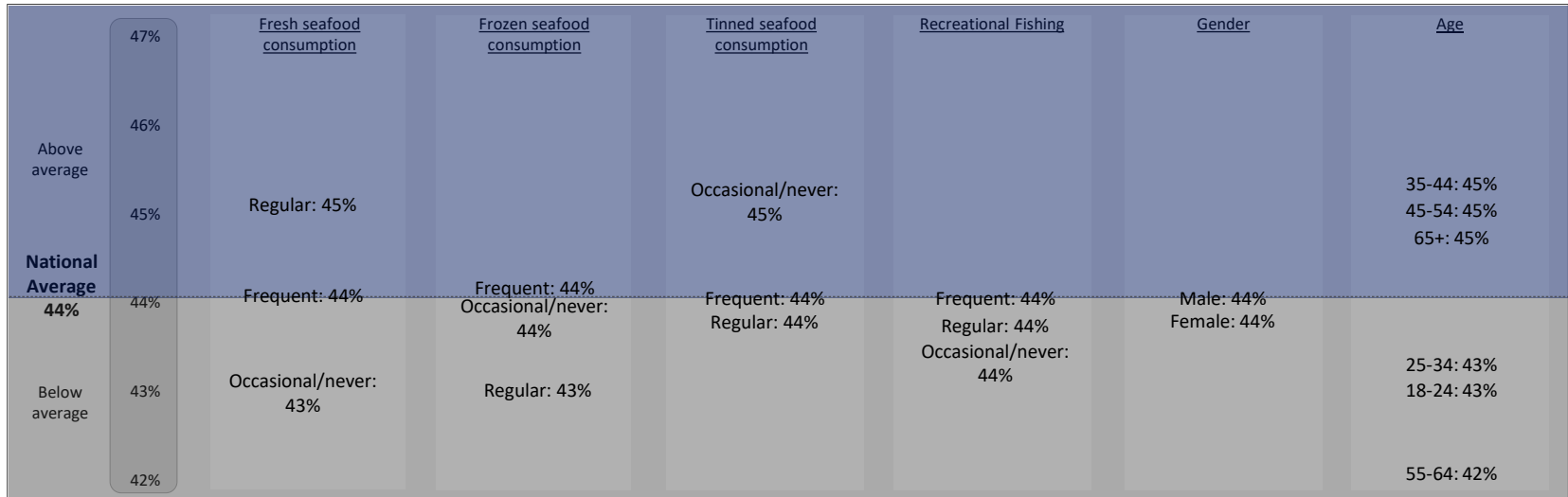
People responded with different estimates of the proportion of fish grow and caught in Australia. The range of different estimates is shown in the chart below (eg 26% believed it was between 20% and 39%).



Please note: the question was not specific to one of the fresh, frozen or tinned segments specifically but rather an overall perception of the percentage grown and caught in Australia.

Base: All respondents; n= 1,002

Percentage mean perception of fish consumed by Australians grown and caught in Australia – across demographic segments

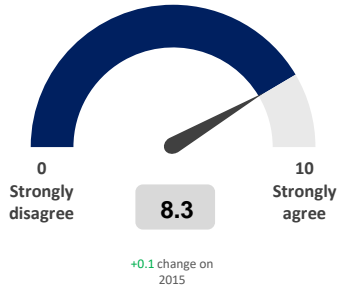


What we asked:

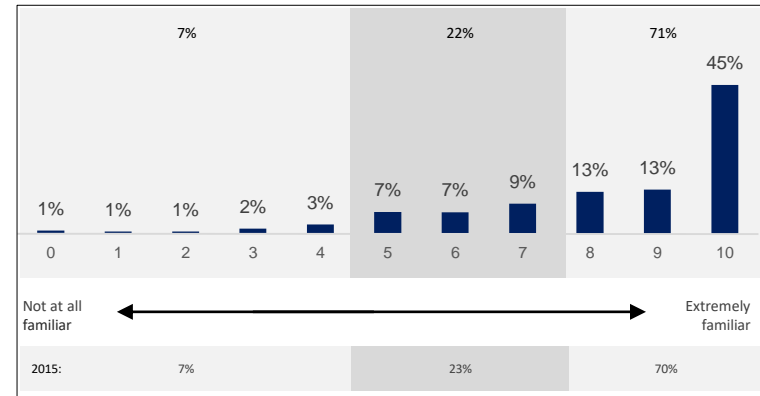
From what you know or have seen, heard or read, what percentage of the fish consumed by Australians is actually grown and caught in Australia, that is not imported from overseas?

what people think about Country of Origin labelling and certification

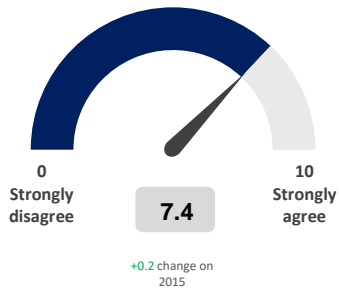
agreement that country of origin labelling allows you to make a more informed choice about the seafood you buy



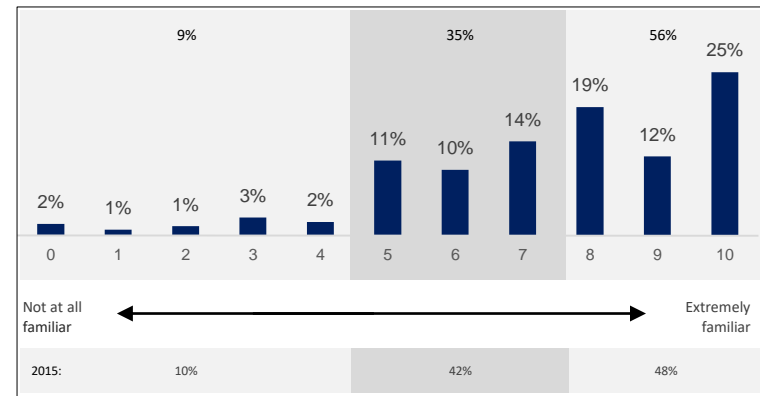
Base: All respondents; n= 1,002



agreement that certified (i.e. MSC, ASC and Friend of the sea) gives you confidence that the seafood is sustainable



Base: All respondents; n= 1,002



What we asked:

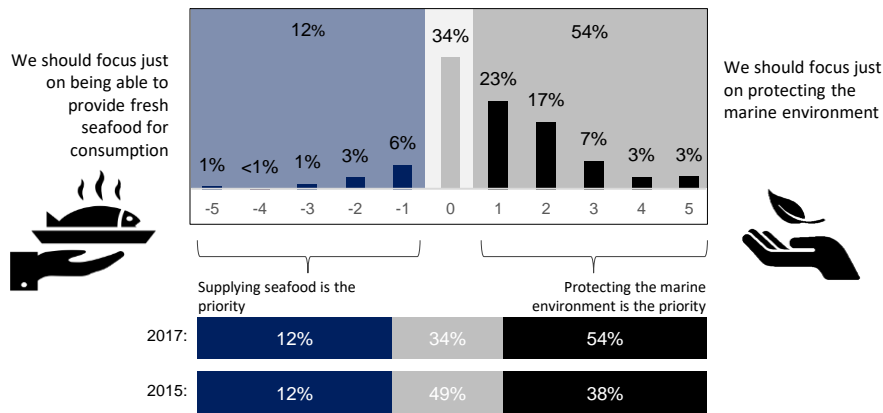
To what extent do you agree with the following statements:



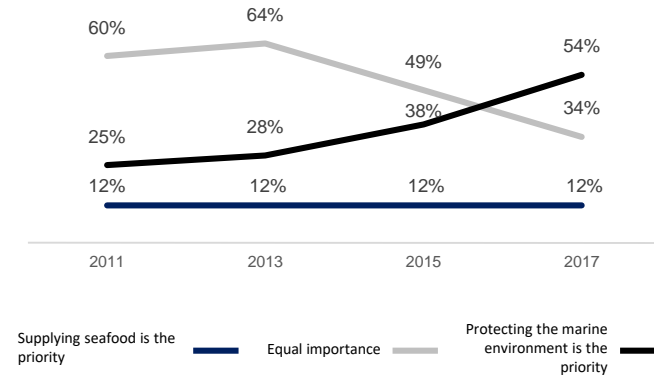
balance between seafood for consumption & maritime protection

balance between economic considerations and environmental considerations

Balance between supplying sufficient fresh seafood and protecting marine environment



Base: All respondents; n= 1,002



Percentage of those who rated 1 or higher on – 'Protecting the marine environment is the priority' over sufficient supply of fresh seafood – across demographic segments

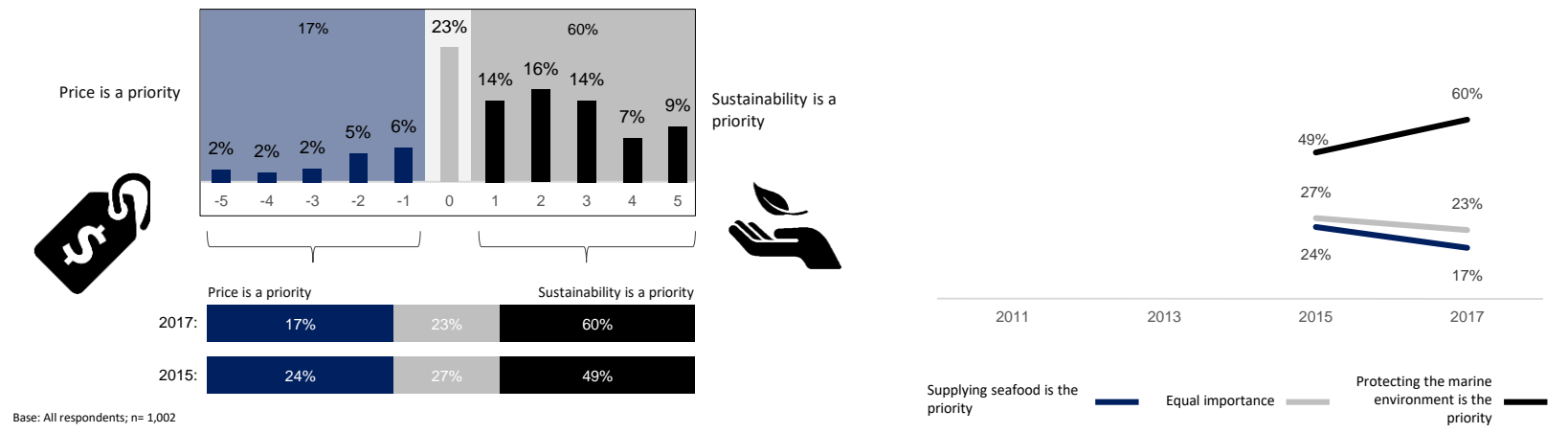
	Fresh seafood consumption	Frozen seafood consumption	Tinned seafood consumption	Recreational Fishing	Gender	Age
Above average	Frequent: 59%	Frequent: 58%	Frequent: 59%	Frequent: 73%	Female: 55%	18-24: 73%
National Average	Regular: 53% Occasional/never: 52%	Occasional/never: 54% Regular: 51%	Occasional/never: 55% Regular: 48%	Regular: 53%	Male: 53%	25-34: 64%
Below average				Occasional/never: 47%		35-44: 59%
						55-64: 53%
						45-54: 42%
						65+: 41%

What we asked:

Most Australians acknowledge that it's important to have a fishing industry that can supply sufficient fresh seafood so that everyone can buy locally caught seafood for consumption, while at the same time having policies and practices that protect the marine environment. In your opinion how would you describe where the balance between these two, at times competing priorities, should be?

balance between economic considerations and environmental considerations

Balance between price and sustainably caught seafood



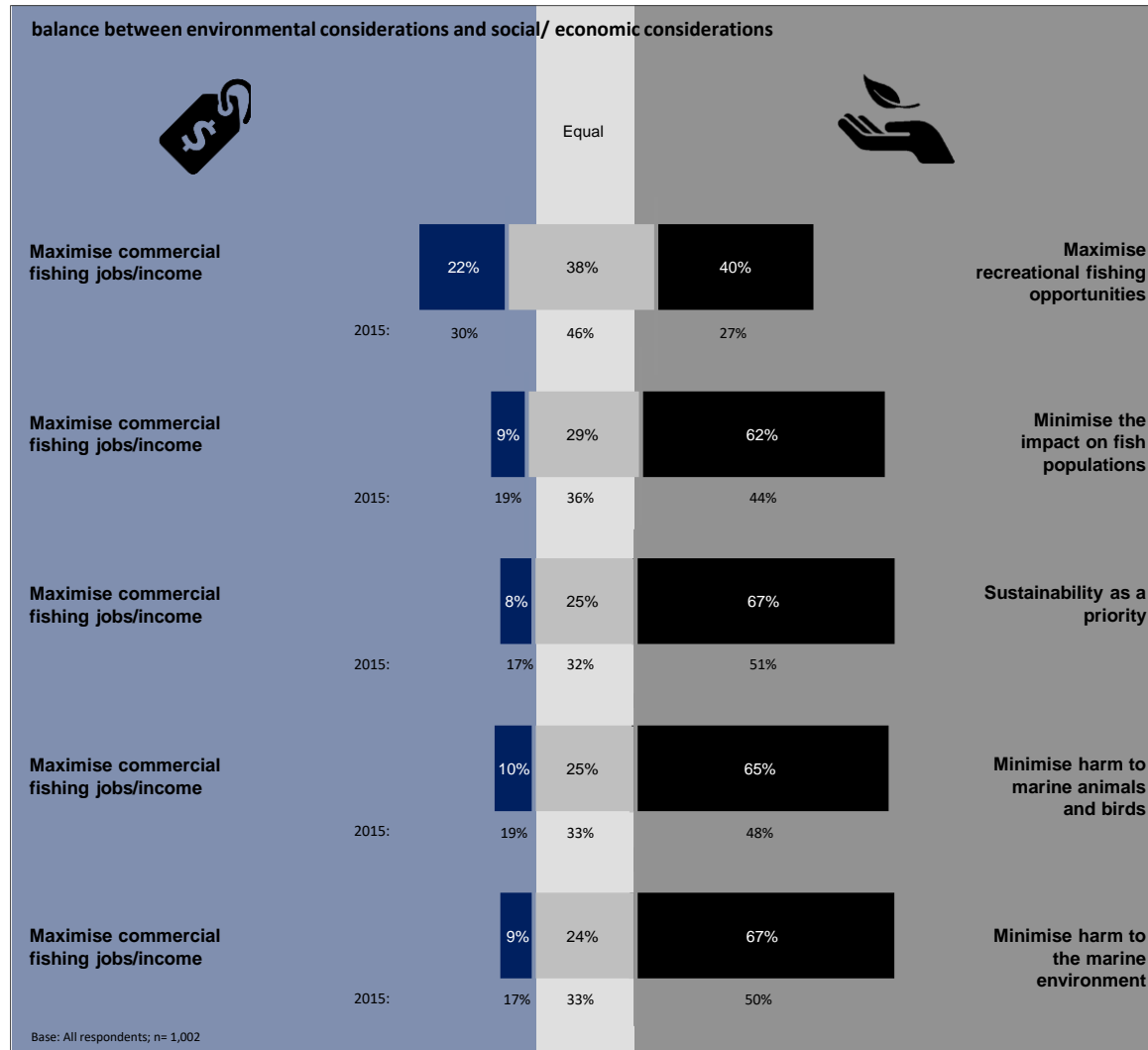
Percentage of those who rated 1 or higher on 'Sustainability is the priority' over buying cheaper seafood – across demographic segments

	Fresh seafood consumption	Frozen seafood consumption	Tinned seafood consumption	Recreational Fishing	Gender	Age
Above average	Frequent: 70%	Frequent: 64%	Frequent: 68%	Frequent: 73%	Male: 60%	35-44: 67%
National Average 60%	Regular: 59%	Regular: 61%	Regular: 61%	Regular: 59%	Female: 61%	18-24: 65%
Below average	Occasional/never: 54%	Occasional/never: 58%	Occasional/never: 55%	Occasional/never: 56%		25-34: 65%
						55-64: 59%
						65+: 56%
						45-54: 50%

What we asked:

When it comes to buying seafood, there can often be a tradeoff between buying the cheapest seafood and buying sustainably caught seafood. When you are buying seafood, which is more important, price or sustainably caught seafood?

balance between economic considerations and environmental considerations



What we asked:

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future
Do you think Australia's fishing industry can be sustainable?



views on sustainability of other rural sectors

sustainability of other rural industry sectors



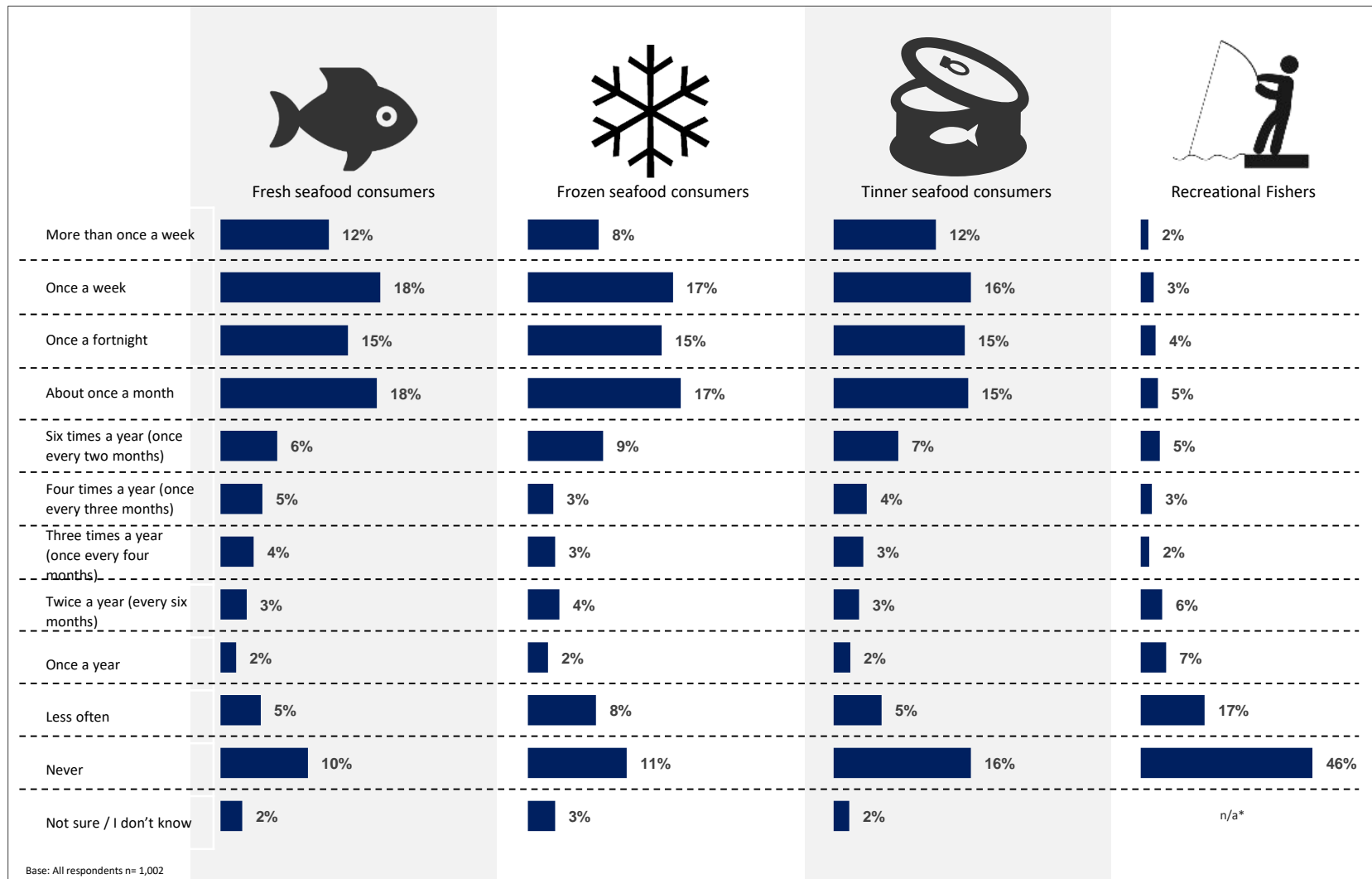
What we asked:

From what you know, do the rural sectors (listed below) have the necessary practices and policies in place that ensure the future of the industry and the environment is sustainable, while at the same time providing sufficient supply for Australians



a snapshot across different community segments

consumption of fish or seafood and fishing frequency



*Not sure/Don't know was not a response option to this question

What we asked:

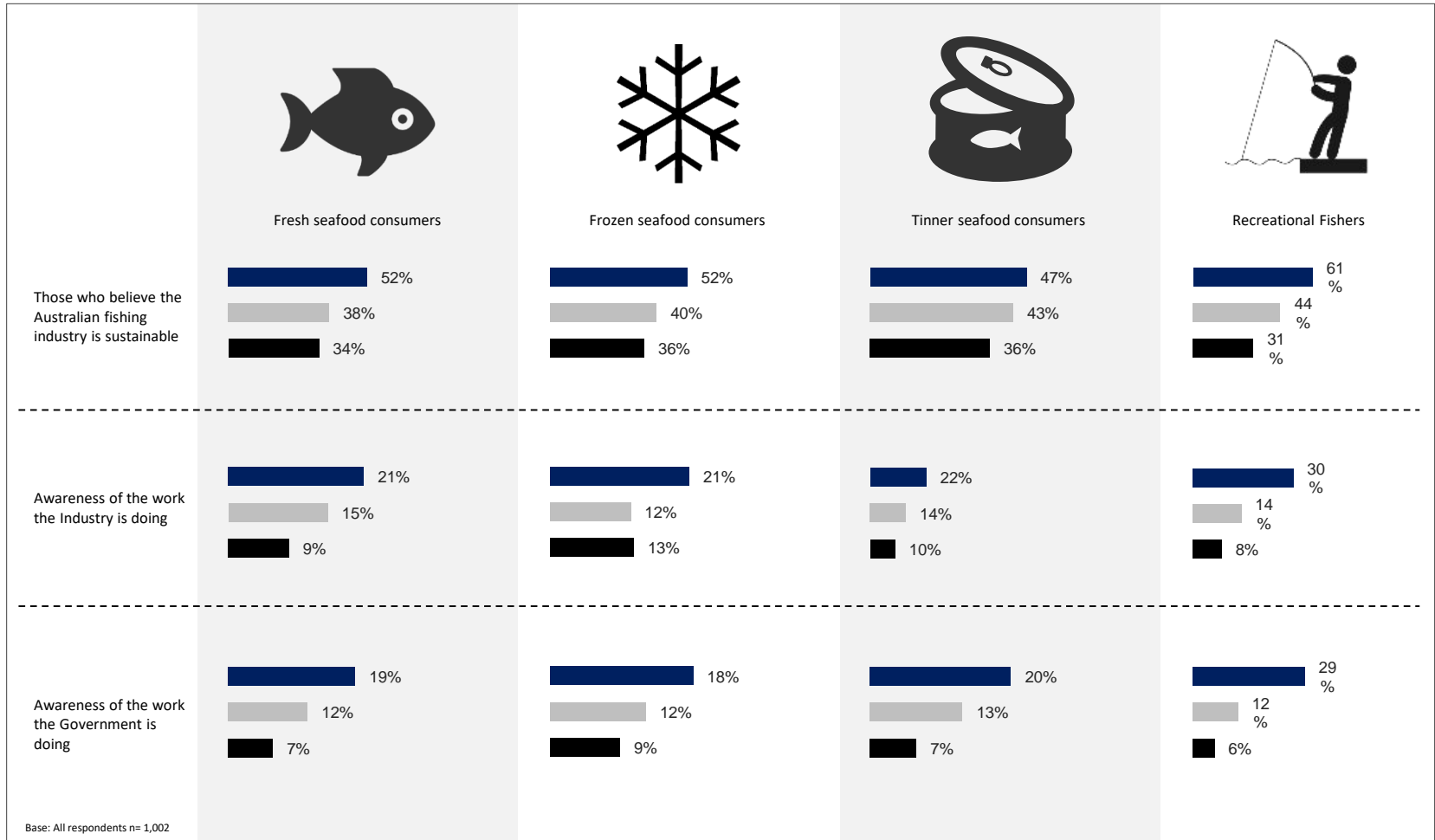
Over the past 12 months, how often would you say that you have eaten **fresh seafood** for a main meal?

Over the past 12 months, how often would you say that you have eaten **frozen fish or seafood** for a main meal?

Over the past 12 months, how often would you say that you have eaten **tinned fish or seafood** (i.e. **tinned tuna, tinned salmon, prawns or mussels**) for a main meal?

And again over the past 12 months, how often have you gone fishing? Include any occasion you have gone recreational fishing – by yourself, with friends or family, or with others.

key metrics by consumption and fishing habits



Definitions:

Seafood consumption

- Frequent: Once a week or more
- Regular: Once a month to once a fortnight
- Occasional/never: Less than once a month

Recreational fishing

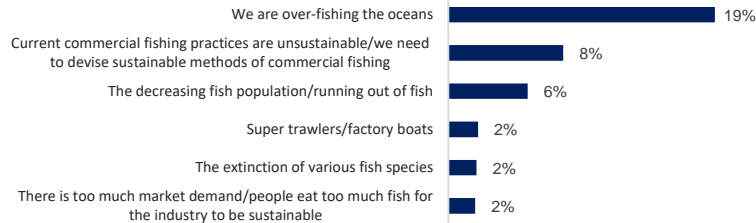
- Frequent (n = 193): 6 times a year or more
- Regular (n = 350): 4 times a year or less
- Never (n = 459): Don't fish



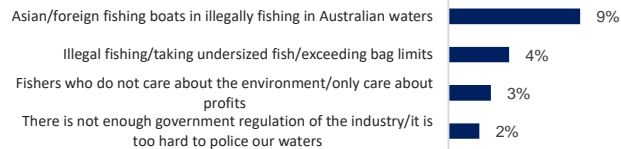
thoughts on commercial and recreational fishing

What do you see to be the biggest issue for the commercial fishing industry today?

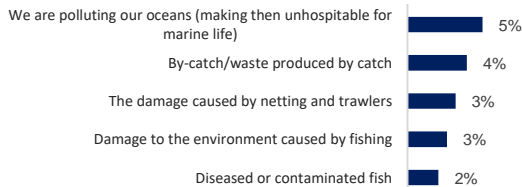
If we keep up our current practices, we will run out of fish



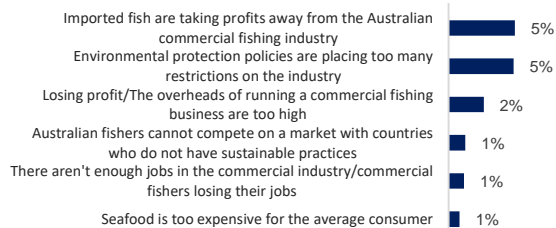
There are too many people illegally fishing/have no regard for the environment



Our current fishing practices are causing damage to the environment



Australian Commercial Fishers are unable to turn over a profits



Base: All respondents; n= 1,002

Note: Excludes responses < 1%

some of what they said...

"Over fishing - maxi fishing boats coming through areas and totally destroying all the fish in an area just to catch one type of fish and in the process killing and dumping the unwanted catch."

"From what I have heard, there certainly seems to be problems. There are areas where fishermen have overfished and there are ships from other countries trying to fish in our waters."

"No fish anymore near the coast. See Germany. I was born in Bremerhaven in 1941 - biggest European fishing port -huge. Todaydead, a whole industry gone in 60 years - ship yards - factories -all gone. It will happen here too!"

"OVERSEAS commercial fishing in our waters raping our oceans, because they have stuffed up their own oceans by being greedy & not worrying about the survival of their fish/seafood species. Russians, Japanese, Chinese. Indonesians, Indians fishing our waters & depleting our fish/seafood stocks."

"Wastage when not catching the fish they require, countries not fishing in their own territorial waters, pollution of the oceans, global warming changing fish habitat."

"I think a lot of fisherman pollute the water ways and oceans with rubbish."

"The effect pollution has in the oceans"

"protecting the fish in the sea from pollutants"

"Competition from overseas cheap imports that may be harmful to the environment and they are cheaper because of lower input costs. Also not subject to the same rigorous health standards."

"Impact of imported seafood products. particularly from Asia e.g. prawns."

"Government involvement and red tape, along with the greenies and tree huggers who just want every one to go back to the stone age"

"Government involvement and red tape, along with the greenies and tree huggers who just want every one to go back to the stone age"

"The rising costs of making the whole process sustainable."

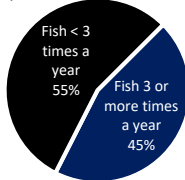
What we asked:

What do you see to be the biggest issue for the commercial fishing industry today?

the appeal of recreational fishing

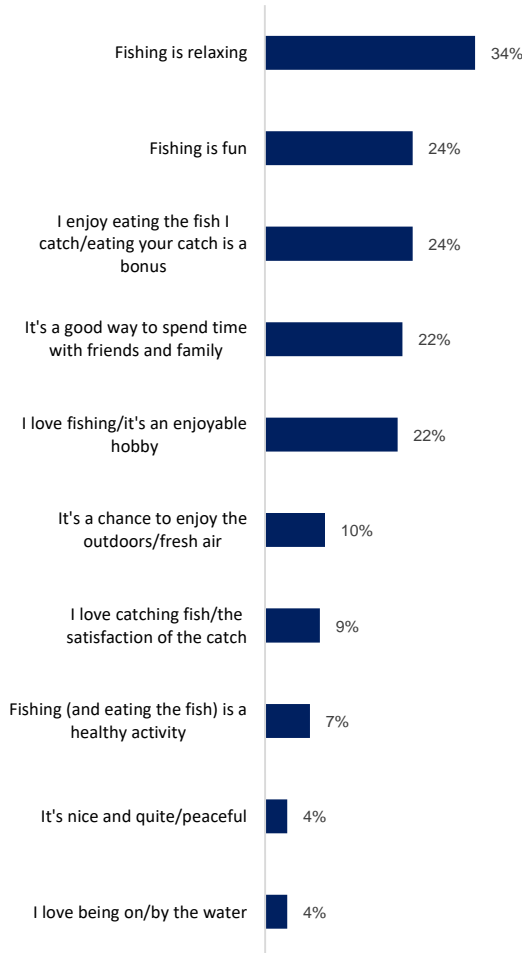


Recreational fishers that go fishing 3 or more times a year



Base: All recreational fishers; n = 543

The main reason why they fish



Base: Recreational Fishers (fish >2 times per year); n = 246

some of what they said....

"It is a very relaxing part time. If your lucky you come home with a meal. But I believe when in doubt throw it back, sometimes even the legal since looks too small, so I let it go."

"It is relaxing and it feels like an achievement when you have caught something ."

"I enjoy the relaxing, the challenge of catching fish and to catch fresh fish for my wife and I at least once a week. Over the last 12 months I have caught enough fresh fish and crabs to give at least 2 main meals a week and some for lunches."

"Fishing is about being in a beautiful place, with good company, enjoying nature and having fun. Fish caught are the bonus."

"I love to go camping boating and fishing with my wife and family members along the banks of the Murray River and the main reason that I fish is for the fun and the hope of catching a nice murray cod."

"For the pleasure of finally catching some fish and I enjoy eating fresh fish and its hard to get fresh fish from the supermarkets and we are not close to a beach where you can get fresh fish."

"I think it is very relaxing to go fishing and catch a feed of fish and even when I catch more than I need I throw them back so I know there will be some there for another day."

"To have some quiet time with myself and bring my children along so the family can bond. Also, fresh fish tastes better and is cheaper when I catch them myself."

"Peaceful relaxation (kids have to be quiet as it will scare the fish and if they scare the fish its brussel sprouts and sivilerbeet for tea) and to catch fish."

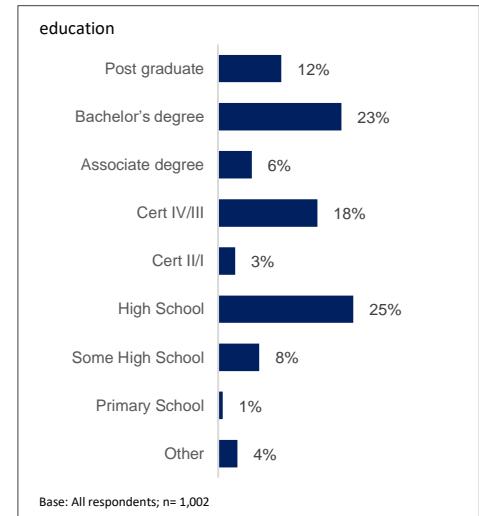
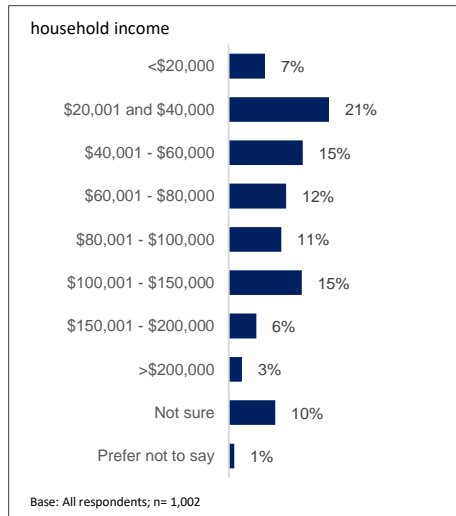
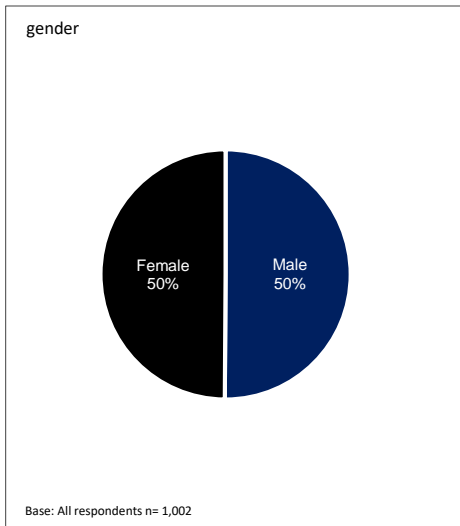
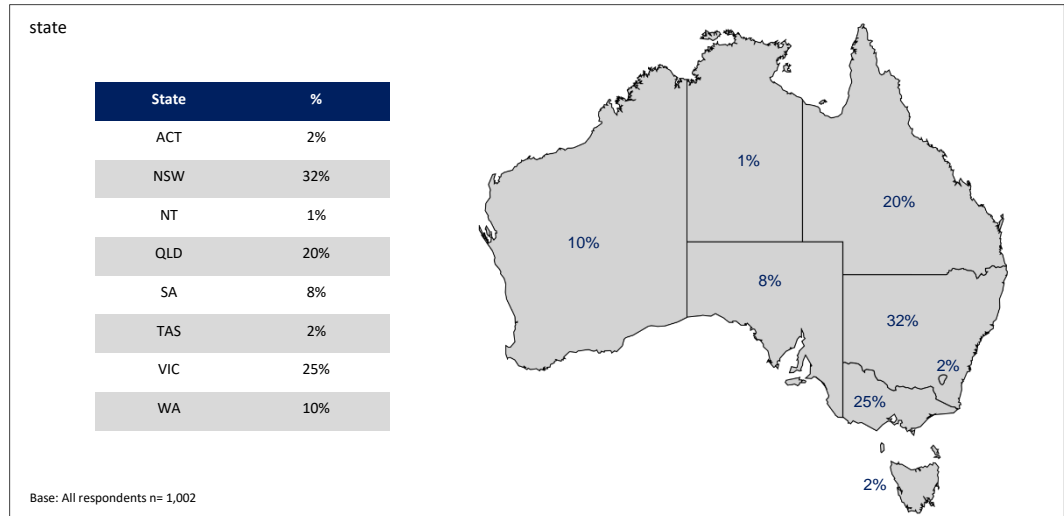
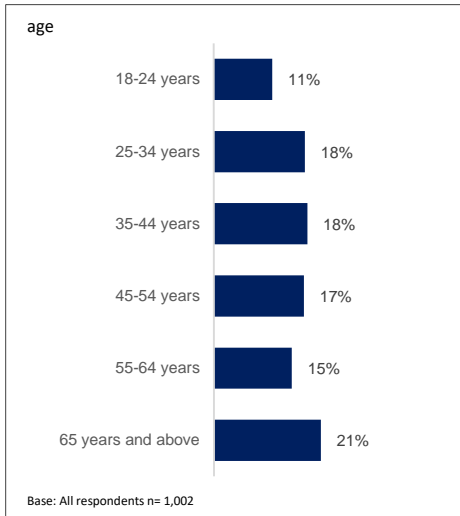
"It's relaxing, good scenery, always something happening by the water and even if I don't catch anything to bring home I still find its the best day out."

What we asked:

What one or two things are the main reasons why you fish?



respondent profiles



What we asked:

Are you...

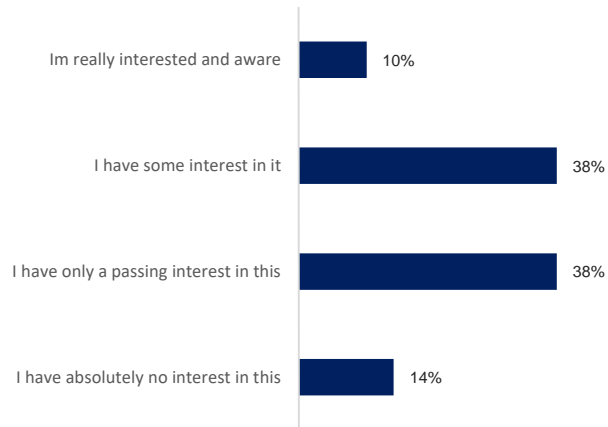
In which of the following age brackets do you fit into?

And what postcode do you live in?

Approximately what is your total annual household income before tax?

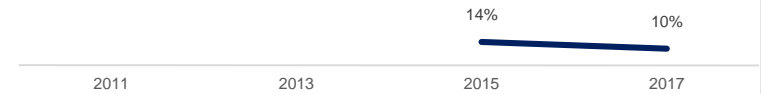
What is the highest level of education you have achieved?

interest in and awareness of the fishing industry in Australia

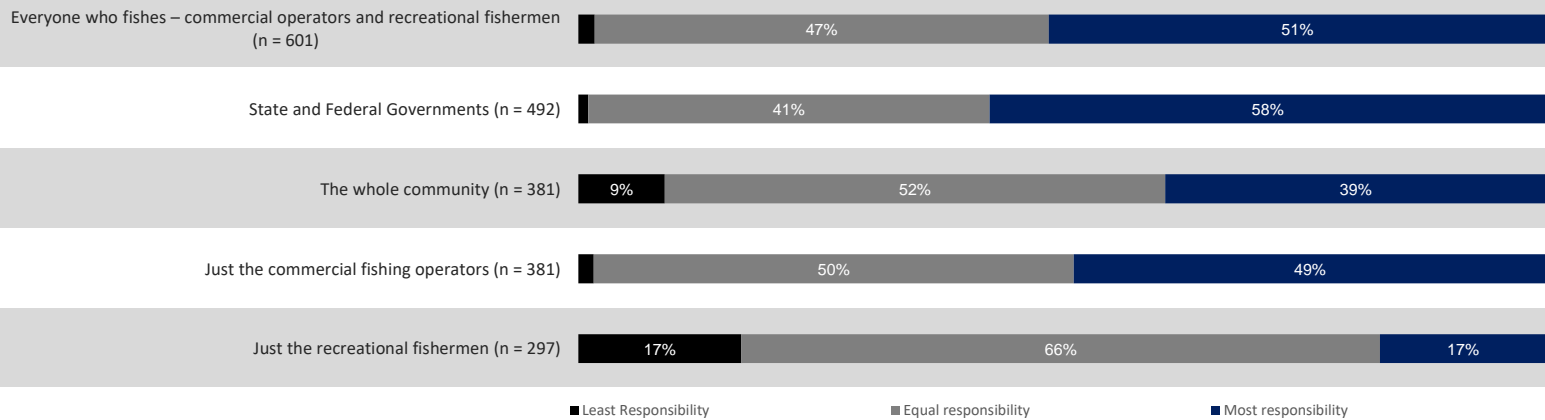


Base: All respondents; n= 1,002

Trend data – those who are really interested/aware



responsibility for sustainability



Base: all respondents, excluding those who responded with "not sure"; n provided above

What we asked:

Which of the following best describes your interest in and awareness of the fishing industry in Australia?

Do you know if the Government is doing work to improve the sustainability of fisheries?



detailed segment tables

detailed segments for results on page 12

Do you think Australia's fishing industry is sustainable?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Yes I do	41%	52%	38%	34%	52%	40%	36%	47%	43%	36%	61%	44%	31%
No, I don't	21%	17%	26%	20%	18%	19%	24%	25%	15%	22%	22%	18%	22%
Not sure / I don't know	38%	31%	36%	46%	30%	41%	41%	28%	41%	42%	17%	37%	48%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Yes I do	49%	33%	37%	43%	41%	43%	37%	43%	56%	44%	38%	44%	40%	36%	38%	33%
No, I don't	20%	21%	26%	18%	19%	17%	25%	21%	22%	19%	20%	22%	22%	25%	29%	11%
Not sure / I don't know	31%	46%	37%	40%	39%	40%	38%	36%	22%	37%	43%	34%	38%	39%	33%	56%

*Note: sample size (n<30). Results indicative only.

Do you think Australia's fishing industry can be sustainable?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	590	146	201	243	119	196	275	146	172	272	76	195	319
Yes, I am hopeful and confident it can be a sustainable industry	30%	35%	33%	25%	31%	38%	24%	29%	30%	31%	28%	35%	28%
I am hopeful but not confident that it can become a sustainable industry	46%	51%	48%	42%	53%	44%	45%	57%	47%	40%	54%	46%	45%
No, I don't think it can ever be a sustainable industry	5%	4%	2%	8%	4%	3%	7%	7%	2%	6%	8%	4%	5%
Not sure / I don't know	19%	10%	17%	26%	12%	16%	24%	7%	22%	23%	11%	15%	23%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	254	336	71	101	106	99	95	118	4*	177	153	113	49	67	15*	12*
Yes, I am hopeful and confident it can be a sustainable industry	29%	31%	27%	36%	27%	29%	26%	33%	0%	31%	24%	37%	27%	37%	13%	25%
I am hopeful but not confident that it can become a sustainable industry	55%	40%	51%	34%	45%	47%	45%	55%	75%	44%	49%	44%	55%	40%	40%	67%
No, I don't think it can ever be a sustainable industry	4%	6%	3%	10%	4%	4%	6%	3%	25%	3%	5%	7%	2%	6%	13%	0%
Not sure / I don't know	12%	24%	20%	21%	24%	19%	22%	8%	0%	22%	22%	12%	16%	16%	33%	8%

*Note: sample size (n<30). Results indicative only.

detailed segments for results on page 14

With that in mind, on a scale of 0 to 10, how sustainable do you think Australian fishing industry is overall? Please consider all sectors of the industry (commercial fishers, aquaculture and recreational fishing).

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	874	288	289	297	237	282	355	259	265	350	189	313	372
Overall sustainability of the Australian Fishing Industry	6.4	6.7	6.3	6.2	6.7	6.4	6.2	6.6	6.6	6.2	6.4	6.6	6.3

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	458	416	102	146	159	145	132	190	8*	279	214	180	70	91	16*	16*
Overall sustainability of the Australian Fishing Industry	6.6	6.3	5.9	6.3	6.4	6.5	6.5	6.8	6.5	6.5	6.3	6.5	6.3	6.6	5.8	6.4

The commercial fishing industry is made up of different sectors. Do you think the following sectors of the Australian fishing industry are sustainable?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base (minimum n)</i>	866	278	289	299	223	288	352	246	267	353	186	309	371
Farm fishing	6.9	7.1	6.9	6.7	7.2	6.9	6.7	7.2	6.9	6.7	6.6	7.2	6.9
Traditional (Indigenous) fishing	6.2	6.7	6.1	5.9	6.6	6.1	6.1	6.7	6.1	6.0	6.1	6.4	6.1
Recreational fishing	6.2	6.6	6.1	5.9	6.5	6.2	6.0	6.4	6.3	6.1	6.2	6.3	6.1
Commercial wild catch	5.6	6.3	5.5	5.1	6.0	5.7	5.4	5.8	5.8	5.4	6.0	5.7	5.4

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base (minimum n)</i>	458	408	98	143	154	147	130	192	8*	270	214	178	72	88	19*	15*
Farm fishing	7.2	6.6	5.9	6.2	6.9	7.3	7.2	7.5	7.8	6.9	6.9	7.0	6.9	6.9	6.4	6.9
Traditional (Indigenous) fishing	6.5	6.0	5.7	6.2	5.9	6.3	6.2	6.8	5.9	6.2	6.2	6.0	6.4	6.6	6.1	6.7
Recreational fishing	6.5	5.9	5.3	6.1	6.2	6.2	6.3	6.8	6.6	6.3	6.0	6.2	6.4	6.3	5.6	6.6
Commercial wild catch	5.8	5.5	5.1	5.6	5.6	5.5	5.4	6.3	5.9	5.8	5.4	5.7	5.4	5.8	5.3	5.6

*Note: sample size (n<30). Results indicative only.

Do you think Australia's fishing industry and their practices around sustainability are better, worse, or the same to those used in other countries?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Australia's fishing industry is well ahead of other countries	20%	23%	20%	17%	30%	19%	16%	24%	21%	17%	28%	21%	16%
We are slightly ahead but not a long way ahead	44%	46%	49%	38%	42%	47%	43%	46%	47%	41%	39%	48%	43%
There are no real differences between Australia and most other countries	16%	19%	13%	16%	17%	17%	15%	18%	17%	14%	17%	16%	15%
Australia is a little way behind other countries	7%	7%	8%	6%	5%	7%	7%	6%	6%	8%	9%	5%	7%
Australia's fishing industry is well behind other countries	2%	1%	2%	2%	2%	1%	2%	2%	1%	2%	2%	1%	2%
Don't care/Not something that interest me	12%	4%	9%	20%	5%	10%	17%	4%	8%	19%	4%	9%	17%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Australia's fishing industry is well ahead of other countries	21%	20%	14%	15%	20%	25%	25%	20%	33%	20%	21%	23%	16%	16%	8%	17%
We are slightly ahead but not a long way ahead	48%	40%	45%	38%	43%	41%	44%	53%	33%	44%	41%	43%	57%	41%	50%	61%
There are no real differences between Australia and most other countries	16%	16%	18%	21%	13%	17%	13%	14%	11%	16%	17%	16%	9%	21%	8%	11%
Australia is a little way behind other countries	8%	6%	8%	8%	7%	6%	7%	5%	0%	6%	7%	6%	9%	8%	0%	6%
Australia's fishing industry is well behind other countries	1%	3%	0%	2%	1%	2%	1%	2%	0%	2%	2%	1%	0%	2%	8%	0%
Don't care/Not something that interest me	7%	16%	15%	16%	16%	9%	11%	5%	22%	12%	11%	10%	10%	12%	25%	6%

*Note: sample size (n<30). Results indicative only.

Do you think Australia's fishing industry and their practices around sustainability are better, worse, or the same to those used in other countries?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Australia's fishing industry is well ahead of other countries	20%	23%	20%	17%	30%	19%	16%	24%	21%	17%	28%	21%	16%
We are slightly ahead but not a long way ahead	44%	46%	49%	38%	42%	47%	43%	46%	47%	41%	39%	48%	43%
There are no real differences between Australia and most other countries	16%	19%	13%	16%	17%	17%	15%	18%	17%	14%	17%	16%	15%
Australia is a little way behind other countries	7%	7%	8%	6%	5%	7%	7%	6%	6%	8%	9%	5%	7%
Australia's fishing industry is well behind other countries	2%	1%	2%	2%	2%	1%	2%	2%	1%	2%	2%	1%	2%
Don't care/Not something that interest me	12%	4%	9%	20%	5%	10%	17%	4%	8%	19%	4%	9%	17%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Australia's fishing industry is well ahead of other countries	21%	20%	14%	15%	20%	25%	25%	20%	33%	20%	21%	23%	16%	16%	8%	17%
We are slightly ahead but not a long way ahead	48%	40%	45%	38%	43%	41%	44%	53%	33%	44%	41%	43%	57%	41%	50%	61%
There are no real differences between Australia and most other countries	16%	16%	18%	21%	13%	17%	13%	14%	11%	16%	17%	16%	9%	21%	8%	11%
Australia is a little way behind other countries	8%	6%	8%	8%	7%	6%	7%	5%	0%	6%	7%	6%	9%	8%	0%	6%
Australia's fishing industry is well behind other countries	1%	3%	0%	2%	1%	2%	1%	2%	0%	2%	2%	1%	0%	2%	8%	0%
Don't care/Not something that interest me	7%	16%	15%	16%	16%	9%	11%	5%	22%	12%	11%	10%	10%	12%	25%	6%

*Note: sample size (n<30). Results indicative only.

In your view, who is responsible for the sustainability of Australia's fisheries?

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Everyone who fishes	60%	59%	66%	56%	64%	58%	59%	58%	61%	60%	56%	66%	57%
The commercial fishing operators	38%	40%	42%	33%	42%	40%	34%	40%	36%	38%	36%	39%	38%
The recreational fishermen	30%	29%	34%	26%	32%	30%	28%	28%	30%	30%	33%	30%	28%
State and Federal Governments	49%	46%	56%	45%	48%	49%	49%	50%	47%	50%	37%	54%	50%
The whole community	38%	39%	39%	36%	38%	38%	38%	43%	35%	37%	33%	43%	36%
Not sure / I don't know	12%	9%	8%	18%	6%	13%	15%	8%	11%	16%	10%	10%	14%

	Gender		Age bracket							State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Everyone who fishes	65%	55%	50%	55%	55%	62%	62%	71%	56%	58%	61%	66%	54%	62%	46%	61%
The commercial fishing operators	41%	35%	45%	39%	34%	45%	30%	38%	44%	40%	39%	39%	32%	34%	29%	39%
The recreational fishermen	32%	27%	39%	32%	28%	32%	22%	28%	22%	30%	29%	30%	28%	32%	25%	28%
State and Federal Governments	54%	44%	41%	43%	45%	55%	50%	57%	44%	45%	53%	52%	51%	50%	38%	50%
The whole community	39%	37%	36%	40%	27%	39%	43%	43%	44%	37%	35%	42%	37%	40%	42%	28%
Not sure / I don't know	8%	16%	16%	17%	15%	10%	10%	5%	11%	13%	11%	11%	12%	10%	21%	6%

*Note: sample size (n<30). Results indicative only.

Do you know if the fishing industry is doing work to improve its level of sustainability?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Yes, I'm aware of the work the industry is doing	15%	21%	15%	9%	21%	12%	13%	22%	14%	10%	30%	14%	8%
I'm not aware, but I would assume they would be making efforts to be more sustainable	56%	60%	59%	52%	59%	60%	52%	58%	61%	52%	53%	62%	54%
No, the industry is not doing work to improve the level of sustainability	5%	5%	4%	5%	6%	3%	6%	6%	3%	5%	7%	2%	6%
Not sure / I don't know	24%	15%	22%	34%	14%	25%	30%	14%	21%	33%	11%	22%	32%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Yes, I'm aware of the work the industry is doing	18%	11%	13%	15%	8%	12%	20%	18%	22%	16%	13%	13%	16%	14%	4%	28%
I'm not aware, but I would assume they would be making efforts to be more sustainable	59%	54%	57%	52%	61%	59%	49%	60%	33%	54%	57%	62%	58%	54%	54%	50%
No, the industry is not doing work to improve the level of sustainability	6%	4%	5%	6%	4%	3%	5%	4%	22%	5%	6%	2%	4%	4%	8%	0%
Not sure / I don't know	17%	31%	25%	26%	27%	26%	26%	17%	22%	24%	24%	22%	22%	28%	33%	22%

*Note: sample size (n<30). Results indicative only.

And where did you hear about the work the fishing industry is doing to improve its level of sustainability?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	146	63	49	34	52	40	54	61	43	42	57	50	39
In fishing industry publications	18%	29%	8%	15%	21%	13%	20%	21%	16%	17%	32%	16%	3%
On fishing websites	23%	33%	18%	12%	31%	25%	15%	25%	28%	17%	40%	18%	5%
On fishing specific shows (radio, TV)	48%	51%	41%	53%	56%	43%	44%	51%	56%	36%	47%	56%	38%
Talking to friends and family who fish	26%	29%	31%	15%	27%	23%	28%	25%	23%	31%	39%	20%	15%
In general newspapers	34%	38%	37%	24%	31%	35%	37%	36%	33%	33%	30%	36%	38%
On general news websites	26%	37%	18%	18%	25%	30%	24%	31%	21%	24%	18%	32%	31%
On general news radio	16%	19%	12%	18%	15%	15%	19%	20%	12%	17%	18%	20%	10%
In general conversation with other people	18%	22%	20%	9%	17%	15%	22%	21%	19%	14%	21%	18%	15%
Other	7%	8%	8%	3%	4%	8%	9%	7%	9%	5%	4%	10%	8%
Not sure / I can't recall	1%	0%	2%	3%	0%	0%	4%	2%	0%	2%	2%	0%	3%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	89	57	15*	27*	15*	21*	30	38	2*	51	33	26*	13*	15*	1*	5*
In fishing industry publications	18%	19%	33%	33%	13%	24%	10%	8%	50%	16%	12%	35%	23%	13%	0%	0%
On fishing websites	27%	18%	33%	33%	27%	24%	20%	13%	0%	25%	24%	19%	15%	33%	0%	20%
On fishing specific shows (radio, TV)	48%	47%	27%	41%	47%	43%	67%	50%	100%	35%	52%	50%	62%	60%	100%	40%
Talking to friends and family who fish	21%	33%	27%	19%	33%	48%	20%	21%	0%	25%	27%	38%	23%	20%	0%	0%
In general newspapers	35%	33%	20%	33%	27%	14%	33%	55%	0%	27%	36%	42%	62%	20%	100%	20%
On general news websites	28%	23%	20%	33%	27%	19%	20%	32%	0%	33%	33%	23%	15%	7%	0%	20%
On general news radio	20%	11%	7%	11%	7%	24%	17%	24%	0%	18%	12%	23%	31%	0%	0%	20%
In general conversation with other people	24%	11%	0%	22%	7%	14%	17%	32%	0%	16%	24%	38%	0%	7%	0%	0%
Other	3%	12%	0%	0%	7%	5%	17%	8%	50%	6%	9%	4%	0%	13%	0%	0%
Not sure / I can't recall	2%	0%	7%	0%	0%	5%	0%	0%	0%	0%	0%	4%	8%	0%	0%	0%

*Note: sample size (n<30). Results indicative only.

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How familiar would you say you with the commercial fishing industry – for example in how big it is, where its located, what commercial fishers fish for, how they fish and how they operate?

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	921	293	302	326	238	307	376	261	283	377	189	325	407
Familiarity with the Australian commercial fishing industry	3.9	4.6	4.0	3.1	4.7	3.8	3.4	4.7	4.0	3.3	5.4	4.2	3.0

	Gender		Age bracket							State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	475	446	101	161	164	156	138	201	9*	288	231	185	76	94	21*	17*
Familiarity with the Australian commercial fishing industry	4.3	3.4	3.4	3.8	3.5	3.9	4.3	4.2	3.2	4.1	3.5	4.0	3.7	3.8	4.2	5.3

With that in mind, on a scale of 0 to 10, how sustainable do you think Australian commercial fishing is overall?

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	844	280	282	282	226	280	338	245	260	339	187	307	350
Sustainability of the Australian commercial fishing	6.1	6.4	6.1	5.9	6.4	6.2	5.9	6.3	6.2	6.0	6.1	6.3	6.0

	Gender		Age bracket							State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	451	393	96	142	153	141	122	190	8	271	204	174	67	85	18*	17*
Sustainability of the Australian commercial fishing	6.2	6.0	5.5	5.8	6.1	6.2	6.2	6.6	5.8	6.2	6.1	6.1	5.8	6.2	6.2	6.4

*Note: sample size (n<30). Results indicative only.

From what you know or have seen, heard or read, what percentage of the fish consumed by Australians is actually grown and caught in Australia, that is not imported from overseas?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Mean	44%	44%	45%	43%	44%	43%	44%	44%	44%	45%	44%	44%	44%
0	2%	3%	2%	3%	2%	2%	3%	1%	2%	3%	3%	1%	3%
1% - 10%	7%	5%	6%	9%	5%	8%	7%	7%	8%	6%	8%	7%	7%
11% - 20%	10%	10%	10%	9%	13%	9%	9%	13%	9%	9%	10%	11%	9%
21% - 30%	12%	12%	12%	12%	13%	13%	11%	12%	12%	12%	14%	12%	11%
31% - 40%	15%	15%	15%	14%	15%	15%	14%	13%	14%	16%	14%	17%	14%
41% - 50%	26%	28%	25%	25%	23%	30%	25%	24%	28%	26%	22%	24%	29%
51% - 60%	12%	12%	13%	11%	14%	10%	11%	11%	13%	11%	11%	12%	12%
61% - 70%	7%	7%	8%	6%	6%	8%	7%	7%	7%	8%	4%	9%	7%
71% - 80%	7%	6%	7%	7%	5%	5%	9%	7%	7%	7%	8%	7%	6%
81% - 90%	1%	2%	1%	1%	2%	1%	1%	1%	1%	1%	3%	1%	1%
91% - 100%	1%	1%	1%	2%	2%	1%	1%	2%	0%	2%	2%	1%	2%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Mean	44%	44%	43%	43%	45%	45%	42%	45%	43%	44%	45%	45%	43%	42%	45%	48%
0	2%	3%	3%	2%	2%	3%	3%	1%	0%	2%	4%	2%	2%	2%	0%	6%
1% - 10%	6%	7%	12%	7%	6%	6%	10%	4%	0%	8%	6%	6%	2%	11%	13%	6%
11% - 20%	10%	10%	12%	10%	14%	7%	7%	10%	0%	9%	9%	9%	20%	10%	8%	6%
21% - 30%	14%	10%	9%	15%	8%	12%	12%	14%	22%	12%	11%	13%	11%	15%	4%	6%
31% - 40%	16%	14%	15%	15%	15%	17%	14%	13%	33%	14%	13%	16%	15%	13%	29%	11%
41% - 50%	24%	28%	19%	25%	27%	28%	28%	28%	33%	29%	28%	21%	26%	26%	21%	17%
51% - 60%	12%	11%	12%	10%	9%	9%	13%	16%	11%	12%	11%	12%	7%	9%	8%	39%
61% - 70%	7%	8%	8%	5%	9%	5%	6%	9%	0%	6%	10%	8%	7%	4%	4%	0%
71% - 80%	7%	7%	7%	9%	8%	8%	5%	4%	0%	7%	6%	10%	6%	6%	0%	6%
81% - 90%	1%	1%	4%	1%	1%	2%	0%	0%	0%	1%	1%	1%	1%	3%	8%	0%
91% - 100%	2%	1%	1%	1%	1%	2%	1%	1%	0%	1%	1%	0%	1%	2%	4%	6%

*Note: sample size (n<30). Results indicative only.

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To what extent do you agree or disagree with the following statements:

Buying seafood with the country of origin labelling allows you to make a more informed choice about the seafood you buy

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	966	305	317	344	246	317	403	272	295	399	191	340	435
Agreement	8.3	8.5	8.3	7.9	8.2	8.4	8.1	8.4	8.4	8.0	7.7	8.4	8.4

	Gender		Age bracket							State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	487	479	106	168	172	167	149	204	9*	303	236	196	78	103	23*	18*
Agreement	8.2	8.3	7.0	7.9	8.2	8.3	8.8	8.8	7.4	8.2	8.2	8.6	8.1	8.2	7.9	8.2

Buying seafood that is certified (i.e. MSC, ASC and Friend of the sea) gives you confidence that the seafood is sustainable

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	930	291	309	330	239	309	382	259	283	388	188	327	415
Agreement	7.4	7.8	7.4	7.1	7.7	7.7	7.1	7.8	7.6	7.1	7.2	7.6	7.4

	Gender		Age bracket							State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	473	457	106	161	169	162	141	191	9*	291	228	191	75	97	21*	18*
Agreement	7.2	7.7	7.0	7.7	7.5	7.3	7.6	7.4	7.8	7.5	7.4	7.5	7.3	7.3	7.1	7.8

*Note: sample size (n<30). Results indicative only.

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Most Australians acknowledge that it's important to have a fishing industry that can supply sufficient fresh seafood so that everyone can buy locally caught seafood for consumption, while at the same time having policies and practices that protect the marine environment. In your opinion how would you describe where the balance between these two, at times competing priorities, should be?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Mean	0.88	1.01	0.78	0.85	1.01	0.76	0.89	1.04	0.73	0.87	1.39	0.75	0.76
We should focus just on being able to provide fresh seafood for consumption - -5	1%	1%	1%	1%	1%	0%	1%	1%	0%	1%	0%	1%	1%
-4	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
-3	1%	1%	2%	1%	2%	2%	0%	2%	2%	1%	2%	1%	1%
-2	3%	2%	4%	3%	3%	3%	3%	2%	3%	4%	1%	5%	3%
-1	6%	7%	6%	6%	6%	7%	6%	5%	7%	7%	7%	7%	5%
0 - Equal	34%	30%	35%	37%	30%	35%	36%	30%	40%	33%	17%	33%	42%
1	23%	25%	20%	23%	23%	19%	25%	23%	20%	25%	27%	23%	21%
2	17%	17%	21%	14%	17%	19%	16%	19%	17%	17%	24%	18%	14%
3	7%	8%	8%	6%	9%	8%	6%	10%	5%	7%	12%	7%	6%
4	3%	3%	2%	4%	4%	2%	4%	4%	3%	3%	4%	2%	4%
We should focus just on protecting the marine environment - +5	3%	5%	1%	4%	4%	2%	3%	4%	3%	3%	6%	2%	3%

Most Australians acknowledge that it's important to have a fishing industry that can supply sufficient fresh seafood so that everyone can buy locally caught seafood for consumption, while at the same time having policies and practices that protect the marine environment. In your opinion how would you describe where the balance between these two, at times competing priorities, should be?

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Mean	0.82	0.93	1.30	1.24	1.08	0.82	0.59	0.41	0.78	0.76	0.99	0.94	0.78	0.90	0.83	1.00
We should focus just on being able to provide fresh seafood for consumption --5	1%	1%	0%	1%	1%	1%	1%	1%	0%	1%	1%	0%	0%	1%	0%	0%
-4	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	1%	0%	0%
-3	2%	1%	2%	1%	2%	1%	1%	1%	0%	2%	2%	1%	0%	1%	4%	0%
-2	4%	2%	1%	1%	2%	3%	4%	6%	11%	5%	2%	2%	1%	2%	4%	6%
-1	8%	5%	7%	5%	6%	7%	5%	8%	0%	7%	6%	7%	5%	8%	0%	0%
0 - Equal	32%	36%	18%	28%	31%	34%	46%	43%	44%	35%	32%	35%	42%	30%	38%	33%
1	23%	23%	27%	27%	18%	24%	18%	24%	22%	20%	24%	22%	25%	25%	29%	33%
2	17%	18%	31%	16%	24%	14%	15%	10%	11%	17%	19%	15%	17%	21%	8%	17%
3	7%	8%	6%	11%	9%	7%	5%	5%	0%	7%	9%	8%	5%	6%	13%	6%
4	3%	3%	4%	6%	3%	4%	3%	1%	0%	3%	4%	4%	2%	4%	0%	0%
We should focus just on protecting the marine environment - +5	3%	4%	4%	5%	4%	3%	2%	2%	11%	4%	3%	3%	1%	3%	4%	6%

*Note: sample size (n<30). Results indicative only.

When it comes to buying seafood, there can often be a tradeoff between buying the cheapest seafood and buying sustainably caught seafood. When you are buying seafood, which is more important, price or sustainably caught seafood?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Mean	1.24	1.49	1.14	1.11	1.26	1.16	1.28	1.52	1.21	1.07	1.70	1.03	1.20
Price is a priority - -5	2%	2%	3%	2%	4%	2%	2%	2%	2%	2%	2%	3%	2%
-4	2%	2%	2%	2%	2%	2%	1%	1%	2%	1%	0%	3%	2%
-3	2%	1%	3%	2%	2%	2%	3%	3%	2%	3%	1%	3%	2%
-2	5%	5%	3%	6%	6%	4%	5%	4%	5%	5%	5%	5%	5%
-1	6%	3%	8%	6%	3%	8%	6%	4%	5%	8%	4%	7%	6%
0 - Equal	23%	17%	22%	28%	20%	21%	26%	18%	23%	26%	16%	20%	28%
1	14%	16%	14%	12%	16%	14%	12%	16%	13%	13%	17%	16%	11%
2	16%	19%	15%	13%	14%	20%	14%	16%	16%	15%	20%	15%	14%
3	14%	17%	15%	10%	16%	13%	13%	14%	17%	12%	17%	13%	13%
4	7%	10%	6%	6%	9%	7%	7%	11%	6%	6%	7%	9%	6%
Sustainability is a priority - +5	9%	7%	9%	12%	9%	7%	12%	11%	8%	9%	11%	6%	11%

When it comes to buying seafood, there can often be a tradeoff between buying the cheapest seafood and buying sustainably caught seafood. When you are buying seafood, which is more important, price or sustainably caught seafood?

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Mean	1.14	1.33	1.12	1.38	1.36	1.29	0.95	1.23	2.56	1.07	1.11	1.65	1.00	1.24	1.83	0.83
Price is a priority - -5	3%	2%	2%	1%	1%	1%	5%	3%	0%	2%	4%	1%	1%	3%	0%	6%
-4	1%	2%	0%	1%	2%	4%	3%	0%	0%	2%	1%	1%	2%	3%	0%	6%
-3	3%	1%	2%	3%	2%	2%	3%	3%	0%	3%	2%	3%	2%	1%	4%	0%
-2	5%	4%	7%	2%	6%	3%	6%	6%	0%	6%	5%	4%	5%	5%	4%	6%
-1	5%	6%	8%	6%	7%	5%	5%	4%	0%	7%	6%	4%	11%	3%	0%	11%
0 - Equal	22%	23%	17%	21%	15%	26%	28%	28%	22%	25%	25%	16%	21%	23%	29%	22%
1	15%	13%	20%	18%	17%	12%	9%	9%	0%	13%	15%	13%	16%	18%	8%	0%
2	15%	17%	20%	18%	18%	18%	9%	12%	33%	15%	15%	18%	14%	16%	0%	17%
3	16%	12%	13%	13%	17%	9%	11%	18%	11%	14%	12%	14%	14%	10%	33%	17%
4	6%	9%	6%	6%	7%	9%	10%	8%	11%	7%	7%	9%	7%	8%	8%	11%
Sustainability is a priority - +5	8%	11%	4%	10%	8%	11%	12%	9%	22%	7%	9%	14%	6%	10%	13%	6%

*Note: sample size (n<30). Results indicative only.

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

Maximise commercial fishing jobs/income versus Maximise recreational fishing opportunities

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Mean	0.50	0.76	0.33	0.43	0.70	0.45	0.42	0.71	0.65	0.25	0.95	0.52	0.29
Maximise commercial fishing jobs/income - -5	2%	1%	2%	2%	2%	1%	1%	3%	1%	2%	1%	1%	2%
-4	1%	1%	1%	2%	1%	1%	2%	1%	1%	2%	1%	1%	2%
-3	2%	2%	4%	2%	1%	3%	2%	1%	3%	3%	2%	3%	2%
-2	6%	7%	6%	4%	6%	6%	4%	6%	4%	7%	9%	5%	5%
-1	11%	10%	14%	11%	11%	12%	11%	11%	10%	13%	10%	13%	11%
0 - Equal	38%	34%	35%	44%	34%	37%	41%	32%	39%	41%	24%	35%	46%
1	14%	13%	16%	14%	11%	18%	14%	14%	17%	13%	15%	17%	12%
2	9%	12%	8%	8%	11%	9%	8%	13%	10%	6%	16%	10%	5%
3	8%	12%	6%	8%	13%	6%	7%	11%	8%	7%	10%	9%	7%
4	3%	5%	3%	2%	4%	2%	3%	4%	3%	2%	6%	2%	2%
Maximise recreational fishing opportunities - +5	5%	5%	5%	5%	5%	5%	5%	5%	6%	4%	7%	4%	4%

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

Maximise commercial fishing jobs/income versus Maximise recreational fishing opportunities

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Mean	0.50	0.50	0.18	0.88	0.42	0.33	0.58	0.50	2.22	0.31	0.59	0.61	0.54	0.44	0.71	0.44
Maximise commercial fishing jobs/income - -5	2%	1%	1%	0%	0%	4%	3%	2%	0%	3%	1%	1%	0%	1%	0%	0%
-4	2%	1%	2%	1%	2%	1%	2%	1%	0%	2%	2%	0%	0%	2%	0%	0%
-3	2%	3%	4%	4%	3%	2%	1%	1%	0%	3%	2%	3%	1%	2%	0%	6%
-2	6%	5%	6%	7%	7%	3%	5%	6%	11%	7%	4%	6%	7%	5%	4%	0%
-1	13%	10%	18%	8%	13%	11%	11%	11%	0%	13%	13%	8%	12%	9%	13%	17%
0 - Equal	34%	42%	35%	31%	36%	43%	40%	41%	11%	36%	33%	41%	43%	45%	46%	50%
1	14%	15%	13%	16%	16%	16%	13%	12%	22%	13%	19%	13%	14%	15%	8%	0%
2	9%	9%	10%	11%	9%	7%	7%	10%	0%	10%	7%	10%	7%	9%	17%	17%
3	9%	7%	6%	10%	9%	6%	7%	11%	22%	8%	10%	7%	7%	9%	4%	6%
4	4%	2%	1%	5%	1%	3%	5%	3%	11%	2%	4%	4%	2%	2%	4%	0%
Maximise recreational fishing opportunities - +5	5%	5%	4%	7%	4%	3%	7%	3%	22%	4%	5%	5%	5%	3%	4%	6%

*Note: sample size (n<30). Results indicative only.

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

Maximise commercial fishing jobs/income versus Minimise the impact on fish populations

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Mean	1.36	1.30	1.39	1.39	1.38	1.26	1.43	1.48	1.35	1.29	1.45	1.28	1.39
Maximise commercial fishing jobs/income - -5	1%	1%	1%	1%	2%	1%	1%	2%	0%	1%	2%	1%	1%
-4	0%	0%	0%	1%	0%	1%	0%	0%	1%	0%	1%	0%	0%
-3	1%	2%	0%	0%	2%	0%	0%	1%	1%	0%	2%	1%	0%
-2	2%	3%	2%	2%	2%	2%	3%	3%	2%	2%	3%	3%	2%
-1	4%	4%	5%	4%	4%	6%	3%	2%	6%	5%	5%	5%	3%
0 - Equal	29%	25%	30%	32%	23%	32%	30%	25%	29%	31%	18%	27%	35%
1	17%	20%	18%	15%	19%	18%	16%	15%	19%	18%	20%	20%	14%
2	18%	20%	16%	18%	20%	16%	19%	20%	17%	17%	19%	20%	16%
3	14%	14%	14%	15%	15%	13%	14%	18%	12%	14%	19%	13%	13%
4	6%	7%	6%	4%	7%	4%	6%	7%	6%	4%	7%	5%	5%
Minimise the impact on fish populations - +5	7%	5%	7%	9%	6%	7%	8%	7%	8%	7%	6%	5%	9%

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

Maximise commercial fishing jobs/income versus Minimise the impact on fish populations

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Mean	1.26	1.46	1.17	1.54	1.61	1.23	1.49	1.11	2.33	1.19	1.25	1.57	1.37	1.68	1.33	1.28
Maximise commercial fishing jobs/income - -5	1%	1%	1%	0%	1%	1%	2%	1%	0%	2%	1%	0%	1%	0%	0%	0%
-4	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	1%	0%	0%
-3	1%	1%	0%	1%	2%	1%	1%	1%	0%	1%	1%	0%	0%	0%	0%	0%
-2	2%	2%	7%	3%	2%	1%	1%	1%	0%	3%	2%	3%	1%	1%	0%	0%
-1	5%	4%	7%	5%	4%	2%	4%	4%	11%	5%	4%	2%	5%	4%	8%	0%
0 - Equal	26%	31%	19%	27%	23%	36%	26%	37%	0%	29%	30%	29%	27%	29%	33%	33%
1	19%	16%	18%	18%	17%	20%	15%	17%	33%	17%	18%	17%	17%	14%	13%	28%
2	20%	16%	27%	14%	16%	18%	20%	16%	0%	18%	16%	17%	26%	16%	25%	28%
3	13%	15%	12%	17%	21%	10%	13%	11%	33%	12%	14%	17%	10%	19%	13%	6%
4	7%	5%	4%	6%	8%	4%	6%	5%	0%	5%	5%	6%	10%	8%	0%	0%
Minimise the impact on fish populations - +5	5%	9%	4%	9%	7%	6%	11%	5%	22%	7%	7%	8%	2%	9%	8%	6%

*Note: sample size (n<30). Results indicative only.

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

Maximise commercial fishing jobs/income versus Sustainability as a priority

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Mean	1.77	1.85	1.74	1.74	1.87	1.71	1.77	1.99	1.79	1.62	1.82	1.70	1.81
Maximise commercial fishing jobs/income - -5	1%	1%	1%	1%	2%	0%	1%	2%	0%	1%	1%	1%	1%
-4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
-3	1%	0%	1%	1%	0%	0%	1%	0%	0%	1%	1%	1%	0%
-2	2%	2%	2%	2%	1%	3%	2%	2%	3%	2%	2%	2%	2%
-1	4%	4%	6%	4%	5%	5%	3%	3%	4%	5%	8%	5%	3%
0 - Equal	25%	22%	26%	28%	21%	27%	27%	21%	27%	27%	15%	24%	31%
1	13%	14%	13%	11%	15%	13%	12%	11%	13%	13%	15%	15%	10%
2	17%	19%	16%	16%	17%	16%	18%	18%	16%	17%	20%	17%	15%
3	14%	15%	12%	15%	13%	15%	14%	16%	13%	13%	16%	14%	13%
4	10%	14%	10%	8%	13%	10%	9%	13%	12%	8%	11%	9%	11%
Sustainability as a priority - +5	13%	9%	14%	14%	14%	11%	13%	14%	12%	13%	11%	12%	14%

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

Maximise commercial fishing jobs/income versus Sustainability as a priority

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Mean	1.74	1.81	1.37	1.86	1.73	1.71	2.01	1.85	3.00	1.64	1.66	1.96	1.68	1.99	2.17	1.61
Maximise commercial fishing jobs/income - -5	1%	0%	0%	0%	1%	1%	2%	1%	0%	2%	0%	0%	0%	0%	0%	0%
-4	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
-3	1%	0%	3%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%
-2	3%	2%	4%	3%	2%	1%	1%	3%	0%	4%	1%	1%	0%	3%	0%	0%
-1	4%	5%	6%	5%	7%	2%	3%	3%	0%	4%	5%	4%	5%	4%	0%	11%
0 - Equal	21%	29%	26%	22%	21%	29%	28%	27%	11%	23%	27%	26%	32%	21%	29%	33%
1	15%	10%	11%	13%	16%	13%	9%	13%	0%	13%	14%	10%	12%	17%	8%	6%
2	18%	16%	26%	16%	17%	19%	15%	13%	11%	17%	19%	17%	17%	11%	25%	17%
3	14%	14%	10%	19%	18%	11%	10%	14%	56%	12%	11%	16%	14%	21%	8%	11%
4	11%	9%	6%	7%	7%	13%	15%	13%	0%	13%	10%	7%	14%	9%	13%	11%
Sustainability as a priority - +5	11%	14%	9%	14%	12%	10%	17%	14%	22%	12%	11%	17%	6%	14%	17%	11%

*Note: sample size (n<30). Results indicative only.

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

Maximise commercial fishing jobs/income versus Minimise harm to marine animals and birds

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Mean	1.57	1.44	1.63	1.62	1.63	1.44	1.64	1.66	1.53	1.54	1.48	1.53	1.64
Maximise commercial fishing jobs/income - -5	1%	1%	0%	2%	1%	0%	1%	1%	0%	1%	1%	1%	1%
-4	0%	0%	1%	0%	1%	0%	0%	0%	1%	0%	1%	0%	0%
-3	0%	1%	1%	0%	0%	1%	0%	0%	1%	0%	1%	0%	1%
-2	2%	4%	3%	1%	3%	3%	1%	4%	3%	1%	6%	2%	1%
-1	6%	5%	5%	6%	5%	6%	6%	5%	7%	6%	7%	6%	5%
0 - Equal	25%	24%	24%	27%	20%	28%	25%	23%	24%	27%	17%	23%	30%
1	16%	18%	16%	14%	16%	16%	16%	12%	17%	18%	17%	19%	13%
2	18%	19%	18%	16%	21%	16%	16%	18%	19%	16%	19%	19%	17%
3	13%	13%	14%	12%	14%	12%	13%	16%	10%	13%	17%	14%	10%
4	8%	7%	8%	10%	6%	6%	11%	10%	8%	8%	6%	9%	9%
Minimise harm to marine animals and birds - +5	10%	8%	11%	12%	11%	10%	10%	10%	11%	10%	9%	8%	13%

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

Maximise commercial fishing jobs/income versus Minimise harm to marine animals and birds

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Mean	1.42	1.72	1.30	1.79	1.57	1.37	1.77	1.55	2.89	1.41	1.47	1.77	1.48	1.87	1.67	1.50
Maximise commercial fishing jobs/income - -5	1%	0%	1%	0%	1%	2%	2%	0%	0%	2%	1%	0%	0%	0%	0%	0%
-4	1%	0%	0%	0%	1%	1%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%
-3	0%	1%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%
-2	3%	2%	3%	4%	4%	2%	1%	1%	0%	3%	2%	3%	1%	3%	0%	0%
-1	7%	4%	12%	4%	7%	3%	6%	5%	0%	5%	8%	5%	6%	5%	8%	0%
0 - Equal	21%	28%	25%	22%	22%	32%	24%	25%	0%	25%	25%	23%	31%	22%	25%	39%
1	19%	13%	16%	16%	16%	18%	11%	17%	22%	15%	18%	15%	15%	17%	8%	22%
2	19%	16%	19%	18%	17%	14%	20%	19%	11%	20%	12%	16%	22%	19%	33%	17%
3	13%	13%	12%	13%	14%	14%	13%	12%	33%	13%	13%	16%	6%	12%	8%	6%
4	9%	8%	5%	6%	10%	7%	13%	8%	22%	8%	8%	9%	14%	5%	8%	6%
Minimise harm to marine animals and birds - +5	7%	14%	8%	16%	9%	7%	11%	10%	11%	8%	11%	11%	5%	17%	8%	11%

*Note: sample size (n<30). Results indicative only.

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

Maximise commercial fishing jobs/income versus Minimise harm to the marine environment

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Mean	1.66	1.64	1.57	1.75	1.72	1.59	1.67	1.80	1.56	1.63	1.74	1.59	1.67
Maximise commercial fishing jobs/income - -5	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%	1%	1%
-4	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%
-3	0%	1%	0%	0%	2%	0%	0%	1%	0%	0%	1%	1%	0%
-2	2%	3%	3%	1%	0%	4%	2%	3%	2%	2%	3%	2%	2%
-1	5%	4%	7%	5%	5%	6%	4%	4%	8%	4%	8%	7%	3%
0 - Equal	24%	22%	24%	26%	20%	24%	26%	20%	24%	27%	15%	21%	31%
1	15%	16%	16%	14%	13%	16%	16%	12%	17%	17%	16%	17%	14%
2	19%	22%	17%	18%	26%	18%	15%	22%	19%	17%	23%	21%	16%
3	13%	14%	13%	14%	11%	13%	15%	16%	12%	13%	17%	13%	12%
4	9%	10%	9%	9%	11%	7%	10%	11%	8%	9%	8%	9%	10%
Minimise harm to the marine environment - +5	10%	7%	10%	13%	10%	11%	10%	10%	11%	10%	10%	9%	11%

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

Maximise commercial fishing jobs/income versus Minimise harm to the marine environment

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Mean	1.57	1.74	1.53	1.82	1.70	1.51	1.73	1.62	2.89	1.54	1.48	1.78	1.65	1.95	1.92	2.17
Maximise commercial fishing jobs/income - -5	1%	0%	0%	0%	1%	1%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%
-4	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%
-3	0%	1%	0%	1%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
-2	2%	3%	5%	3%	2%	2%	0%	1%	0%	3%	1%	3%	1%	3%	0%	0%
-1	6%	5%	7%	5%	7%	3%	4%	6%	0%	5%	7%	5%	9%	2%	0%	0%
0 - Equal	21%	27%	19%	21%	22%	30%	26%	25%	11%	23%	26%	24%	25%	24%	25%	39%
1	18%	13%	19%	14%	14%	18%	11%	15%	11%	15%	19%	13%	11%	16%	17%	6%
2	21%	17%	20%	20%	20%	16%	19%	19%	11%	20%	17%	20%	21%	18%	29%	6%
3	14%	13%	14%	13%	15%	13%	15%	12%	33%	14%	12%	13%	15%	13%	13%	22%
4	10%	8%	7%	8%	8%	8%	11%	12%	11%	11%	7%	8%	14%	9%	4%	6%
Minimise harm to the marine environment - +5	7%	14%	8%	15%	10%	9%	11%	8%	22%	7%	10%	13%	5%	15%	13%	22%

*Note: sample size (n<30). Results indicative only.

We'd like to get your views about the sustainability of some other rural sectors. From what you know, do the rural sectors (listed below) have the necessary practices and policies in place that ensure the future of the industry and the environment is sustainable, while at the same time providing sufficient supply for Australians?

Dairy (milk, butter, cheese, yogurt)

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Yes, it is a sustainable industry sector	40%	43%	43%	35%	43%	42%	37%	41%	40%	40%	36%	39%	43%
No, but I am hopeful and confident it can be a sustainable industry	28%	28%	28%	28%	26%	28%	28%	32%	27%	25%	32%	27%	26%
No, but I am hopeful but not confident that it can be a sustainable industry	14%	15%	16%	12%	16%	13%	14%	14%	17%	13%	19%	16%	10%
No, I don't think it is or ever can be a sustainable industry	4%	4%	1%	6%	2%	3%	4%	2%	4%	5%	4%	4%	3%
Not sure	14%	10%	13%	19%	12%	13%	16%	12%	12%	18%	9%	13%	17%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Yes, it is a sustainable industry sector	47%	34%	36%	35%	33%	45%	46%	45%	44%	38%	41%	43%	32%	45%	46%	50%
No, but I am hopeful and confident it can be a sustainable industry	26%	29%	28%	31%	28%	22%	27%	29%	44%	31%	24%	28%	36%	21%	25%	22%
No, but I am hopeful but not confident that it can be a sustainable industry	14%	15%	17%	13%	18%	9%	13%	15%	11%	13%	16%	15%	19%	9%	4%	22%
No, I don't think it is or ever can be a sustainable industry	4%	4%	1%	3%	4%	5%	3%	3%	0%	4%	4%	3%	1%	8%	0%	0%
Not sure	10%	19%	18%	18%	17%	18%	11%	7%	0%	15%	15%	11%	12%	18%	25%	6%

*Note: sample size (n<30). Results indicative only.

We'd like to get your views about the sustainability of some other rural sectors. From what you know, do the rural sectors (listed below) have the necessary practices and policies in place that ensure the future of the industry and the environment is sustainable, while at the same time providing sufficient supply for Australians?

Beef

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Yes, it is a sustainable industry sector	46%	48%	46%	43%	44%	48%	44%	43%	47%	46%	38%	49%	46%
No, but I am hopeful and confident it can be a sustainable industry	23%	25%	24%	21%	27%	20%	23%	30%	21%	20%	28%	23%	21%
No, but I am hopeful but not confident that it can be a sustainable industry	12%	11%	17%	9%	14%	15%	9%	11%	15%	11%	17%	13%	10%
No, I don't think it is or ever can be a sustainable industry	5%	6%	3%	7%	5%	3%	7%	7%	4%	6%	8%	4%	5%
Not sure	13%	9%	10%	20%	10%	13%	16%	10%	12%	17%	9%	11%	17%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Yes, it is a sustainable industry sector	53%	39%	27%	33%	41%	47%	56%	63%	67%	44%	45%	50%	41%	41%	50%	61%
No, but I am hopeful and confident it can be a sustainable industry	22%	25%	35%	24%	25%	22%	19%	17%	22%	23%	21%	22%	27%	25%	21%	33%
No, but I am hopeful but not confident that it can be a sustainable industry	12%	13%	20%	14%	12%	11%	11%	9%	11%	14%	13%	12%	16%	10%	4%	0%
No, I don't think it is or ever can be a sustainable industry	5%	6%	1%	10%	7%	4%	4%	5%	0%	4%	8%	4%	5%	7%	8%	0%
Not sure	9%	18%	17%	19%	15%	16%	11%	6%	0%	15%	13%	11%	11%	18%	17%	6%

*Note: sample size (n<30). Results indicative only.

We'd like to get your views about the sustainability of some other rural sectors. From what you know, do the rural sectors (listed below) have the necessary practices and policies in place that ensure the future of the industry and the environment is sustainable, while at the same time providing sufficient supply for Australians?

Eggs

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Yes, it is a sustainable industry sector	53%	54%	57%	48%	54%	55%	50%	54%	52%	52%	48%	52%	55%
No, but I am hopeful and confident it can be a sustainable industry	21%	22%	18%	22%	22%	18%	22%	22%	22%	19%	21%	21%	21%
No, but I am hopeful but not confident that it can be a sustainable industry	11%	11%	14%	8%	11%	13%	9%	11%	13%	9%	17%	13%	7%
No, I don't think it is or ever can be a sustainable industry	3%	4%	2%	4%	3%	3%	4%	4%	2%	4%	6%	3%	3%
Not sure	12%	9%	9%	18%	9%	11%	15%	9%	11%	15%	9%	11%	14%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Yes, it is a sustainable industry sector	60%	45%	37%	38%	52%	54%	60%	69%	89%	51%	54%	55%	51%	48%	50%	67%
No, but I am hopeful and confident it can be a sustainable industry	18%	24%	29%	26%	17%	20%	18%	18%	11%	22%	18%	22%	20%	22%	21%	22%
No, but I am hopeful but not confident that it can be a sustainable industry	11%	11%	12%	18%	13%	8%	9%	7%	0%	11%	11%	9%	19%	10%	8%	0%
No, I don't think it is or ever can be a sustainable industry	3%	4%	4%	3%	4%	4%	3%	2%	0%	2%	4%	3%	2%	5%	4%	6%
Not sure	8%	17%	17%	16%	14%	14%	11%	4%	0%	13%	13%	10%	9%	16%	17%	6%

*Note: sample size (n<30). Results indicative only.

We'd like to get your views about the sustainability of some other rural sectors. From what you know, do the rural sectors (listed below) have the necessary practices and policies in place that ensure the future of the industry and the environment is sustainable, while at the same time providing sufficient supply for Australians?

Horticulture (fruit and vegetables)

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Yes, it is a sustainable industry sector	45%	48%	49%	40%	47%	45%	44%	46%	46%	45%	40%	47%	46%
No, but I am hopeful and confident it can be a sustainable industry	28%	29%	26%	29%	31%	27%	27%	31%	28%	26%	31%	26%	28%
No, but I am hopeful but not confident that it can be a sustainable industry	11%	10%	11%	12%	10%	12%	11%	13%	12%	9%	13%	13%	9%
No, I don't think it is or ever can be a sustainable industry	2%	4%	2%	1%	3%	2%	2%	2%	2%	3%	7%	1%	2%
Not sure	13%	9%	11%	18%	9%	13%	15%	8%	13%	17%	8%	13%	15%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Yes, it is a sustainable industry sector	52%	39%	36%	41%	41%	47%	52%	52%	67%	42%	46%	46%	42%	48%	50%	72%
No, but I am hopeful and confident it can be a sustainable industry	26%	30%	22%	29%	28%	29%	26%	30%	22%	29%	30%	29%	26%	21%	25%	17%
No, but I am hopeful but not confident that it can be a sustainable industry	11%	11%	21%	10%	13%	6%	9%	11%	11%	13%	9%	9%	20%	11%	4%	0%
No, I don't think it is or ever can be a sustainable industry	2%	3%	2%	2%	3%	2%	3%	3%	0%	2%	2%	4%	2%	2%	4%	0%
Not sure	9%	17%	19%	18%	16%	15%	10%	4%	0%	14%	13%	11%	10%	18%	17%	11%

*Note: sample size (n<30). Results indicative only.

We'd like to get your views about the sustainability of some other rural sectors. From what you know, do the rural sectors (listed below) have the necessary practices and policies in place that ensure the future of the industry and the environment is sustainable, while at the same time providing sufficient supply for Australians?

Pork

	Total	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
		Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
Yes, it is a sustainable industry sector	40%	41%	42%	39%	42%	41%	39%	39%	42%	40%	40%	40%	41%
No, but I am hopeful and confident it can be a sustainable industry	26%	29%	27%	21%	31%	23%	24%	31%	24%	23%	28%	25%	25%
No, but I am hopeful but not confident that it can be a sustainable industry	11%	11%	13%	10%	13%	12%	10%	12%	14%	9%	15%	14%	8%
No, I don't think it is or ever can be a sustainable industry	5%	7%	2%	7%	4%	4%	7%	5%	5%	6%	7%	5%	5%
Not sure	17%	12%	17%	23%	11%	20%	20%	13%	16%	21%	10%	16%	22%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
Yes, it is a sustainable industry sector	49%	32%	24%	30%	36%	47%	48%	51%	56%	40%	39%	45%	30%	39%	50%	50%
No, but I am hopeful and confident it can be a sustainable industry	24%	28%	31%	24%	24%	26%	23%	27%	33%	27%	25%	26%	23%	24%	17%	28%
No, but I am hopeful but not confident that it can be a sustainable industry	11%	12%	18%	14%	11%	7%	9%	11%	11%	10%	11%	12%	21%	10%	8%	11%
No, I don't think it is or ever can be a sustainable industry	5%	5%	4%	9%	6%	3%	5%	4%	0%	4%	7%	5%	6%	6%	0%	6%
Not sure	11%	24%	24%	23%	23%	17%	15%	7%	0%	19%	18%	11%	20%	22%	25%	6%

*Note: sample size (n<30). Results indicative only.

What do you see to be the biggest issue for the commercial fishing industry today?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	1,002	307	325	370	247	328	427	274	304	424	193	350	459
We are over-fishing the oceans	19%	21%	17%	18%	21%	20%	17%	22%	17%	18%	16%	20%	19%
Asian/foreign fishing boats illegally fishing in Australian waters	9%	10%	9%	9%	10%	8%	10%	11%	8%	9%	7%	10%	10%
Current commercial fishing practices are unsustainable/we need to devise sustainable methods of commercial fishing	8%	9%	8%	8%	11%	8%	7%	10%	9%	6%	10%	7%	8%
The decreasing fish population/running out of fish	6%	6%	6%	5%	5%	6%	6%	5%	6%	6%	6%	5%	6%
Polluted Oceans	5%	7%	4%	5%	6%	5%	5%	6%	5%	5%	3%	5%	7%
Imported fish are taking profits away from the Australian commercial fishing industry	5%	5%	6%	4%	6%	3%	5%	5%	5%	4%	4%	5%	5%
Environmental protection policies are placing too many restrictions on the industry	5%	4%	5%	4%	5%	4%	5%	3%	7%	4%	2%	6%	5%
Illegal fishing/taking undersized fish/exceeding bag limits	4%	5%	4%	4%	5%	3%	5%	5%	4%	4%	8%	4%	3%
By-catch/waste produced by by-catch	4%	4%	5%	4%	4%	3%	5%	4%	3%	5%	4%	4%	4%
It is difficult to balance between a profitable fishing industry and a sustainable fishing industry	4%	2%	5%	4%	4%	2%	4%	5%	3%	3%	1%	5%	4%
The damage caused by netting and trawlers	3%	4%	4%	3%	2%	4%	4%	4%	3%	3%	4%	4%	3%
Fishers who do not care about the environment/only care about profits	3%	3%	3%	3%	2%	4%	3%	5%	1%	3%	2%	2%	4%
Damage to the environment caused by fishing (unspecified)	3%	4%	2%	2%	4%	4%	2%	4%	3%	2%	4%	2%	3%
Losing profit/The overheads of running a commercial fishing business are too high	2%	2%	4%	2%	4%	2%	2%	2%	3%	2%	4%	2%	2%
Diseased or contaminated fish	2%	2%	2%	2%	2%	3%	2%	2%	3%	2%	1%	2%	3%
There is not enough government regulation of the industry/it is too hard to police our waters	2%	2%	2%	2%	2%	2%	3%	2%	3%	2%	3%	3%	2%
Super trawlers/factory boats	2%	2%	2%	3%	2%	1%	3%	3%	1%	3%	2%	2%	2%
The extinction of various fish species	2%	1%	3%	1%	2%	2%	2%	3%	2%	1%	2%	2%	2%
There is too much market demand/people eat too much fish for the industry to be sustainable	2%	2%	2%	2%	0%	3%	2%	1%	2%	2%	2%	2%	2%

What do you see to be the biggest issue for the commercial fishing industry today?

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
We are over-fishing the oceans	19%	19%	19%	19%	19%	20%	20%	17%	44%	14%	18%	20%	23%	26%	21%	11%
Asian/foreign fishing boats illegally fishing in Australian waters	11%	7%	2%	1%	3%	7%	18%	22%	22%	10%	7%	11%	6%	13%	4%	6%
Current commercial fishing practices are unsustainable/we need to devise sustainable methods of commercial fishing	10%	6%	13%	10%	9%	5%	6%	8%	22%	9%	4%	9%	10%	9%	4%	11%
The decreasing fish population/running out of fish	5%	6%	4%	4%	8%	7%	4%	5%	0%	5%	7%	4%	4%	6%	4%	11%
Polluted Oceans	5%	6%	2%	8%	3%	4%	5%	8%	22%	6%	6%	4%	2%	4%	4%	6%
Imported fish are taking profits away from the Australian commercial fishing industry	5%	5%	1%	5%	3%	5%	5%	8%	0%	4%	5%	6%	5%	3%	0%	11%
Environmental protection policies are placing too many restrictions on the industry	6%	3%	1%	2%	2%	5%	3%	12%	0%	5%	4%	5%	4%	4%	4%	6%
Illegal fishing/taking undersized fish/exceeding bag limits	5%	3%	3%	2%	5%	5%	5%	5%	22%	5%	3%	5%	5%	2%	0%	0%
By-catch/waste produced by by-catch	4%	4%	1%	5%	3%	3%	7%	5%	11%	4%	3%	6%	1%	5%	4%	6%
It is difficult to balance between a profitable fishing industry and a sustainable fishing industry	3%	4%	3%	4%	3%	5%	5%	2%	0%	4%	5%	4%	1%	2%	0%	0%
The damage caused by netting and trawlers	4%	2%	1%	3%	2%	4%	5%	5%	0%	4%	3%	3%	1%	5%	0%	6%
Fishers who do not care about the environment/only care about profits	2%	4%	3%	4%	2%	2%	3%	4%	11%	3%	5%	2%	2%	2%	0%	0%
Damage to the environment caused by fishing (unspecified)	2%	4%	5%	5%	4%	3%	1%	0%	0%	2%	3%	5%	2%	3%	0%	0%
Losing profit/The overheads of running a commercial fishing business are too high	4%	1%	1%	4%	4%	3%	1%	2%	0%	3%	3%	3%	1%	1%	0%	0%
Diseased or contaminated fish	2%	2%	1%	2%	2%	4%	1%	2%	11%	2%	2%	4%	1%	0%	0%	0%
There is not enough government regulation of the industry/it is too hard to police our waters	3%	2%	0%	1%	3%	2%	3%	3%	11%	2%	1%	2%	4%	4%	0%	0%
Super trawlers/factory boats	3%	1%	0%	1%	0%	3%	4%	4%	11%	2%	1%	1%	5%	1%	13%	6%
The extinction of various fish species	2%	2%	4%	3%	1%	2%	2%	1%	0%	3%	2%	1%	2%	2%	0%	0%
There is too much market demand/people eat too much fish for the industry to be sustainable	2%	2%	4%	2%	2%	2%	0%	1%	0%	2%	3%	1%	2%	2%	0%	6%

*Note: sample size (n<30). Results indicative only.

And what sort of responsibility does each of these have?

Everyone who fishes – commercial operators and recreational fishermen

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	601	180	213	208	158	189	254	159	186	256	108	230	263
Least Responsibility	2%	1%	3%	0%	2%	3%	1%	2%	3%	1%	2%	2%	2%
Equal responsibility	47%	40%	51%	49%	39%	51%	49%	43%	46%	50%	36%	50%	48%
Most responsibility	51%	59%	46%	50%	59%	47%	50%	55%	52%	49%	62%	48%	50%

	Gender		Age bracket							State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	325	276	57	97	99	108	94	146	5*	183	150	132	44	65	11*	11*
Least Responsibility	2%	2%	4%	2%	1%	3%	0%	1%	0%	1%	3%	3%	0%	0%	9%	0%
Equal responsibility	51%	42%	53%	46%	42%	51%	41%	49%	60%	42%	49%	49%	48%	49%	45%	55%
Most responsibility	47%	57%	44%	52%	57%	46%	59%	50%	40%	57%	49%	48%	52%	51%	45%	45%

State and Federal Governments

	Consumption of fresh fish/seafood				Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing		
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	492	142	182	168	119	162	211	137	144	211	71	190	231
Least Responsibility	1%	3%	0%	1%	2%	1%	0%	1%	1%	1%	3%	1%	1%
Equal responsibility	41%	42%	42%	41%	34%	44%	43%	34%	42%	46%	38%	41%	43%
Most responsibility	58%	56%	58%	58%	64%	54%	56%	65%	58%	53%	59%	58%	56%

	Gender		Age bracket							State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	270	222	46	76	81	96	76	117	4*	143	130	104	41	52	9*	9*
Least Responsibility	0%	2%	4%	1%	0%	1%	0%	1%	0%	1%	0%	1%	5%	2%	0%	0%
Equal responsibility	43%	40%	35%	46%	37%	42%	45%	42%	25%	43%	42%	38%	46%	42%	22%	44%
Most responsibility	57%	59%	61%	53%	63%	57%	55%	57%	75%	56%	58%	61%	49%	56%	78%	56%

*Note: sample size (n<30). Results indicative only.

And what sort of responsibility does each of these have?

Just the commercial fishing operators

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	381	122	137	122	103	131	147	109	109	163	70	135	176
Least Responsibility	2%	2%	1%	2%	2%	2%	1%	3%	1%	1%	3%	1%	1%
Equal responsibility	50%	48%	49%	52%	49%	47%	53%	42%	49%	55%	43%	55%	48%
Most responsibility	49%	51%	50%	46%	50%	52%	46%	55%	50%	44%	54%	44%	51%

	Gender		Age bracket							State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	208	173	51	68	61	78	45	78	4*	127	95	79	26	36	7*	7*
Least Responsibility	1%	2%	4%	1%	2%	0%	2%	1%	0%	2%	1%	3%	0%	3%	0%	0%
Equal responsibility	49%	51%	49%	57%	49%	46%	47%	49%	75%	50%	43%	54%	54%	50%	71%	14%
Most responsibility	50%	47%	47%	41%	49%	54%	51%	50%	25%	48%	56%	43%	46%	47%	29%	86%

The whole community

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	381	119	127	135	94	123	164	117	107	157	64	151	166
Least Responsibility	9%	9%	10%	7%	11%	8%	9%	11%	7%	9%	11%	8%	9%
Equal responsibility	52%	50%	57%	48%	39%	54%	57%	45%	50%	58%	55%	55%	48%
Most responsibility	39%	41%	32%	44%	50%	37%	35%	44%	44%	33%	34%	37%	43%

	Gender		Age bracket							State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	197	184	41	70	49	68	65	88	4*	119	87	84	30	42	10*	5*
Least Responsibility	9%	9%	7%	7%	8%	9%	11%	10%	0%	8%	8%	8%	10%	12%	20%	0%
Equal responsibility	51%	52%	46%	54%	59%	59%	52%	42%	75%	50%	52%	51%	73%	52%	20%	0%
Most responsibility	40%	39%	46%	39%	33%	32%	37%	48%	25%	41%	40%	40%	17%	36%	60%	100%

*Note: sample size (n<30). Results indicative only.

Which of the following best describes your interest in and awareness of the fishing industry in Australia?

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
<i>Base</i>	1,002	307	325	370	247	328	427	274	304	424	193	350	459
I'm really interested and aware	10%	18%	7%	6%	19%	7%	7%	18%	10%	4%	24%	9%	4%
I have some interest in it	38%	47%	43%	25%	48%	43%	28%	46%	43%	28%	54%	45%	25%
I have only a passing interest in this	38%	30%	38%	45%	26%	39%	45%	29%	38%	45%	19%	40%	45%
I have absolutely no interest in this	14%	5%	12%	24%	6%	12%	20%	6%	10%	22%	3%	5%	26%

	Gender		Age bracket							State						
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
<i>Base</i>	502	500	113	176	181	174	151	207	9*	318	246	201	81	105	24*	18*
I'm really interested and aware	12%	7%	5%	11%	10%	9%	13%	10%	22%	10%	9%	13%	5%	10%	0%	17%
I have some interest in it	37%	38%	46%	36%	31%	33%	38%	43%	22%	36%	33%	41%	47%	42%	38%	33%
I have only a passing interest in this	40%	37%	34%	31%	40%	43%	40%	41%	56%	40%	42%	34%	32%	35%	38%	39%
I have absolutely no interest in this	11%	18%	15%	21%	19%	16%	9%	7%	0%	14%	15%	12%	16%	13%	25%	11%

*Note: sample size (n<30). Results indicative only.

And what sort of responsibility does each of these have?

Just the recreational fishermen

	Consumption of fresh fish/seafood			Consumption of frozen fish/seafood			Consumption of canned fish/seafood			Go Fishing			
	Total	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional/ non eaters	Frequent	Regular	Occasional
Base	297	89	110	98	79	99	119	76	92	129	63	104	130
Least Responsibility	17%	11%	21%	17%	8%	23%	18%	12%	11%	24%	6%	14%	24%
Equal responsibility	66%	70%	63%	66%	71%	60%	68%	64%	66%	67%	59%	73%	64%
Most responsibility	17%	19%	16%	16%	22%	17%	14%	24%	23%	9%	35%	13%	12%

	Gender		Age bracket						State							
	Male	Female	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	NT	NSW	VIC	QLD	SA	WA	TAS	ACT
Base	162	135	44	57	50	56	33	57	2*	96	71	60	23	34	6*	5*
Least Responsibility	19%	15%	18%	16%	16%	20%	18%	14%	0%	17%	17%	20%	9%	15%	33%	20%
Equal responsibility	62%	71%	50%	72%	64%	66%	70%	72%	100%	63%	62%	70%	74%	71%	50%	80%
Most responsibility	20%	14%	32%	12%	20%	14%	12%	14%	0%	21%	21%	10%	17%	15%	17%	0%

*Note: sample size (n<30). Results indicative only.

technical notes and research design

Reliability of the Estimates

The estimates in this report are based on information obtained from a sample survey. Any data collection may encounter factors, known as non-sampling error, which can impact on the reliability of the resulting statistics. In addition, the reliability of estimates based on sample surveys are also subject to sampling variability. That is, the estimates may differ from those that would have been produced had all persons in the population been included in the survey.

Non-sampling error

Non-sampling error may occur in any collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or recording of answers by interviewers and errors in coding and processing data. Every effort is made to reduce non-sampling error by careful design of survey questionnaires and quality control procedures at all stages of data processing.

Sampling error

One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of persons was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all persons had been surveyed, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

Calculation of Confidence Interval

If 50% of all the people in a population of 20,000 people drink coffee in the morning, and if you were repeat the survey of 377 people ("Did you drink coffee this morning?") many times, then 95% of the time, your survey would find that between 45% and 55% of the people in your sample answered "Yes".

The remaining 5% of the time, or for 1 in 20 survey questions, you would expect the survey response to more than the margin of error away from the true answer.

When you survey a sample of the population, you don't know that you've found the correct answer, but you do know that there's a 95% chance that you're within the margin of error of the correct answer.

In terms of the numbers selected above, the margin of error *MoE* is given by:

$$MoE = z * \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}}$$

where *n* is the sample size, *p*' is the fraction of responses that you are interested in, and *z* is the [critical value](#) for the 95% confidence level (in this case, 1.96).

This calculation is based on the [Normal distribution](#), and assumes you have more than about 30 samples.

Margin of Error for a given sample size and survey estimate.		Sample Size										
		30	50	75	100	150	200	300	500	1,000	1,500	2,000
Survey Estimate	10%	n/a	n/a	n/a	± 5.88%	± 4.80%	± 4.16%	± 3.39%	± 2.63%	± 1.86%	± 1.52%	± 1.31%
	20%	n/a	± 11.09%	± 9.05%	± 7.84%	± 6.40%	± 5.54%	± 4.53%	± 3.51%	± 2.48%	± 2.02%	± 1.75%
	30%	n/a	± 12.70%	± 10.37%	± 8.98%	± 7.33%	± 6.35%	± 5.19%	± 4.02%	± 2.84%	± 2.32%	± 2.01%
	40%	± 17.53%	± 13.58%	± 11.09%	± 9.60%	± 7.84%	± 6.79%	± 5.54%	± 4.29%	± 3.04%	± 2.48%	± 2.15%
	50%	± 17.89%	± 13.86%	± 11.32%	± 9.80%	± 8.00%	± 6.93%	± 5.66%	± 4.38%	± 3.10%	± 2.53%	± 2.19%
	60%	± 17.53%	± 13.58%	± 11.09%	± 9.60%	± 7.84%	± 6.79%	± 5.54%	± 4.29%	± 3.04%	± 2.48%	± 2.15%
	70%	n/a	± 12.70%	± 10.37%	± 8.98%	± 7.33%	± 6.35%	± 5.19%	± 4.02%	± 2.84%	± 2.32%	± 2.01%
	80%	n/a	± 11.09%	± 9.05%	± 7.84%	± 6.40%	± 5.54%	± 4.53%	± 3.51%	± 2.48%	± 2.02%	± 1.75%
	90%	n/a	n/a	n/a	± 5.88%	± 4.80%	± 4.16%	± 3.39%	± 2.63%	± 1.86%	± 1.52%	± 1.31%

Note. Margin of Errors are provided at the 95% confidence level on the assumption of a large population size (non-finite) and normally distributed. Results labelled "n/a" are due to the assumption of the normal distribution not being upheld ($np < 10$ or $n(1-p) < 10$).

Objective

In the context of the ongoing effort directed at ensuring the broader Australian community is informed about and engaged with the Australian fishing industry's progress in achieving environmental sustainability, the level of awareness and engagement stands as an important indication of success. This research aimed to gauge the community's perceptions about the achievements and ongoing investment the industry is making into achieving long term sustainability.

Methodology

An online survey was distributed via an accredited online research panel of respondents over the age of 18 years.

Sample

In total, n = 1,002 surveys were completed by participants. Respondent demographics from the survey were representative of ABS population estimates across age, gender and location to ensure the final results appropriately reflected the current size and structure of the Australian population.

Questionnaire

Participants were asked to complete a 10 min online survey which covered a range of topics relating to their awareness and their thoughts about the Australian fishing industry. These included, but were not limited to:

- Whether the industry is sustainable;
- How the fishing industry benchmarks against other countries and industries; and
- Knowledge and awareness of the efforts being made.

Timing

The online survey was launched on the 8th June 2017 and remained open until the 15th June 2017.

Definitions

Eat fresh fish or seafood; Eat frozen fish or seafood; Eat tinned fish or seafood;

Frequent eaters is defined as those who eat the specified fish or seafood at least once a week.

Regular eaters includes those who eat the specified fish or seafood once a fortnight or once a month.

Occasional / non eaters includes those who eat the specified fish or seafood less frequently or do not eat it at all.

Fishers

Frequent fishers is defined as those who go fishing at least six times a year (after every 2 months).

Regular fishers includes those who go fishing either one, two, three or four times a year.

Occasional fishers includes those who go fishing less often and those who never go fishing.

want more information?

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Community Perceptions of the Sustainability of the Australian Fishing Industry



May 2018

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About the Research

background

Sustainability remains an ongoing challenge and key area of focus for the Australian fishing industry. All sectors, including both industry and Government, continue to invest time and resources into improving the sustainability of the industry. In parallel, efforts are directed at ensuring the broader Australian community is informed about and engaged with industry's progress (in regards to achieving sustainability). The level of awareness and engagement remains one important 'marker' of success for the industry.

To this end, FRDC has conducted a biannual sustainability omnibus (in its current form) since 2011 to gauge the community's perceptions about the achievements and ongoing investment the industry is making into achieving long term sustainability. While there have been some slight changes over this time (including a shift to an annual study for 2018), the core design and metrics have remained unchanged. This has provided continuity in the information available through the program as well as trend information across a number of key metrics.

With that as context, we move to provide an overview of the 2018 design – the fifth piece of research since 2011 covering perceptions of sustainability of the Australian fishing industry.

research objectives

The aim of the research was to track a range of measures including, among others:

- Whether the industry is sustainable;
- How the fishing industry benchmarks against other countries and industries; and
- Knowledge and awareness of the efforts being made.

The quantitative research involved an online survey of a nationally representative sample of randomly selected adult Australians (aged 18 years and over). The survey took approximately 10 minutes to complete.

In total, n = 1,508 surveys were completed over the period to provide robust measures of community perceptions. The research was conducted over the period 4th April to 12th April 2018.

Respondent demographics from the survey were representative of ABS population estimates across age, gender and location to ensure the final results appropriately reflected the current size and structure of the Australian population.

The key findings from the research now follow.

Management Summary

community perceptions about the sustainability of the industry have softened

For the purposes of this research, sustainability was defined as “the industry having the necessary practices and policies in place that ensure the future of fish species and the marine environment, while at the same time providing sufficient supply of fish for commercial and recreational fishing needs”.

The results from the 2018 research show that:

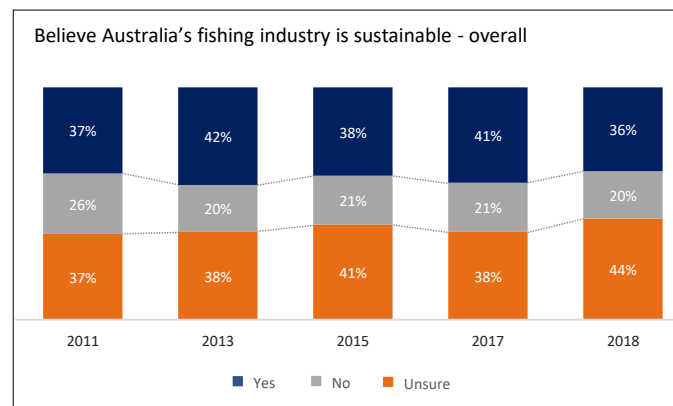
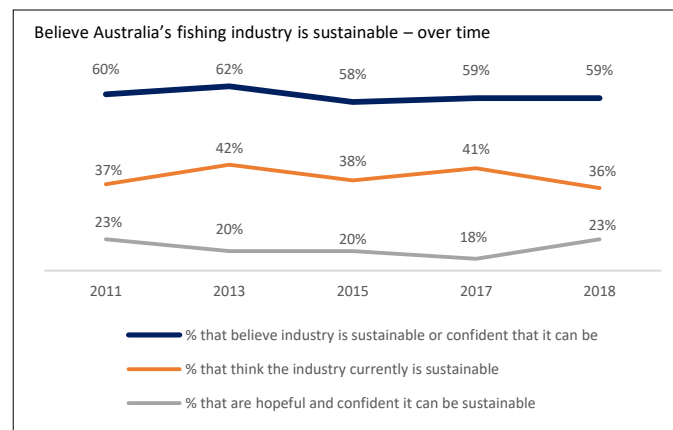
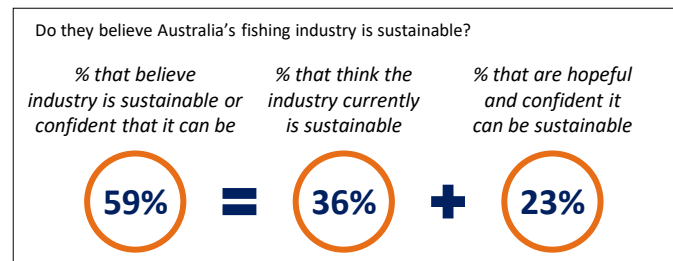
- 59% of all Australians believe that the industry (as a whole) is sustainable or are confident the industry can be sustainable; this result has remained largely unchanged over the past several years.
- 36% believe it is sustainable now; this result is down (-5%) on the 2017 result with the change now reflected in an increase in the proportion of the community who are confident the industry can be sustainable (23%, up 5%). The results are indicating a softening in the conviction about whether the industry is now sustainable.

What remains clear is that:

- There is a consistent cohort (around one in five people) who hold a view that the industry is not sustainable. This result has remained largely unchanged over the past seven years. It would appear that this group may be difficult to shift in their views.
- There is a high level of uncertainty about the sustainability of the industry today (44% unsure). Whilst this cohort report they are unsure about sustainability, they have mixed views about whether the industry can become sustainable. Very few rule out the industry becoming sustainable, with most split around their confidence as to whether the industry can achieve sustainability.

As we understand it, the industry continues to focus on building its credentials in the area of sustainability. The results suggest this focus and investment requires a continuous and ongoing effort as the community view is influenced by a range of factors, some in the control and influence of industry, while others not.

The rate of change in acceptance across the Australian community reflects the size of this challenge, both to sustain this current level and further improve community perceptions. Given these results, a different approach to influencing community perceptions may be warranted. One more targeted and perhaps narrow approach is discussed shortly.



What we've learnt from this research. . . .

females continue to be less convinced about the sustainability of the industry

The results again in 2018 suggest that females are:

- o less likely than males to believe the industry is sustainable; and
- o more critical across most other measures in the research.

As shown opposite, while perception of the sustainability of the Australian fishing industry have declined for both males and females, the 'gap' between genders remains. The results continue to underscore the need to invest in communicating and engaging with female audiences across the community. This may require a different strategy, approach, language or proposition to better engage them. Further research and exploration into this area is warranted.

the commercial wild catch sector has been identified as a key influencer of overall sustainability

Over the past several surveys, the analysis has pinpointed the strong correlation between community views about the commercial sector and their views about the sustainability of the fishing industry overall. From the results, this year we note that:

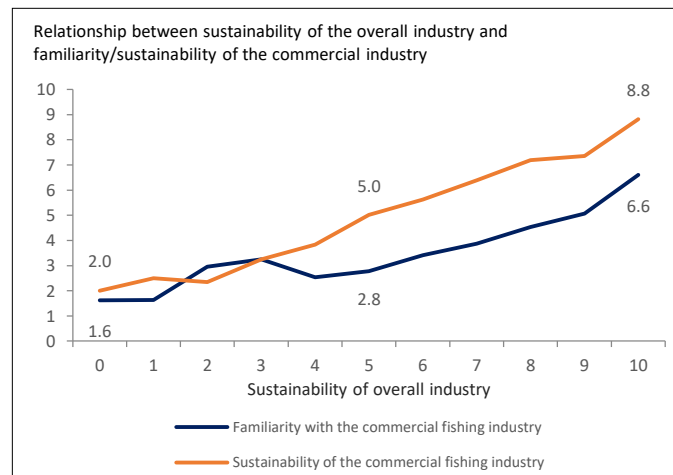
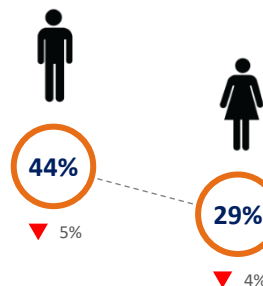
- o the community is unfamiliar with the commercial sector. 73% of people rated their familiarity at less than 6.
- o there is a clear correlation between familiarity with the commercial sector and perceptions of sustainability of the industry overall. The more familiar people are, the more likely they are to think the industry overall is sustainable.

The challenge in driving overall community perceptions of sustainability will then likely reside in the industry's ability to build a stronger awareness of and engagement with the commercial sector, or to fundamentally shift the discussion to diffuse the strong influence this relationship has on community perceptions.

an immovable 1 in 5?

The research program has, over the past several years, reported a group within the community who do not believe the industry is or could achieve sustainability. This group represents about 1 in 5 of the community and is over represented by non-fishers and non-seafood consumers.

It is likely, given the relative stability of this group, that shifting their views and perceptions will be a hugely difficult challenge. While this does not remove the necessity or ambition to change perceptions, they are a group where achieving change will be challenging, problematic and long term.



The key issues people see impacting on sustainability of the wild catch sector
<i>Theme 1: Overfishing of populations, short term gain for long term loss</i>
<i>Theme 2: Overseas businesses flooding the market with cheap imports and disregarding sustainability of our fish populations</i>
<i>Theme 3: Environmental protection, climate change and it's impact on the marine environment and ecosystems</i>

MANAGEMENT SUMMARY

the more engaged or connected with the fishing industry, the more likely people will believe the industry is or could become sustainable

In previous studies, it was evident that those people who were more 'engaged' with the industry were more likely to hold the view that the industry is or could become sustainable. This result is again evident this time.

Further analysis of the 2018 data was undertaken and has identified three segments:

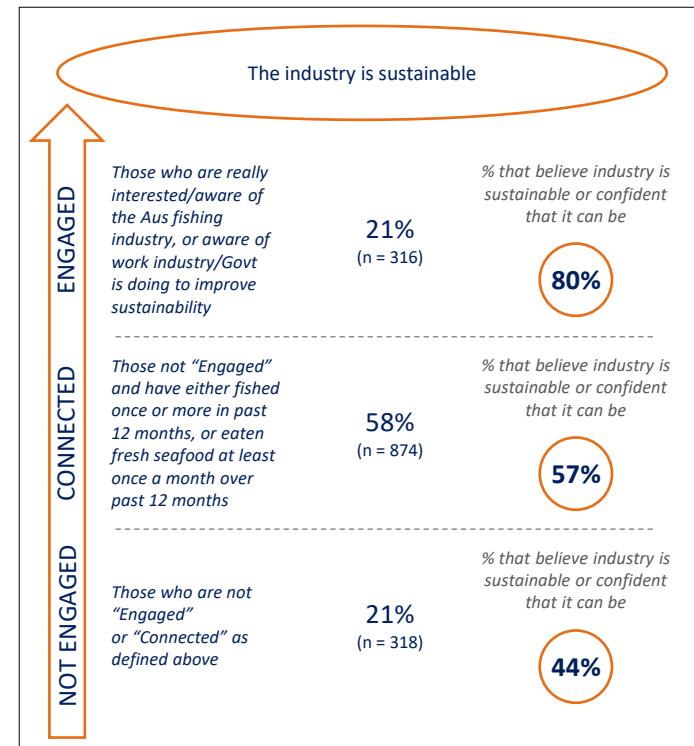
- the **engaged** segment (or those who are interested, familiar with and aware of things that are occurring within and across the industry);
- the **connected** segment (regular rec fishers and/or regular fresh seafood consumers); and
- the **not engaged** segment (those not in either of the other two segments).

The results clearly indicate different perceptions across these three segments.

As discussed previously, a broadcast community-wide effort to change perceptions will require a significant resource and time investment, and require an ongoing continuous effort over the long term. The results (the level and change over time) of community perceptions on the industry's sustainability exhibits the significant challenge.

The segments perhaps offer a different perspective and pathway forward with:

- A need to continue and reinforce the success around sustainability across the 'engaged' segment. Given this segment is already engaged with the industry, existing channels and opportunities to communicate and share the successes achieved and future efforts to improve industry sustainability should be sufficient to reach this segment.
- An opportunity to target the 'connected' segment to more directly persuade and influence their perceptions with targeted efforts. This might be done using:
 - Fishing industry publications, websites, social media and blogs to reach and engage with the rec fisher community; and
 - Point of sale focus for the fresh seafood consumers. It is evident that the CoO labelling and sustainable accreditation are the 'obvious' mechanism to engage with consumers. Leveraging these opportunities and other POS opportunities should provide the opportunity to engage directly with seafood consumers.
- A more passive and selective approach to communicating with the 'not engaged' segment. This might include a downstream effect created by the established communications and promotions rather than any specific investment targeted to create a broad and wide change in perceptions.

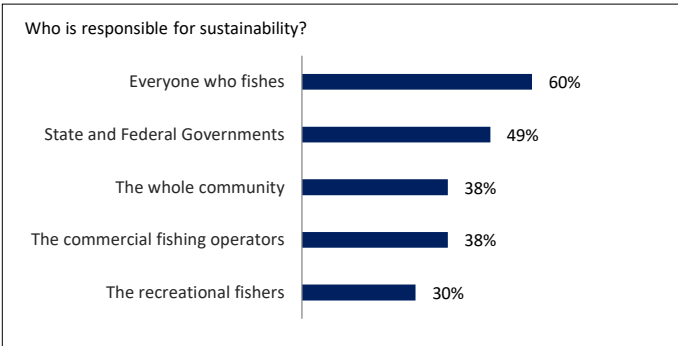


Six additional insights from the research. . . .

1 Australians continue to believe sustainability is a shared responsibility

Within the research, respondents held the view that the responsibility for the sustainability of the Australian fishing industry is shared across all of the community, commercial fishers and the government.

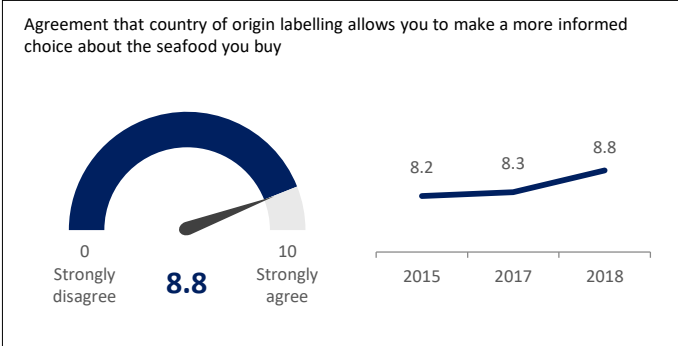
Whilst the responsibility was seen to be shared, governments and commercial fishing operators were considered the custodians. This assignment of responsibility to commercial fishers (among other stakeholders) again reiterates the influencing role they can and do play in shaping people’s views of the sustainability of the industry overall. Any efforts to engage the broader community in a shared responsibility model might help diffuse the current focus on the commercial sector as carrying primary responsibility for this.



2 country of origin labelling empowers customers to make more informed decisions about seafood

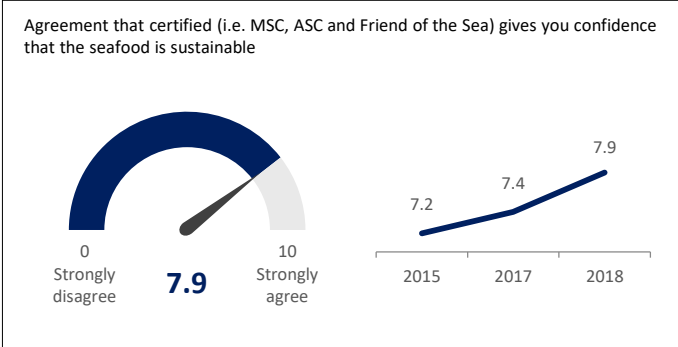
While this result does not relate to any one specific sector or part of the supply chain, the 2018 research confirms the increasing number of the community who believe country of origin labelling (as a general mechanism) is empowering. More than 79% rated their agreement at 8 or above (out of a possible 10) while less than 4% rated their agreement lower than a ‘5’.

The results are now indicating an overwhelming majority of the community see the CoO labelling as one of the important (and perhaps one of the few) signposts in their purchasing decisions. Connecting CoO labelling to the sustainability proposition might be another way of shifting the broader community perceptions.



3 more people are getting on board with certification

Consumer support for certification systems received good support in the most recent research. The majority of consumers agree that certification systems provide confidence that the seafood is sustainable. We also note that this result has improved since the 2017 research (up 0.5). This should provide further encouragement to continue to support certification across the fresh seafood sector. Further reinforcement of this perception together with building and maintaining a strong link between certification and Australian seafood might also help with the ambition of changing community perceptions.



4 the community believe the Australian fishing industry is ahead of other countries

More than two in three people (67%) believe Australia's fishing industry is more sustainable than other countries.

This result is consistent with that reported in previous years and indicates a widespread view that, comparatively, the Australian industry is more sustainable.



5 the concerns of the Australian community vary on some quite specific issues

For the first time in this program of research, questions about the level of concern across a range of issues were measured. These measures were similar to those collected internationally by the Canadian Centre for Food Integrity and also the USA Centre for Food Integrity.

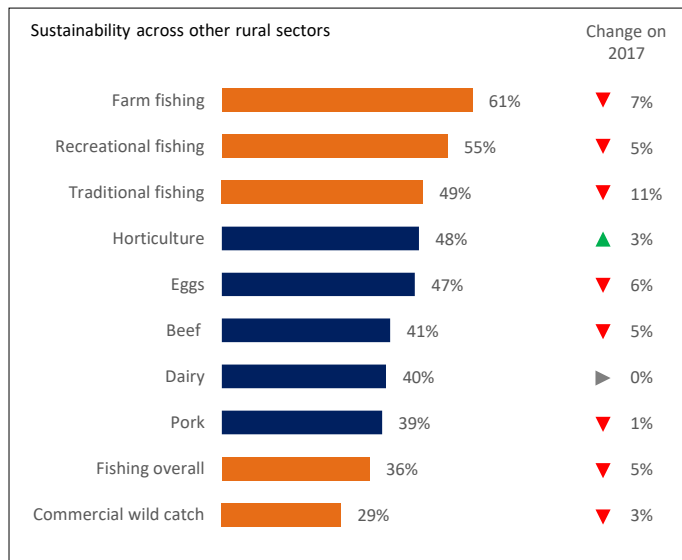
While on a number of measures Australians rate similar levels of concern, it was noteworthy that there is a greater level of concern about the safety of food imported from outside Australia and lower levels of concern about the safety of food produced in Australia.

Concerns about "life issues"	2018 FRDC	2018 USA	2017 Canada	2016 Canada
The safety of food imported from outside of Australia	70%	59%	52%	*
Keeping healthy food affordable	65%	65%	61%	66%
The rising cost of food / affordability of food	61%	63%	62%	69%
Environmental sustainability of food produced in Australia	49%	*	*	*
The safety of food produced in Australia	48%	59%	51%	54%

6 the view of the fishing industry remains behind that of other sectors

Australians continue to hold different views on sustainability across the various rural sectors. In the 2018 research, community views about the sustainability of the different sectors have moved (mostly) downward. That is, fewer people are acknowledging the different sectors as sustainable.

Changes in perceptions of the fishing industry have already been noted but are consistent with this reported in other sectors. It is clear however that the community perceptions of the commercial sector are dampening the overall perceptions of the fishing industry.



This now concludes the management summary for this study.

Detailed Findings

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

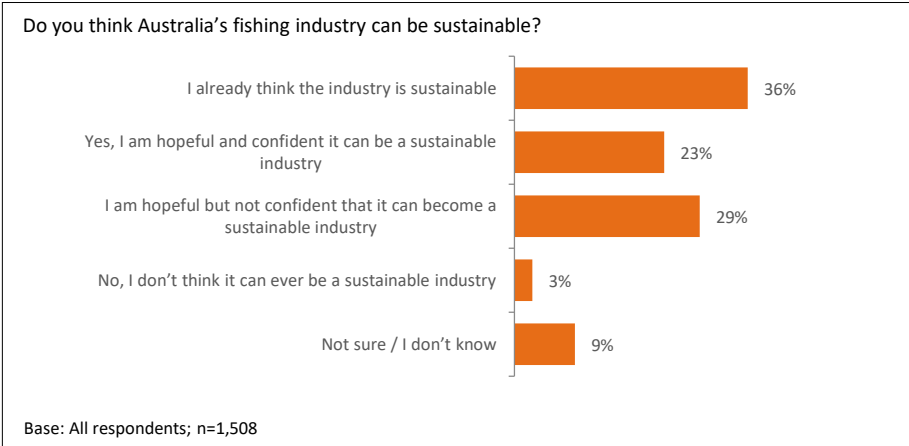
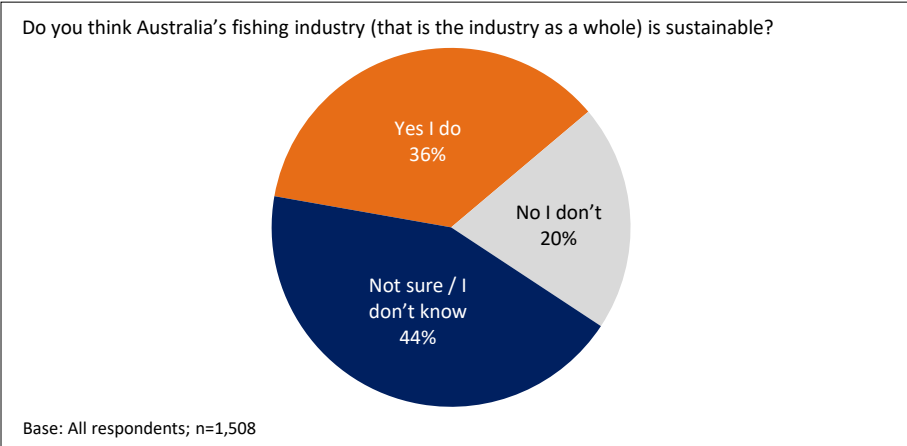
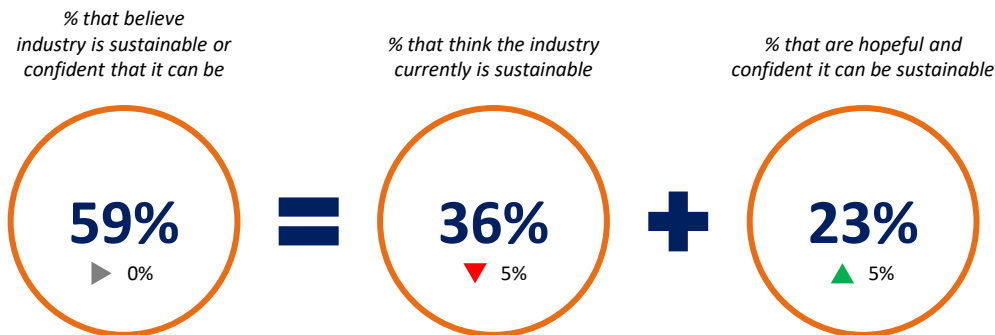
Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

Concern and Trust on Life Issues

Those who believe sustainability is possible



What we asked:

Do you think Australia's fishing industry (that is the industry as a whole) is sustainable? That is, does the industry have the necessary practices and policies in place that ensure the future of fish species and the marine environment, while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?

Do you think Australia's fishing industry can be sustainable?

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

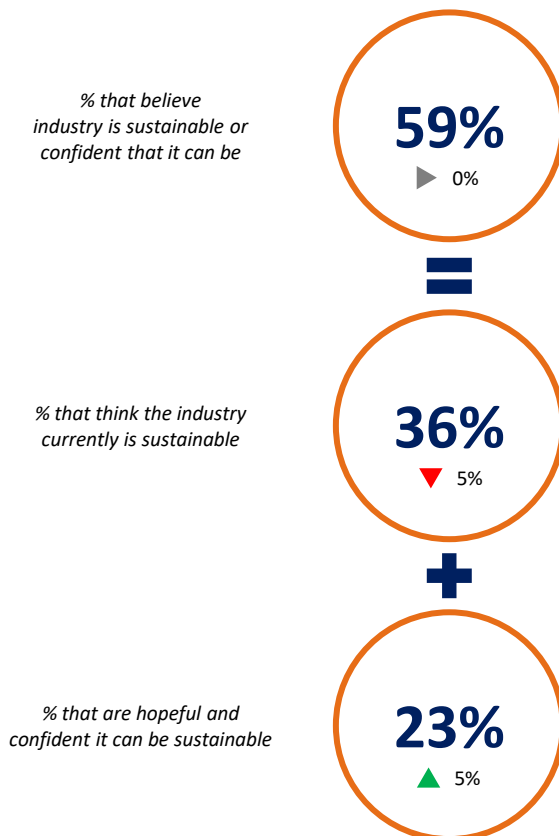
Sustainability of Industry Sectors

Balancing Economics and Sustainability

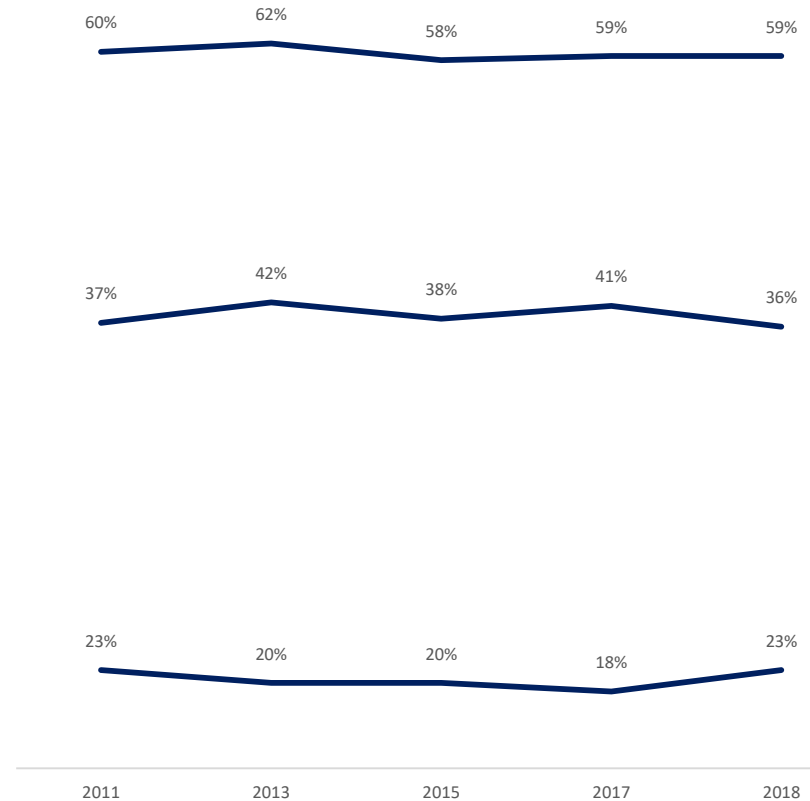
Sustainability of Other Industries

Concern and Trust on Life Issues

Those who believe sustainability is possible



Results over time



What we asked:

Do you think Australia's fishing industry (that is the industry as a whole) is sustainable? That is, does the industry have the necessary practices and policies in place that ensure the future of fish species and the marine environment, while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?
Do you think Australia's fishing industry can be sustainable?

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

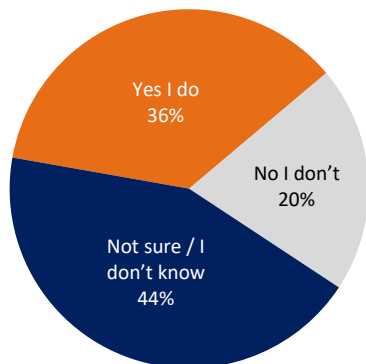
Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

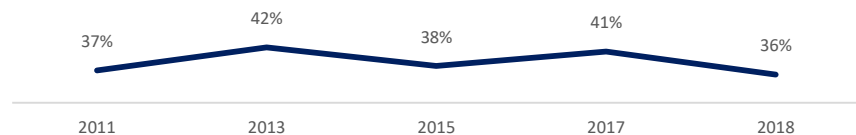
Concern and Trust on Life Issues

Do you think Australia's fishing industry (that is the industry as a whole) is sustainable?

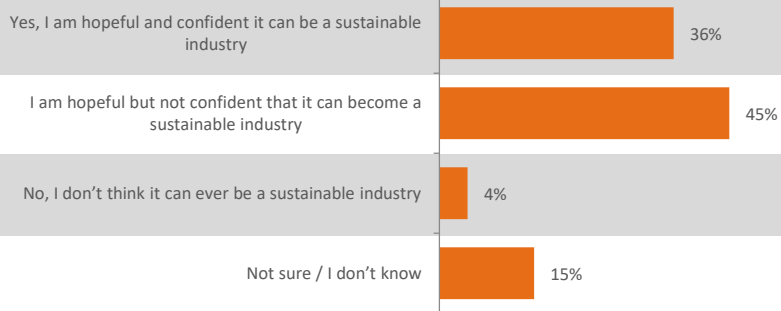


Base: All respondents; n=1,508

Results over time

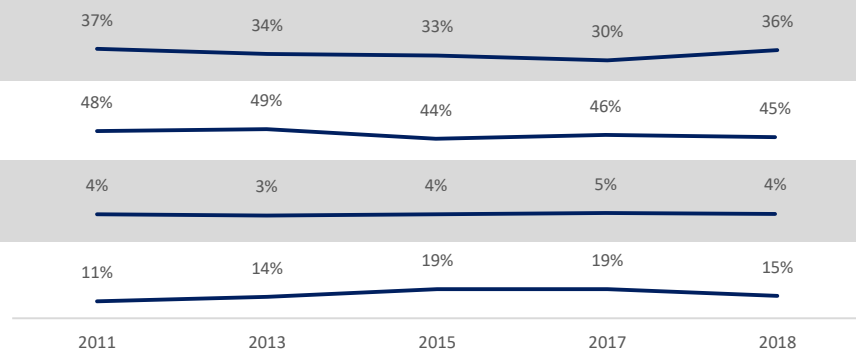


Do you think Australia's fishing industry can be sustainable?



Base: All respondents who do not think or are unsure whether Australia's fishing industry is sustainable; n=964

Results over time



What we asked:

Do you think Australia's fishing industry (that is the industry as a whole) is sustainable? That is, does the industry have the necessary practices and policies in place that ensure the future of fish species and the marine environment, while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?

Do you think Australia's fishing industry can be sustainable?

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

Sustainability of Industry Sectors

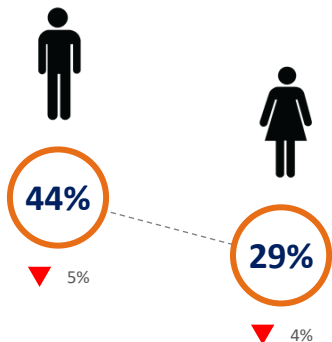
Balancing Economics and Sustainability

Sustainability of Other Industries

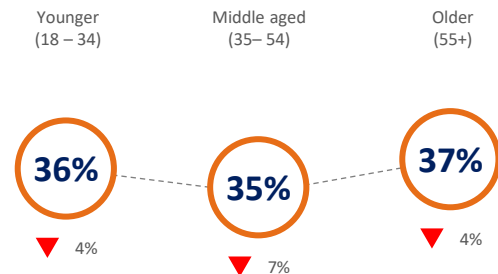
Concern and Trust on Life Issues

Do you think Australia's fishing industry (that is the industry as a whole) is sustainable? A view of different key segments

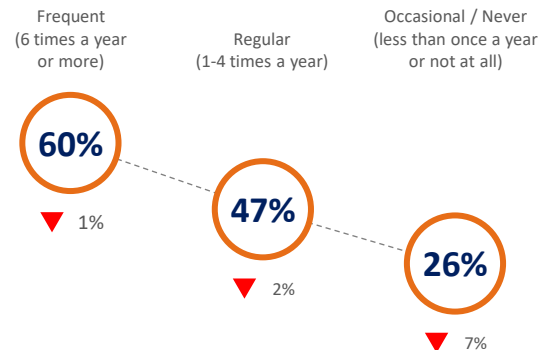
Gender



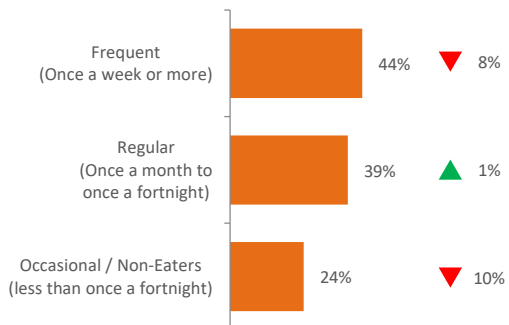
Age



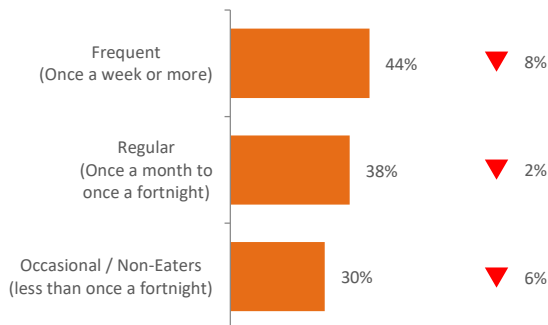
Recreational fishers



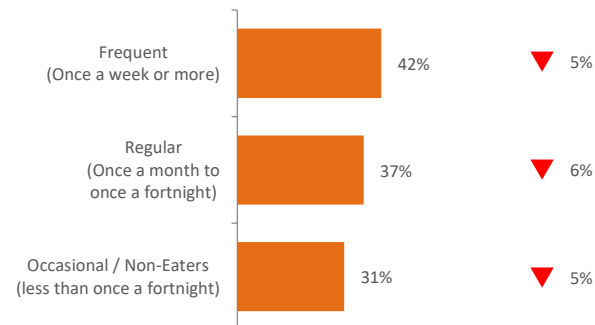
Fresh seafood consumers



Frozen seafood consumers



Tinned seafood consumers



What we asked:

Do you think Australia's fishing industry (that is the industry as a whole) is sustainable? That is, does the industry have the necessary practices and policies in place that ensure the future of fish species and the marine environment, while at the same time providing sufficient supply of fish for commercial and recreational fishing needs?

DETAILED FINDINGS



A look at perceptions of sustainability by engagement with the industry	the “Engaged” segment	the “Connected” segment	the “Not Engaged” segment
Descriptor	<p><i>Respondents who are either:</i></p> <ul style="list-style-type: none"> • Really interest and aware of the fishing industry in Australia; or • Aware of the work the industry or Government is doing to improve sustainability 	<p><i>Respondents who not in the “Engaged” segment and:</i></p> <ul style="list-style-type: none"> • Have fished at least once in the past 12 months; or • Have eaten fresh seafood for a main meal at least once a month over the past 12 months 	<p><i>Respondents who not in either the “Engaged” segment or the “Connected” segment.</i></p>
% of Base	21% (n = 316)	58% (n = 874)	21% (n = 318)
% that believe industry is sustainable or confident that it can be	80%	57%	44%
% that think the industry currently is sustainable	59%	34%	19%
% that are hopeful and confident it can be sustainable	21%	23%	25%

This group is clearly more engaged, expressing a strong interest in the industry and awareness of what industry and Government are doing to improve sustainability.

While not reporting an interest in the industry, this group are by default connected – either because they fish regularly or consume fresh seafood regularly. They have then more regular and frequent touch points with the industry.

This group appears to have little engagement with the industry – they report no interest in the industry, and are not regular fishers or consumers. They are likely to have few direct interactions with seafood or the industry.

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

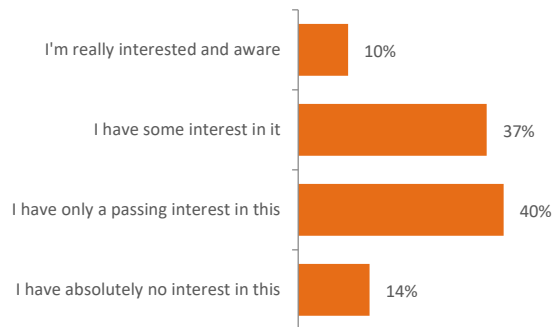
Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

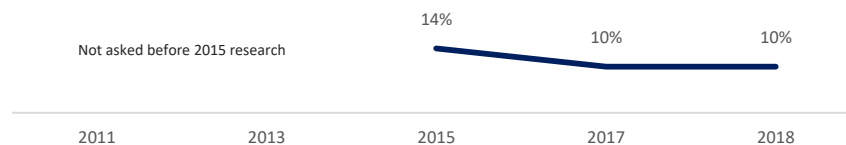
Concern and Trust on Life Issues

Interest in and awareness of the fishing industry in Australia

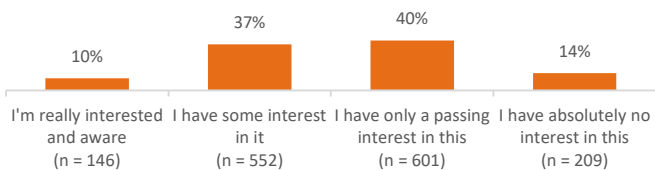


Base: All respondents; n=1,508

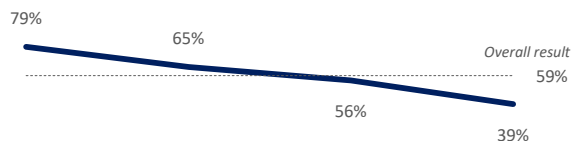
Results over time – those who are really interested and aware



Do these groups vary in their view of whether they believe sustainability is possible?



% that believe industry is sustainable or confident that it can be



What we asked:

Which of the following best describes your interest in and awareness of the fishing industry in Australia?

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

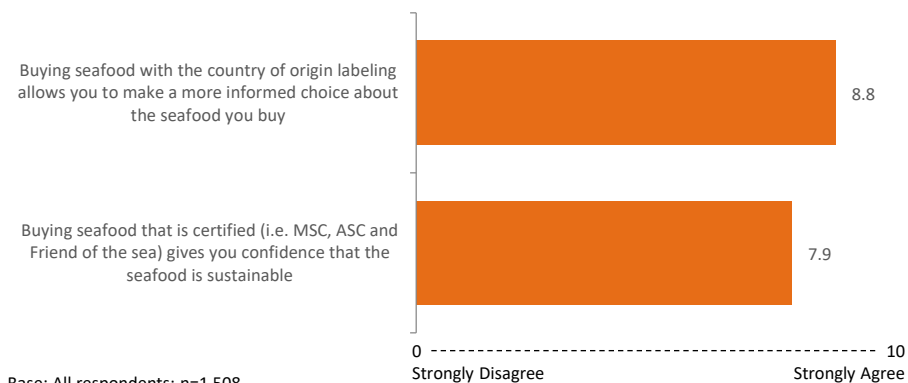
Sustainability of Industry Sectors

Balancing Economics and Sustainability

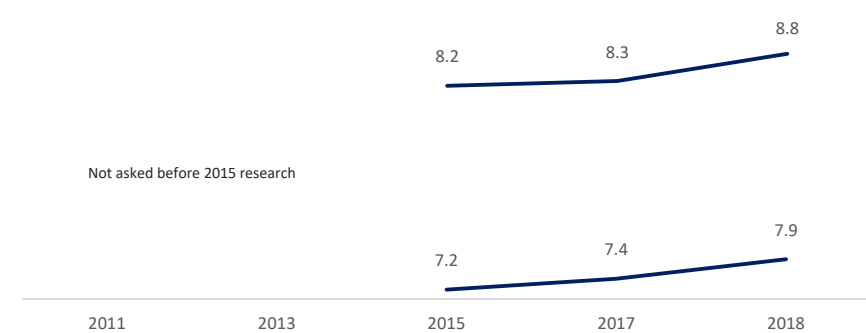
Sustainability of Other Industries

Concern and Trust on Life Issues

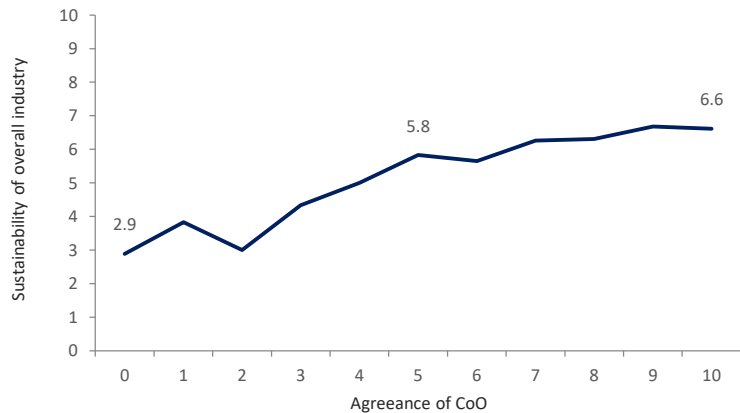
To what extent do you agree or disagree with the following statements:



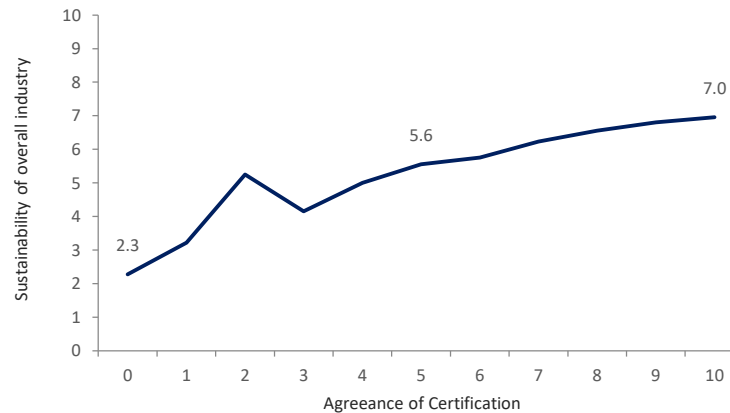
Results over time



Is there a relationship between agreeance of CoO and perceptions of the sustainability of the overall industry?



Is there a relationship between agreeance of certification and perceptions of the sustainability of the overall industry?



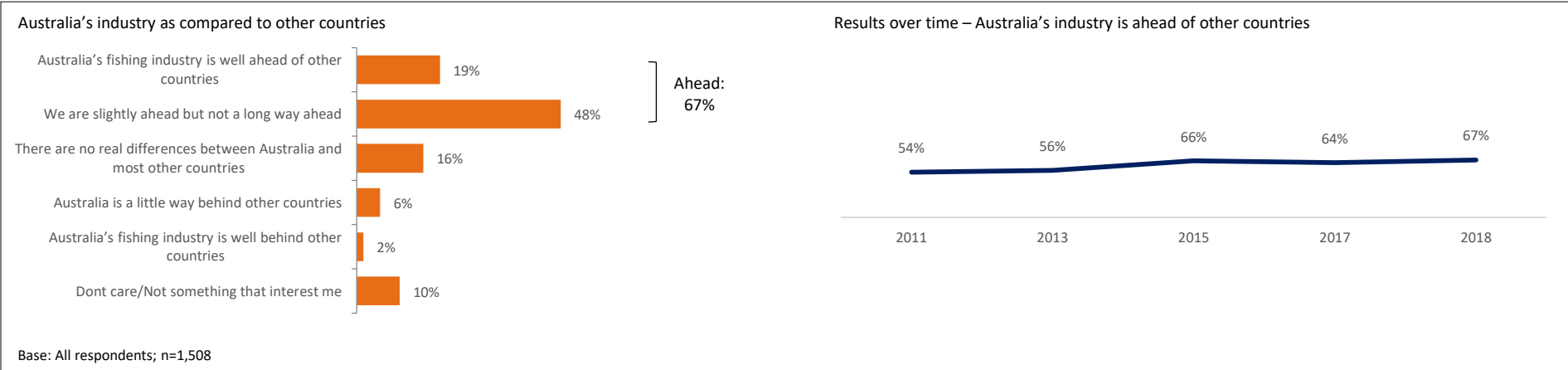
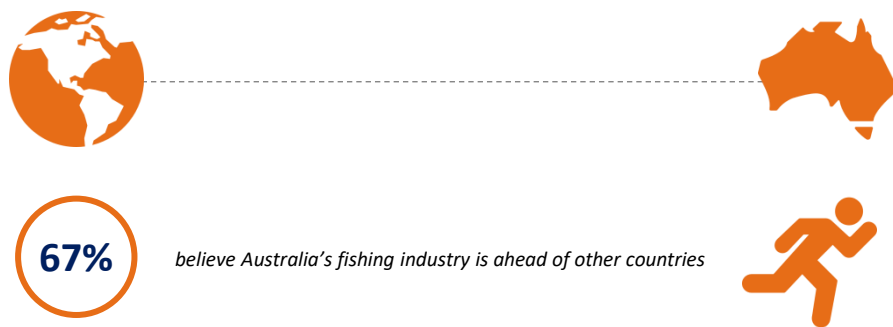
What we asked:

To what extent do you agree or disagree with the following statements:

DETAILED FINDINGS

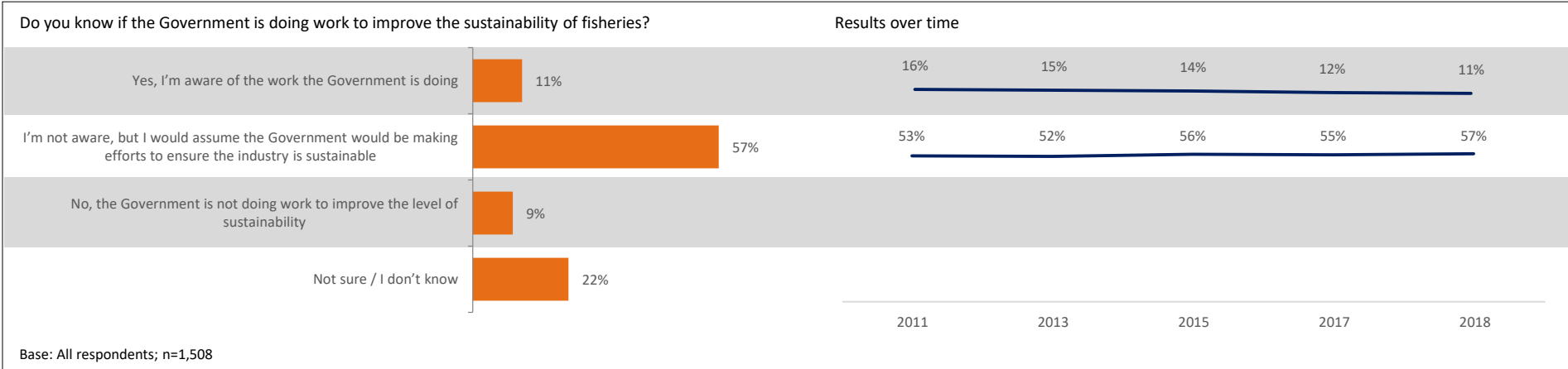
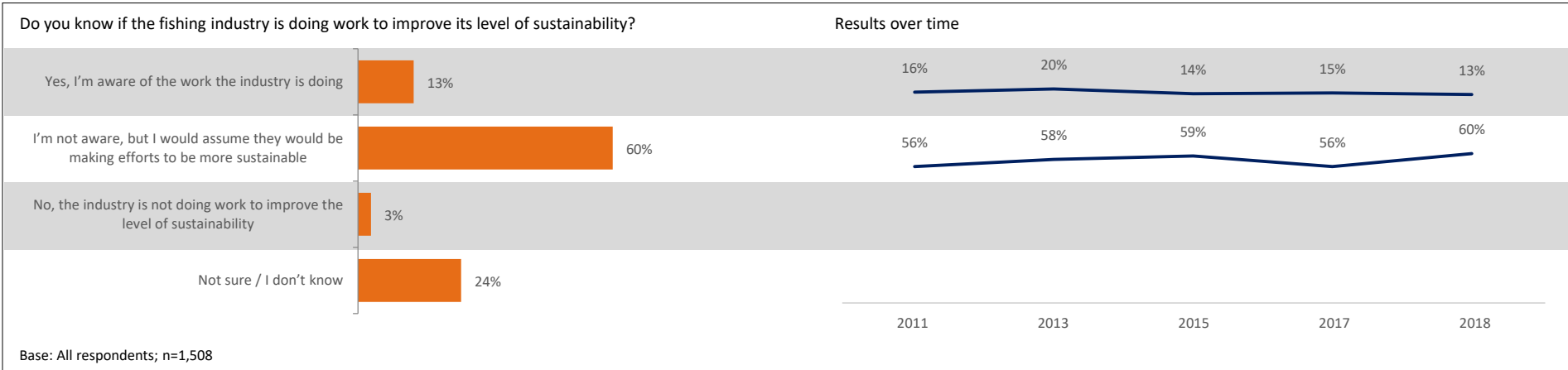
- Sustainability of the Industry
- Awareness and Interest of the Industry**
- Sustainability of Industry Sectors
- Balancing Economics and Sustainability
- Sustainability of Other Industries
- Concern and Trust on Life Issues

Australia's industry as compared to other countries



What we asked:
 Do you think Australia's fishing industry and their practices around sustainability are better, worse, or the same to those used in other countries?

DETAILED FINDINGS



What we asked:
 Do you know if the fishing industry is doing work to improve its level of sustainability?
 Do you know if the Government is doing work to improve the sustainability of fisheries?

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

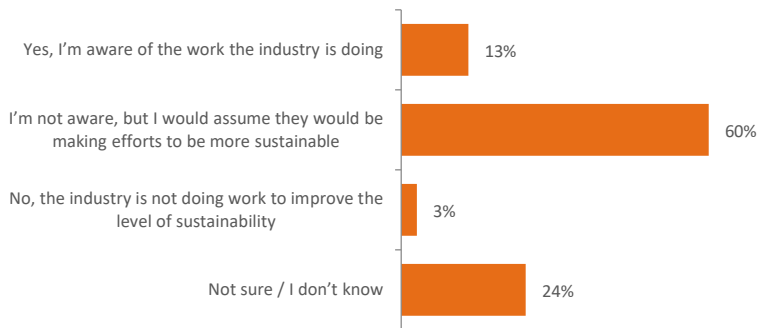
Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

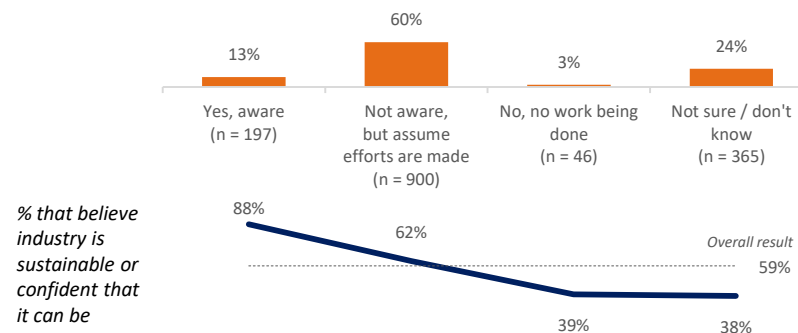
Concern and Trust on Life Issues

Do you know if the fishing industry is doing work to improve its level of sustainability?

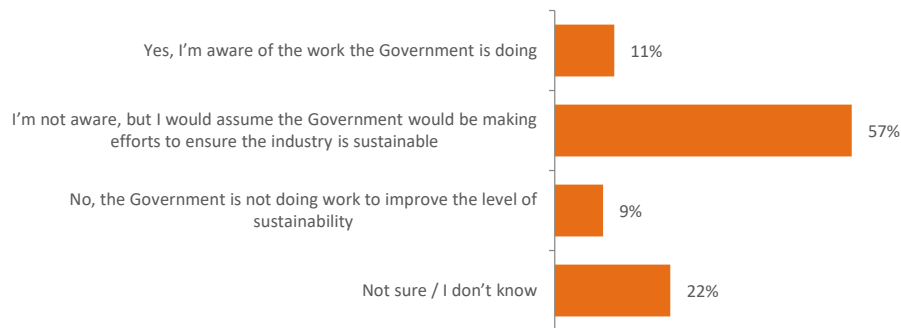


Base: All respondents; n=1,508

Do these groups vary in their view of whether they believe sustainability is possible?

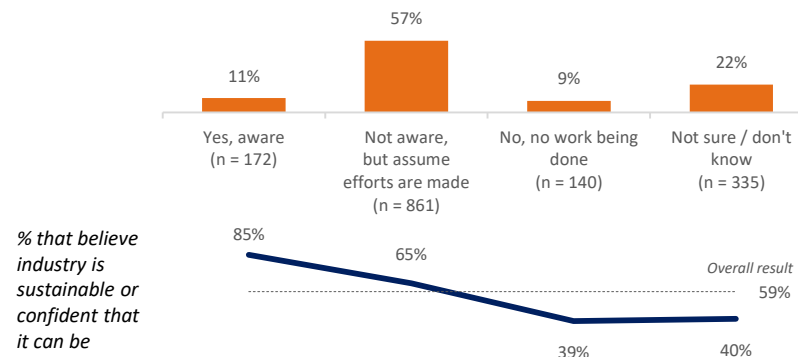


Do you know if the Government is doing work to improve the sustainability of fisheries?



Base: All respondents; n=1,508

Do these groups vary in their view of whether they believe sustainability is possible?



What we asked:

- Do you know if the fishing industry is doing work to improve its level of sustainability?
- Do you know if the Government is doing work to improve the sustainability of fisheries?

DETAILED FINDINGS

Sustainability of the Industry

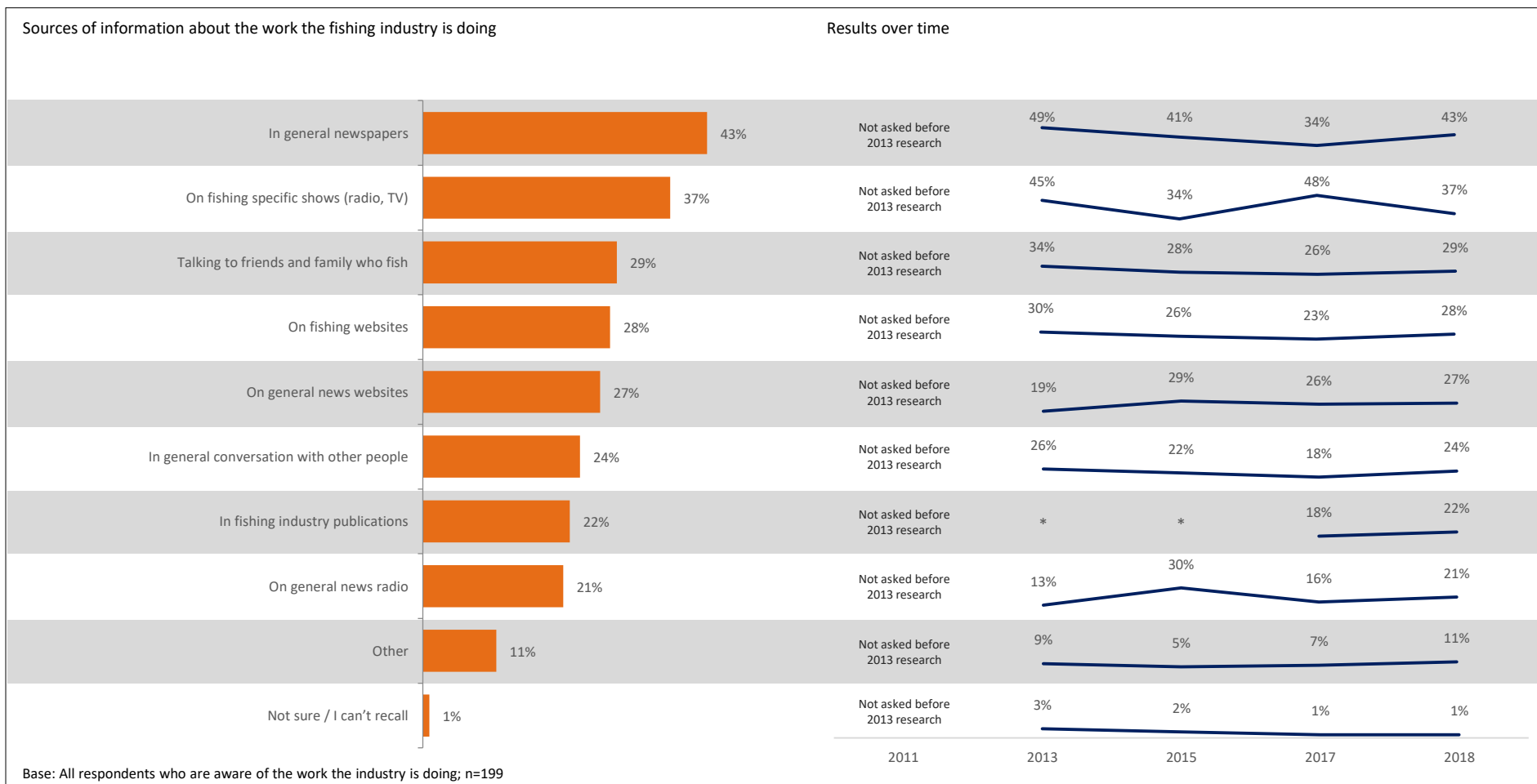
Awareness and Interest of the Industry

Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

Concern and Trust on Life Issues



What we asked:

And where did you hear about the work the fishing industry is doing to improve its level of sustainability

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

Sustainability of Industry Sectors

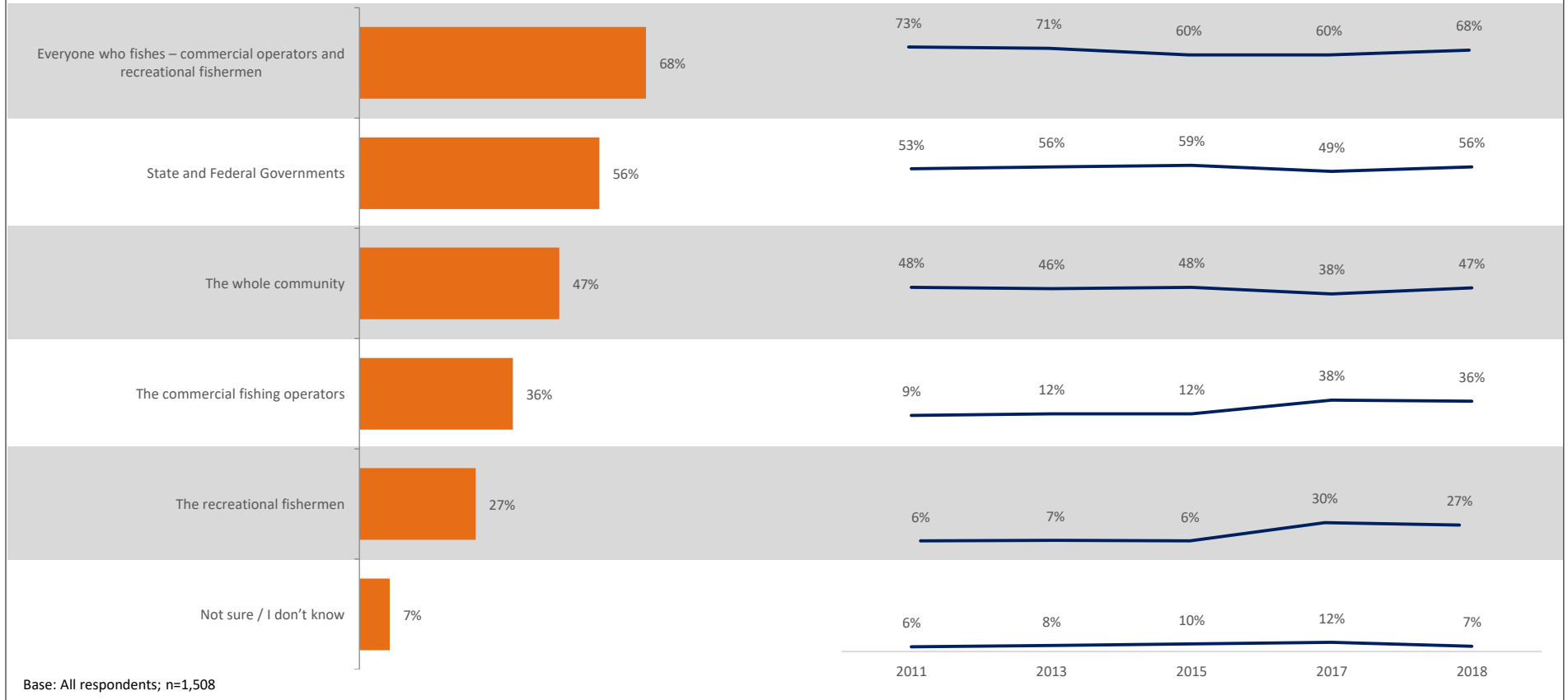
Balancing Economics and Sustainability

Sustainability of Other Industries

Concern and Trust on Life Issues

In your view, who is responsible for the sustainability of Australia's fisheries?

Results over time



What we asked:

In your view, who is responsible for the sustainability of Australia's fisheries?

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

Concern and Trust on Life Issues



What we asked:

And what sort of responsibility does each of these have?

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

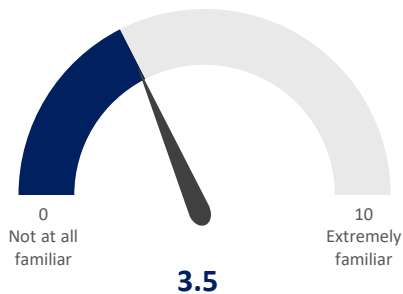
Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

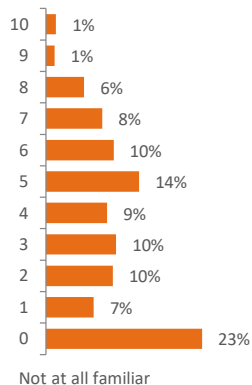
Concern and Trust on Life Issues

Familiarity with the Australian commercial fishing industry

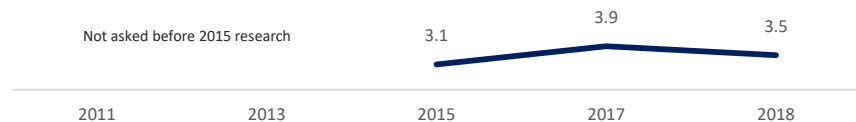


Base: All respondents; n=1,508

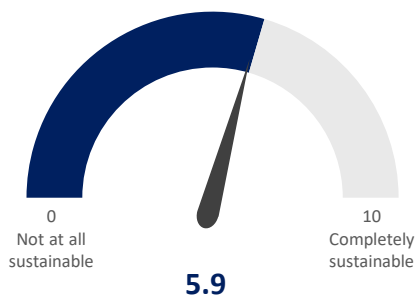
Extremely familiar



Results over time

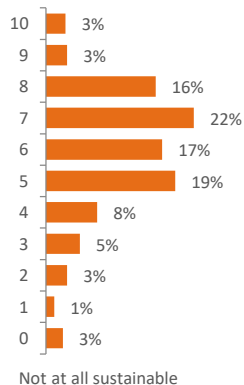


Sustainability of Australian commercial fishing overall

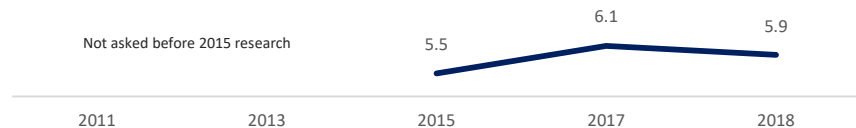


Base: All respondents; n=1,508

Completely sustainable



Results over time



What we asked:

How familiar would you say you with how the commercial fishing industry – for example in how big it is, where its located, what commercial fishers fish for, how they fish and how they operate? With that in mind, on a scale of 0 to 10, how sustainable do you think Australian commercial fishing is overall?

DETAILED FINDINGS

Sustainability of the Industry

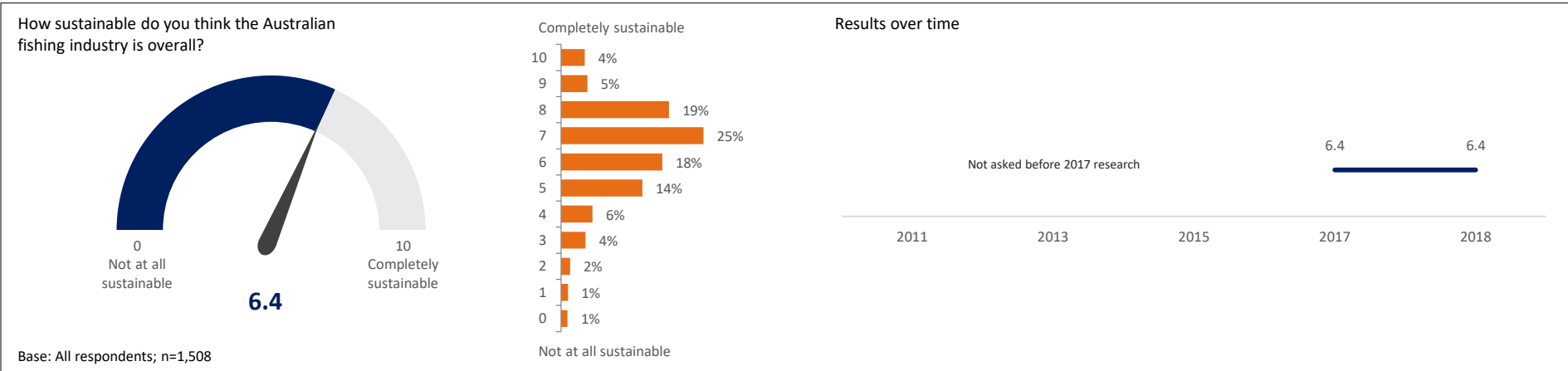
Awareness and Interest of the Industry

Sustainability of Industry Sectors

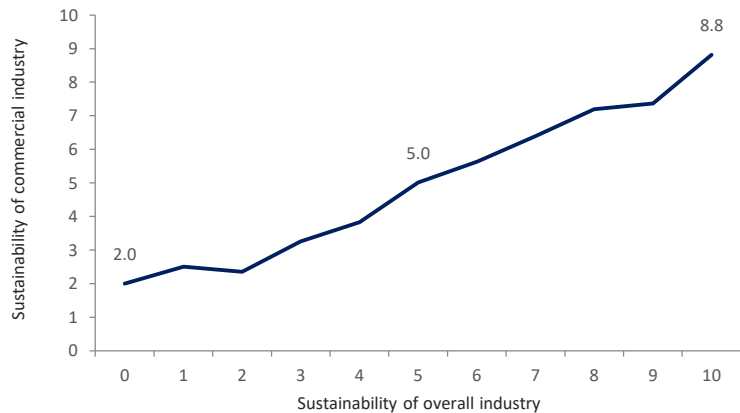
Balancing Economics and Sustainability

Sustainability of Other Industries

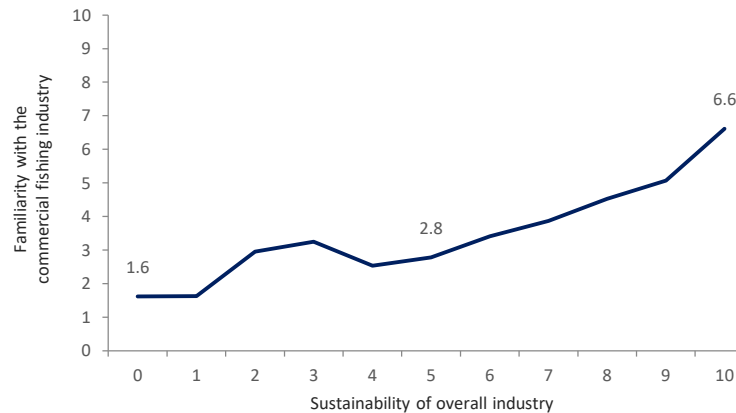
Concern and Trust on Life Issues



Are perceptions of sustainability similar between the overall industry and the commercial industry?
0 – Not at all sustainable, 10 – Completely sustainable



Is there a relationship between familiarity of the commercial fishing industry and perceptions of the sustainability of the overall industry?



What we asked:
With that in mind, on a scale of 0 to 10, how sustainable do you think Australian fishing industry is overall? Please consider all sectors of the industry (commercial fishers, aquaculture and recreational fishing)

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

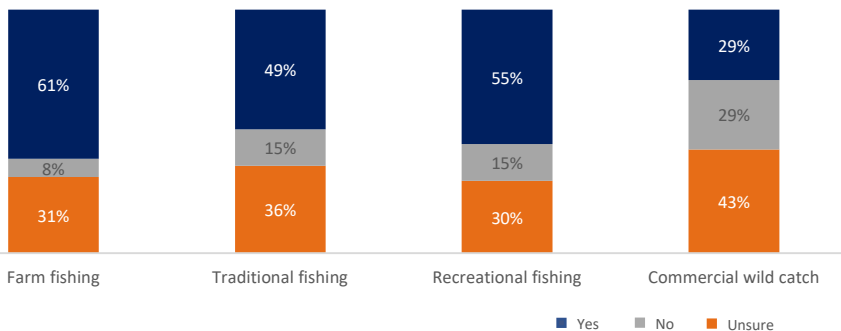
Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

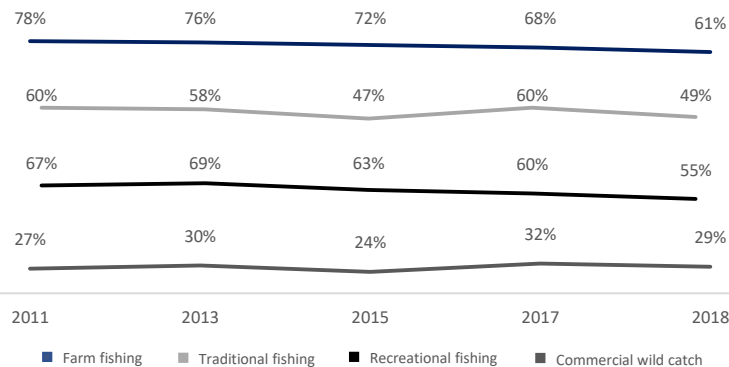
Concern and Trust on Life Issues

Do you think the following sectors of the Australian fishing industry are sustainable?

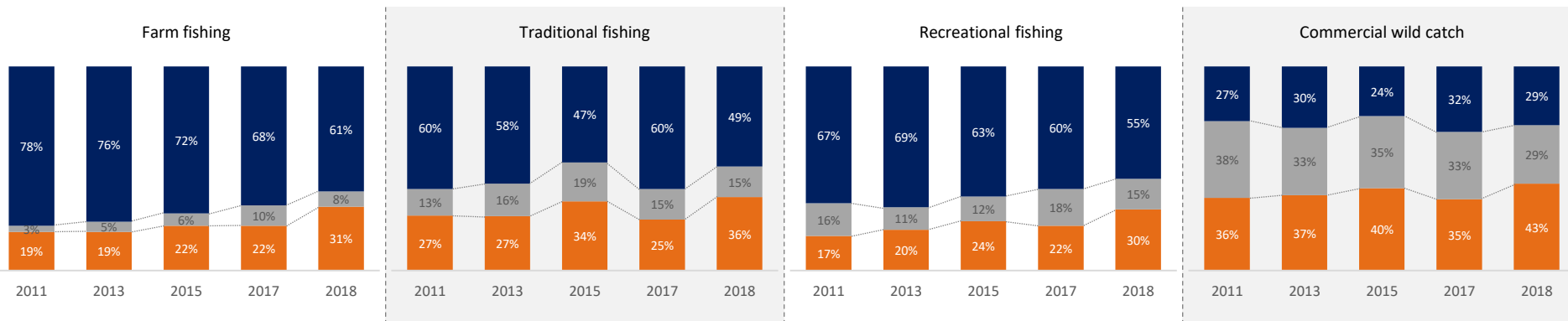


Base: All respondents; n=1,508

Results over time – of those who answered “Yes”



Results over time – by sector



What we asked:

Do you think the following sectors of the Australian fishing industry are sustainable?

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

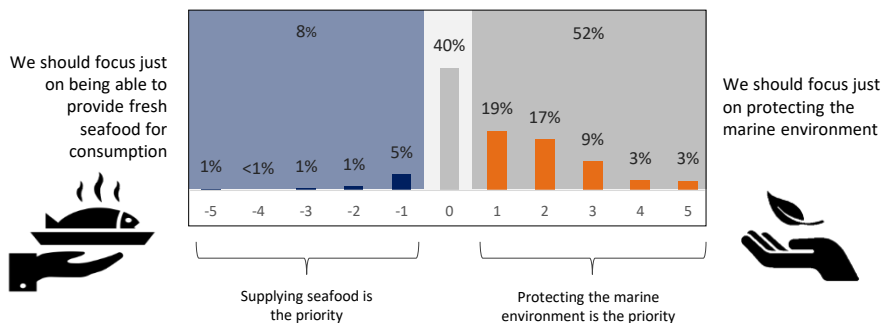
Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

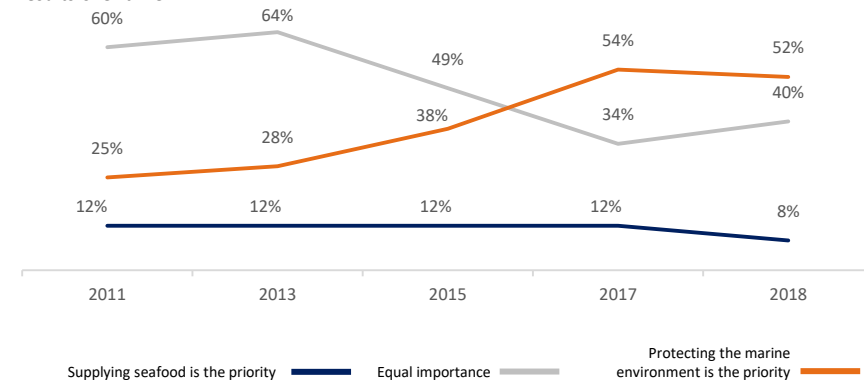
Concern and Trust on Life Issues

Balance between supplying sufficient fresh seafood and protecting marine environment

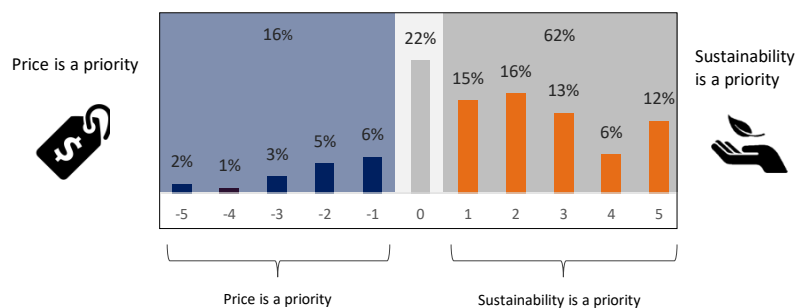


Base: All respondents; n=1,508

Results over time

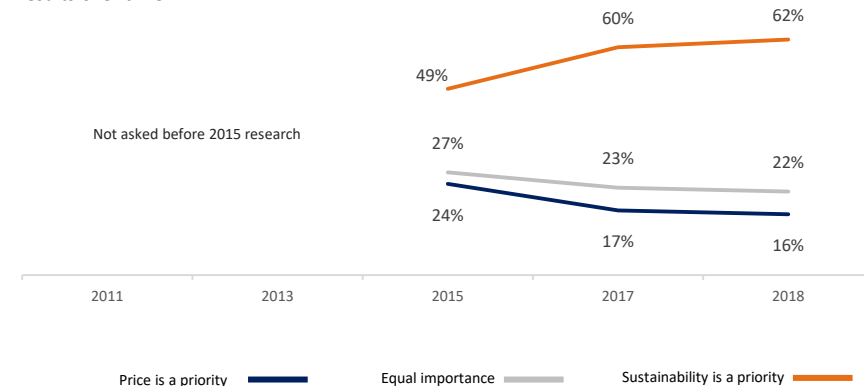


Balance between price and sustainably caught seafood



Base: All respondents; n=1,508

Results over time



What we asked:

Most Australians acknowledge that it's important to have a fishing industry that can supply sufficient fresh seafood so that everyone can buy locally caught seafood for consumption, while at the same time having policies and practices that protect the marine environment. In your opinion how would you describe where the balance between these two, at times competing priorities, should be?

When it comes to buying seafood, there can often be a trade-off between buying the cheapest seafood and buying sustainably caught seafood. When you are buying seafood, which is more important, price or sustainably caught seafood?

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

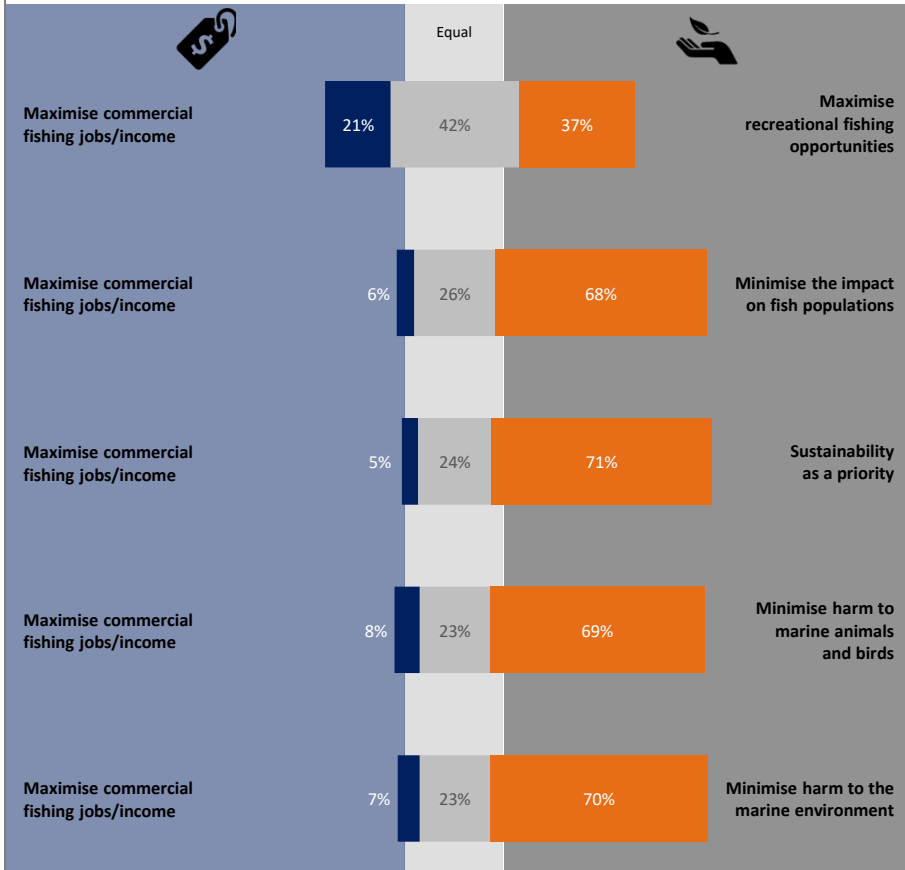
Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

Concern and Trust on Life Issues

Balance between environmental considerations and social/ economic considerations



Base: All respondents; n=1,508

Results over time – % of those who leaned towards environmental considerations



What we asked:

Managing fisheries often involves difficult trade-offs between environmental conditions and social and economic considerations. Where do you think the balance between these potentially conflicting values should be in the future?

DETAILED FINDINGS

Sustainability of the Industry

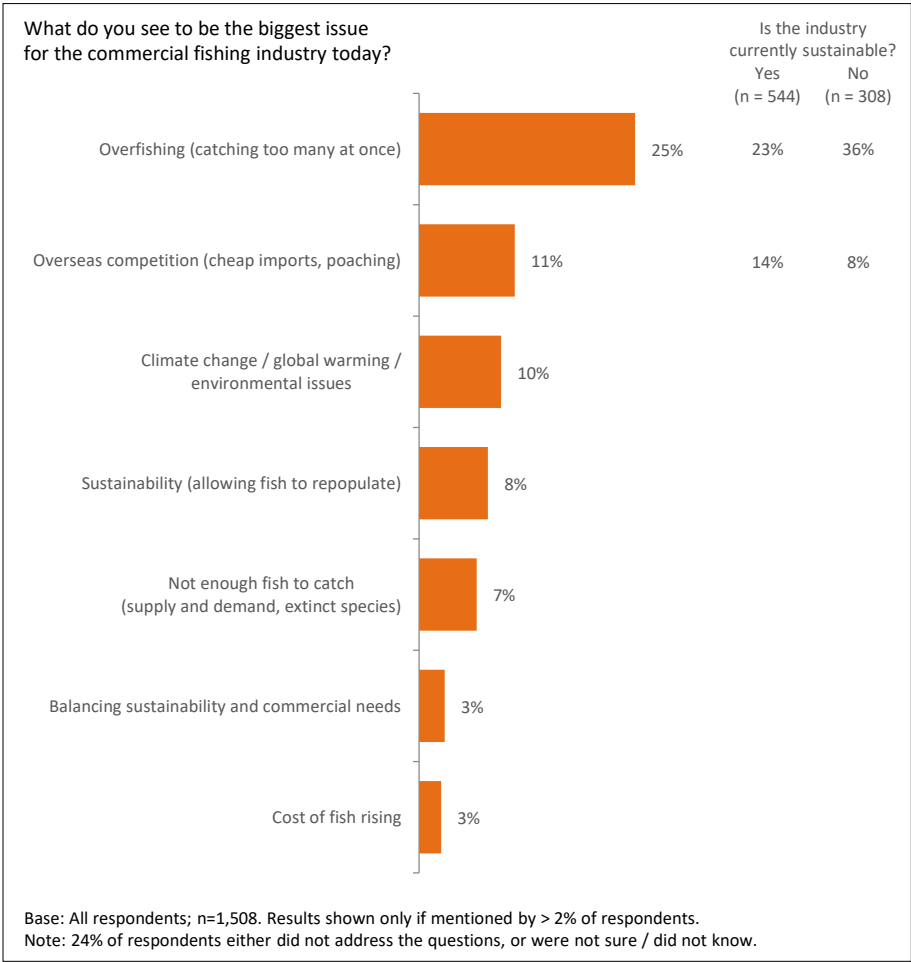
Awareness and Interest of the Industry

Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

Concern and Trust on Life Issues



Some of what they said...

Overfishing

“Overfishing. Short term gain for long term loss because corporations don't gather fish in a quantity that is at all sustainable for the future of the industry.”

“Overfishing is the biggest issue. It refers to the practice of catching fish faster than they are able to reproduce. The large fish are vulnerable to this and are slow to reproduce. As overfishing takes place over time, these species decrease and fisherman begin 'fishing down the food chain,' shifting focus from catching predators to species lower in the food web, like sardines and squid. Removing these prey species from the marine environment impact predators and the aquatic ecosystem.”

Overseas Competition

“Overseas imports flooding our market with product which in many cases is produced in questionable situations. This cheap product is usually inferior & non-hygienically produced.”

“That the smaller, locally owned and operated ventures are not taken over by overseas multinationals. Generally, overseas businesses don't care about the damage or sustainability to our local waterways or fish populations.”

Environmental issues

“Environmental protection and sustainability - without a healthy river and ocean system, the commercial fishing industry won't have a long future! You have to first look after the very system that your whole industry is reliant on!”

“Climate change and its impact on the marine environment and its impact on the marine ecosystems.”

What we asked:

What do you see to be the biggest issue for the commercial fishing industry today?

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

Concern and Trust on Life Issues

Perception of the percentage of fish consumed by Australians grown and caught in Australia



Please note: the question was not specific to one of the fresh, frozen or tinned segments specifically but rather an overall perception of the percentage grown and caught in Australia.

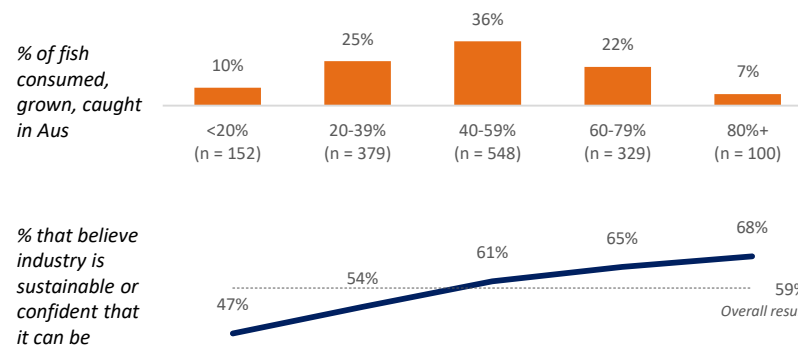
Base: All respondents; n=1,508

Some of what they said...

People responded with different estimates of the proportion of fish grow and caught in Australia. The range of different estimates is shown in the chart below (e.g. 25% believed it was between 20% and 39%).

Distribution of estimates provided	10%	25%	36%	22%	7%
	<20%	20-39%	40-59%	60-79%	80%+
2017:	14%	26%	38%	18%	4%
2015:	14%	26%	38%	18%	4%

Do those who have varying views of the percentage of fish consumed by Australians grown and caught in Australia also vary in their view of whether they believe sustainability is possible?

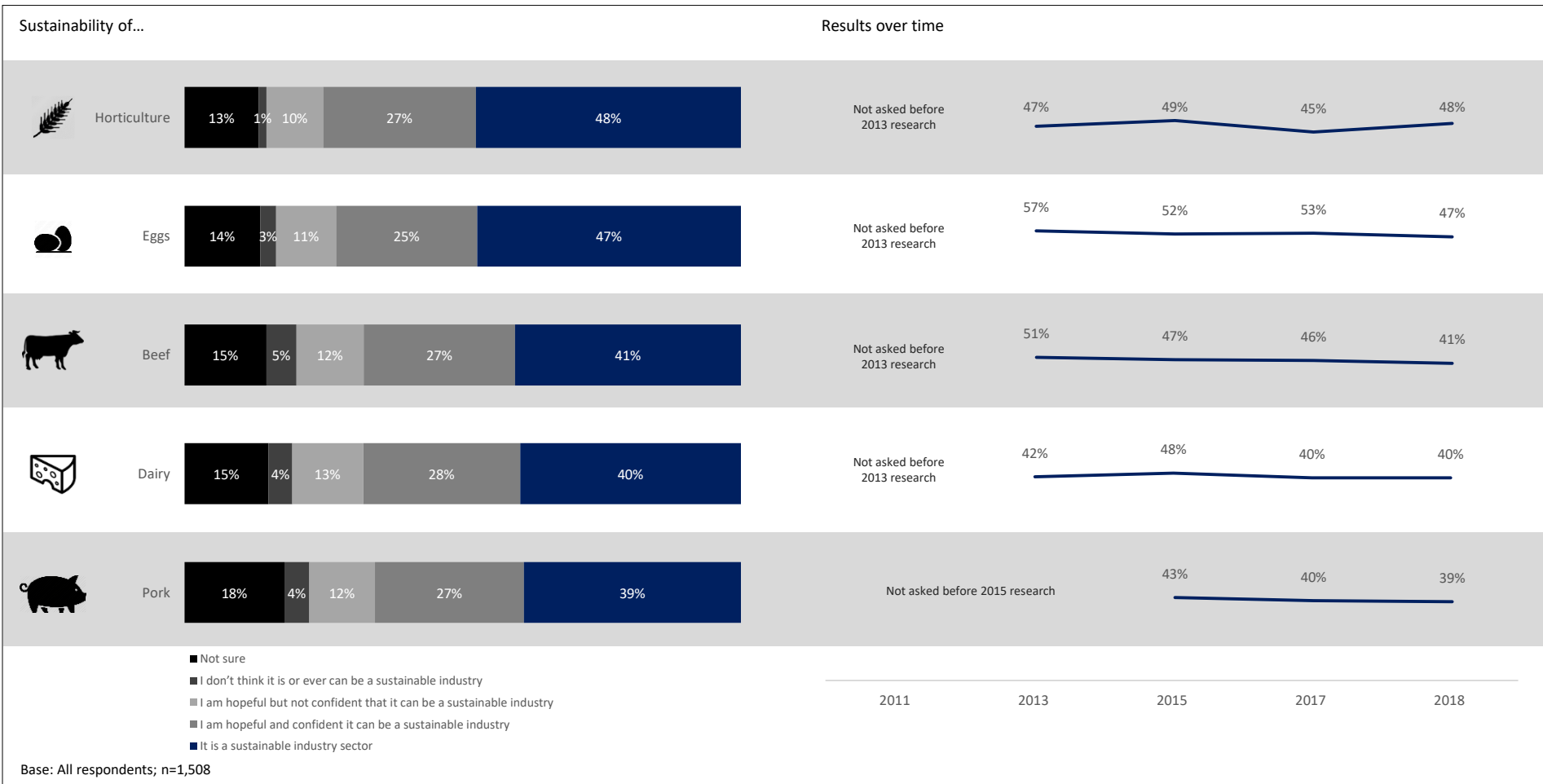


What we asked:

From what you know or have seen, heard or read, what percentage of the fish consumed by Australians is actually grown and caught in Australia, that is not imported from overseas?

DETAILED FINDINGS

- Sustainability of the Industry
- Awareness and Interest of the Industry
- Sustainability of Industry Sectors
- Balancing Economics and Sustainability
- Sustainability of Other Industries**
- Concern and Trust on Life Issues



What we asked:

From what you know, do the rural sectors (listed below) have the necessary practices and policies in place that ensure the future of the industry and the environment is sustainable, while at the same time providing sufficient supply for Australians?

DETAILED FINDINGS

Sustainability of the Industry

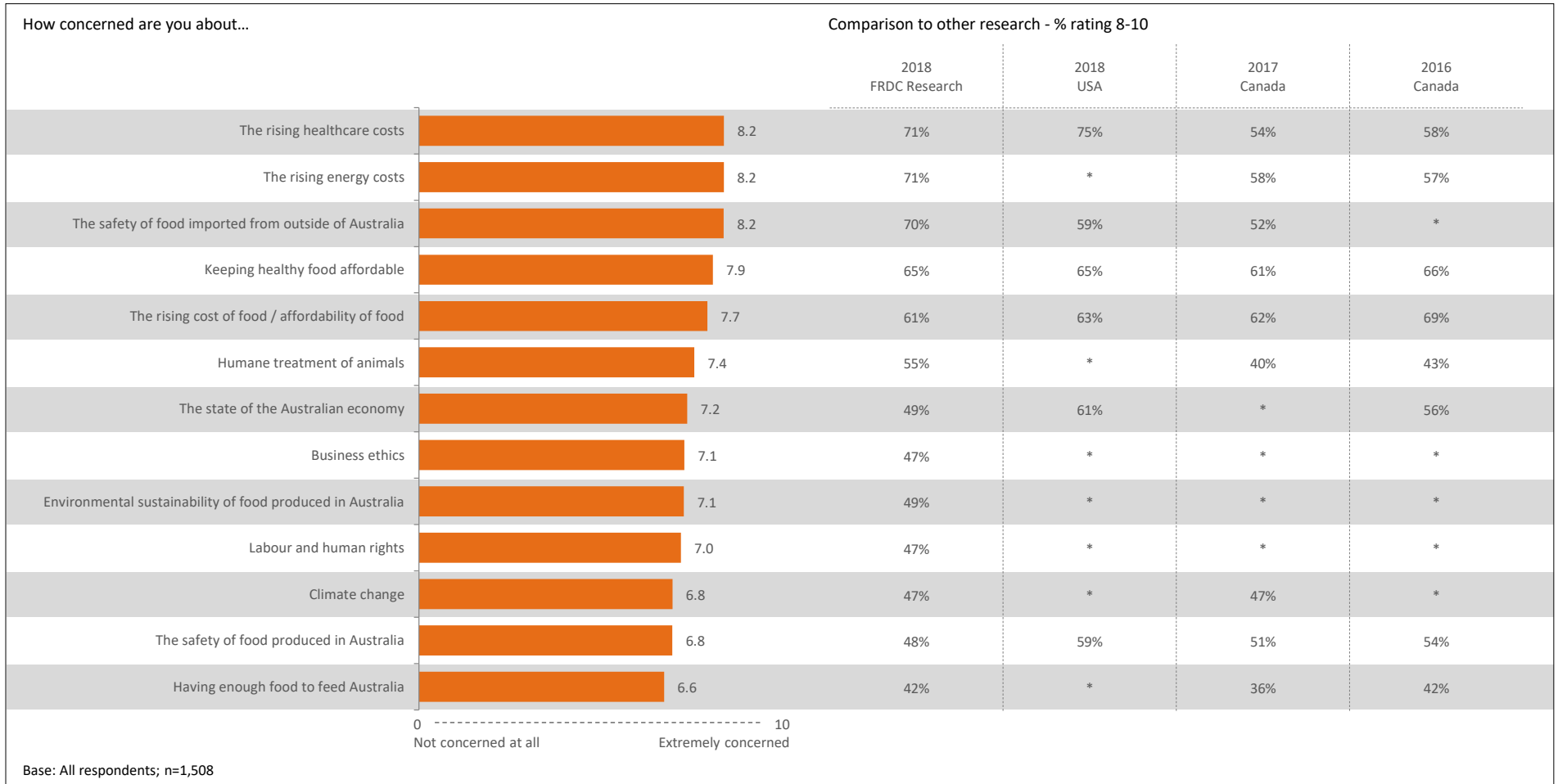
Awareness and Interest of the Industry

Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

Concern and Trust on Life Issues



What we asked:

We would now like you to rate your level of concern on several “life issues” that affect people in their everyday lives. Please rate these issues on a scale of 0 to 10, where 0 is “No concern” and 10 is “A high level of concern”.
How concerned are you about...

DETAILED FINDINGS

Sustainability of the Industry

Awareness and Interest of the Industry

Sustainability of Industry Sectors

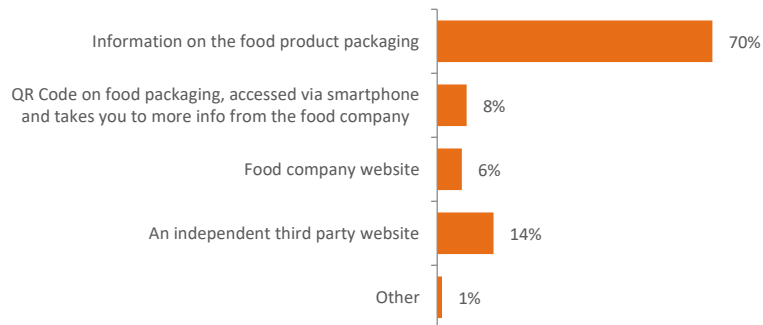
Balancing Economics and Sustainability

Sustainability of Other Industries

Concern and Trust on Life Issues

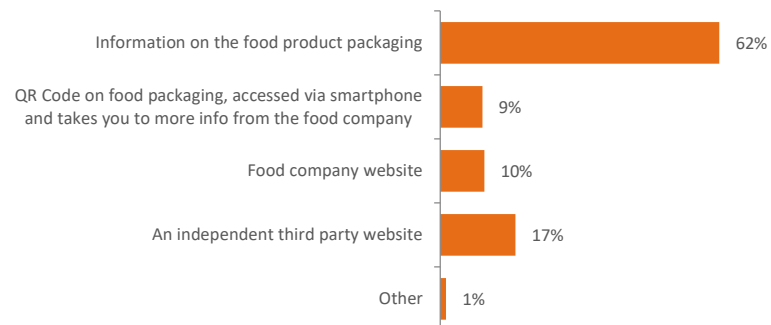
Where would you most prefer to access information from food companies regarding...

...how their food products may impact your health?



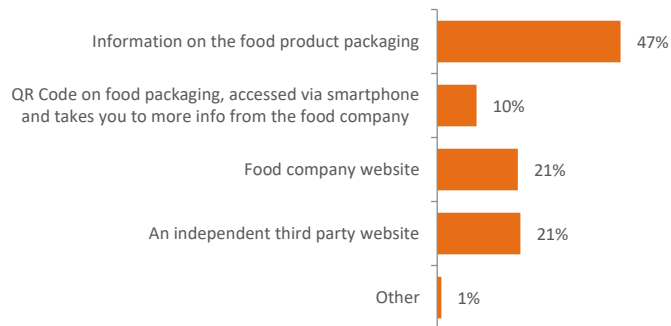
Base: All respondents; n=1,508

...food safety?



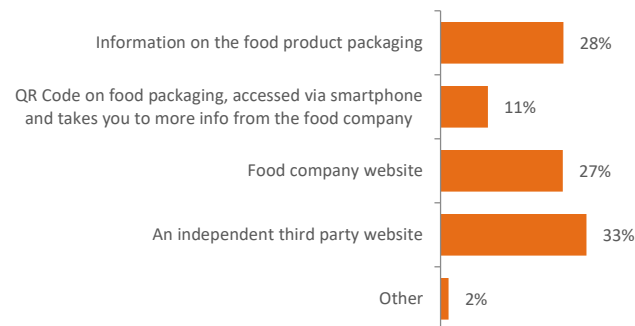
Base: All respondents; n=1,508

...their environmental stewardship?



Base: All respondents; n=1,508

...labour and human rights?



Base: All respondents; n=1,508

What we asked:

Where would you most prefer to access information from food companies regarding...

...how their food products may impact your health?

...food safety?

...their environmental stewardship?

...labour and human rights?

DETAILED FINDINGS

Sustainability of the Industry

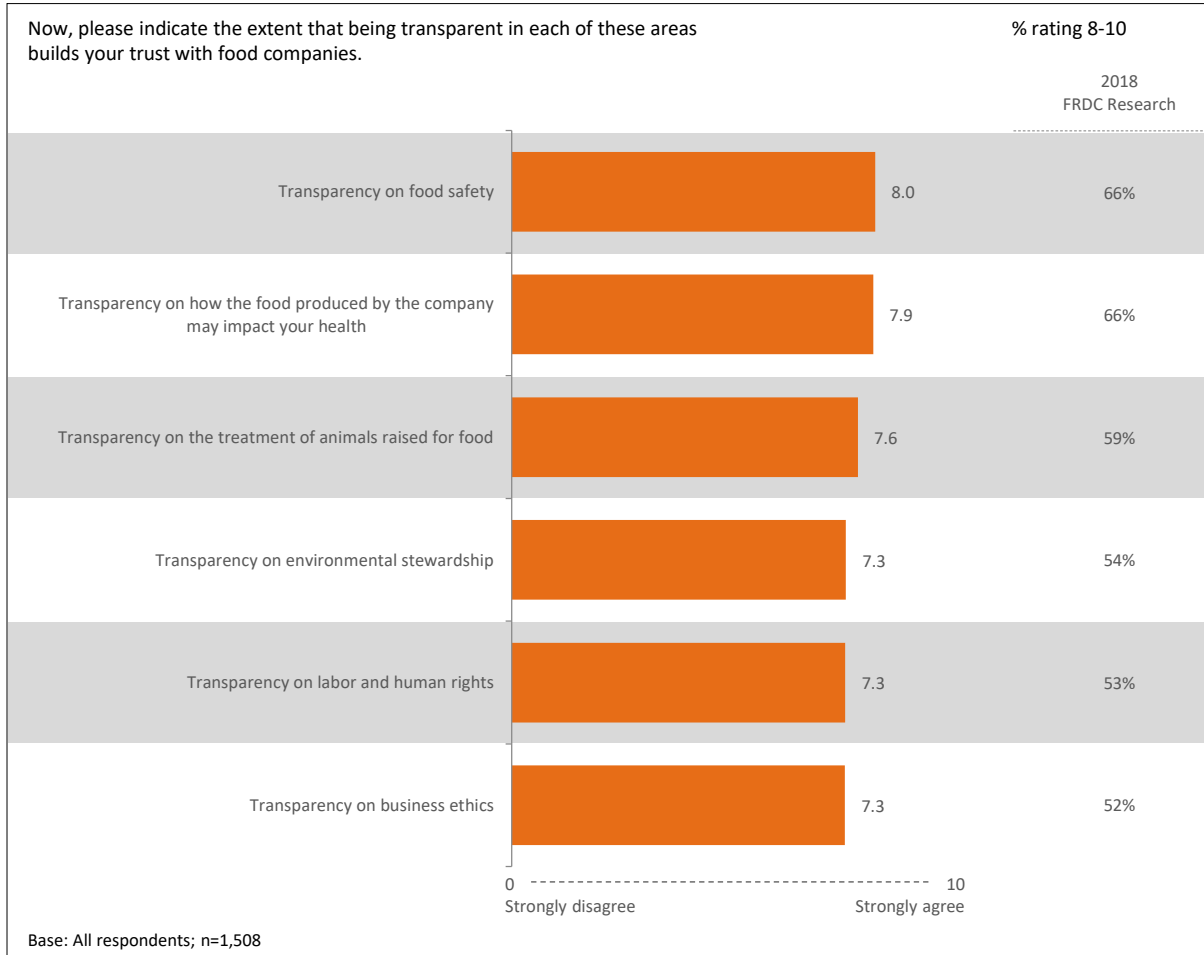
Awareness and Interest of the Industry

Sustainability of Industry Sectors

Balancing Economics and Sustainability

Sustainability of Other Industries

Concern and Trust on Life Issues

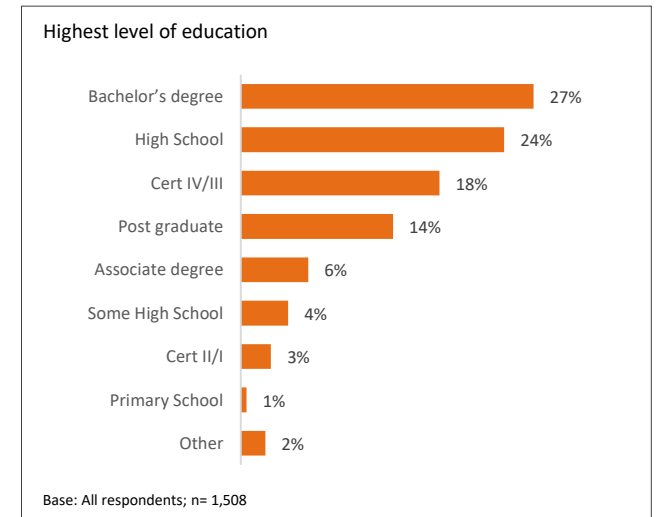
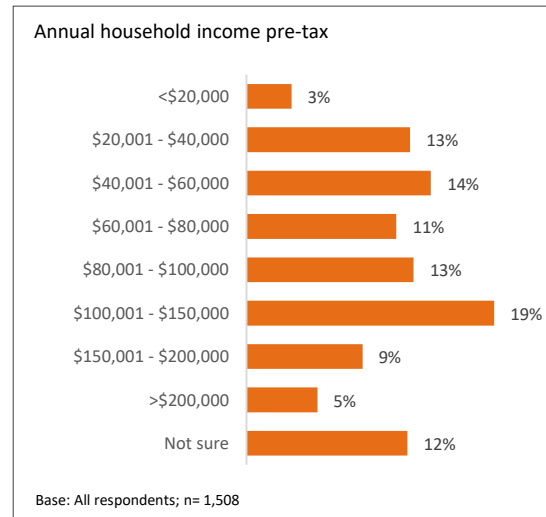
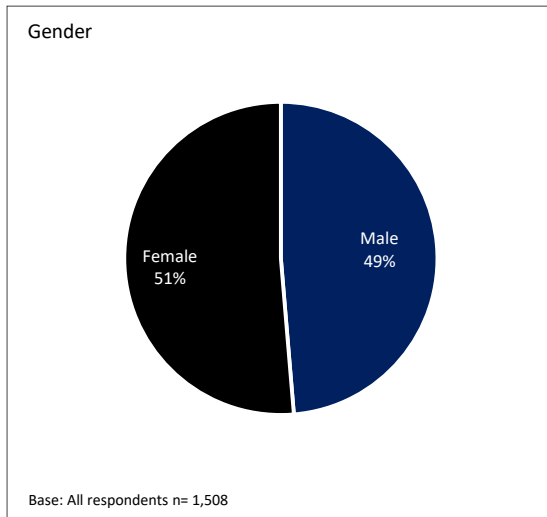
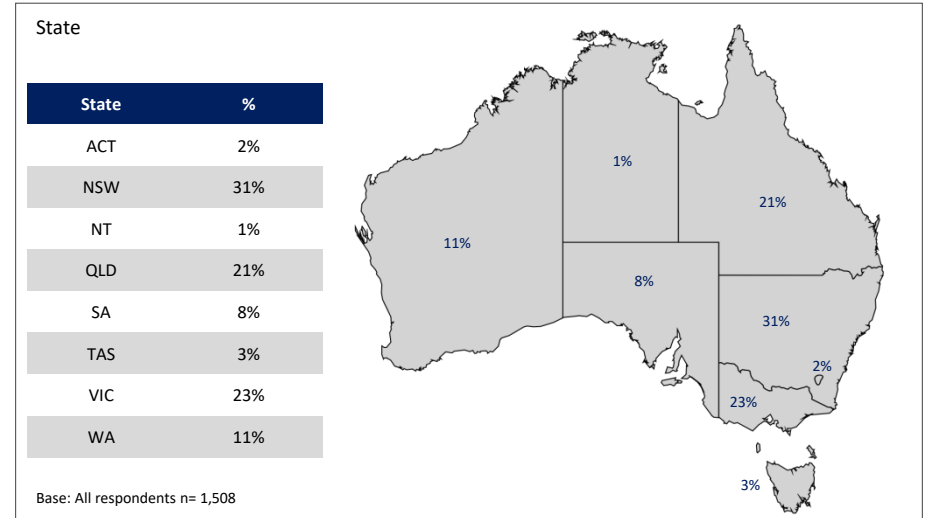
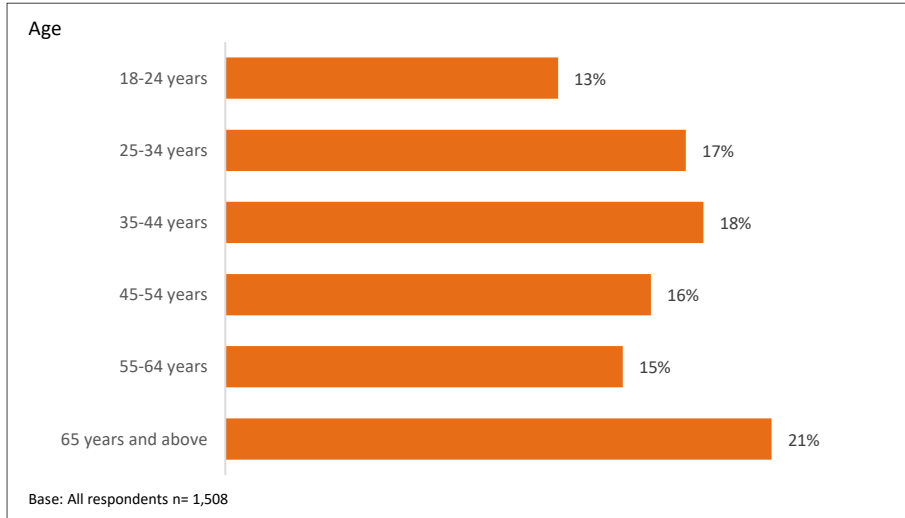


What we asked:

Now, please indicate the extent that being transparent in each of these areas builds your trust with food companies.

Respondent Profiles

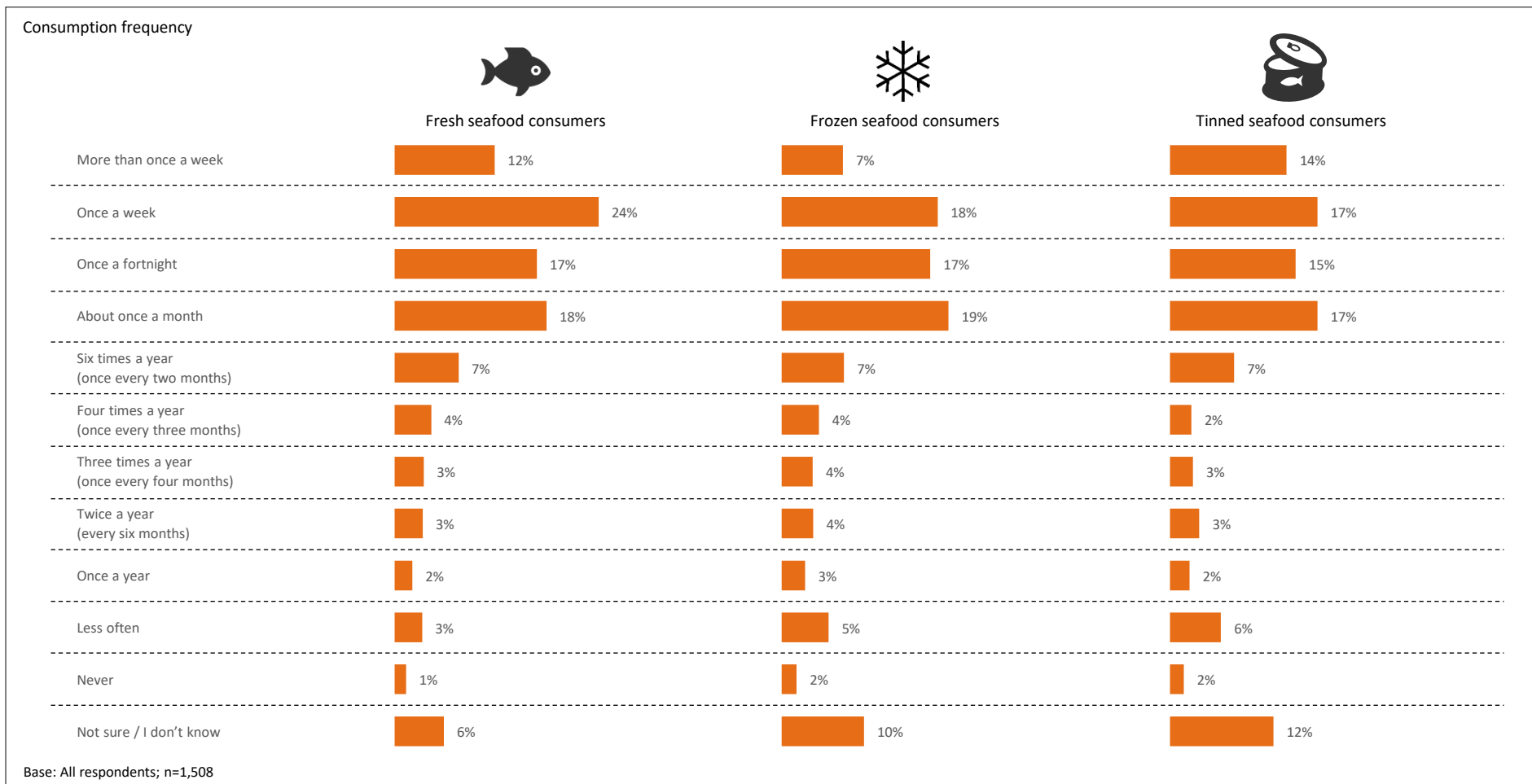
RESPONDENT PROFILES



What we asked:
 Are you...
 In which of the following age brackets do you fit?
 And what postcode do you live in?

Approximately what is your total annual household income before tax?
 What is the highest level of education you have achieved?

RESPONDENT PROFILES



What we asked:

Over the past 12 months, how often would you say that you have eaten **fresh seafood** for a main meal?
Over the past 12 months, how often would you say that you have eaten **frozen fish or seafood** for a main meal?

Over the past 12 months, how often would you say that you have eaten **tinned fish or seafood (i.e. tinned tuna, tinned salmon, prawns or mussels)** for a main meal?

RESPONDENT PROFILES

Consumption frequency – grouped (excluding “not sure” answers)



Fresh seafood consumers



Frozen seafood consumers



Tinned seafood consumers

Frequent
(once a week or more)



37%

28%

35%

Regular
(per fortnight or per month)



36%



40%



36%

Occasional / Non-eater
(less than once a month
or not at all)



26%



32%



29%

Base: All respondents; n=1,508

What we asked:

Over the past 12 months, how often would you say that you have eaten **fresh seafood** for a main meal?
Over the past 12 months, how often would you say that you have eaten **frozen fish or seafood** for a main meal?

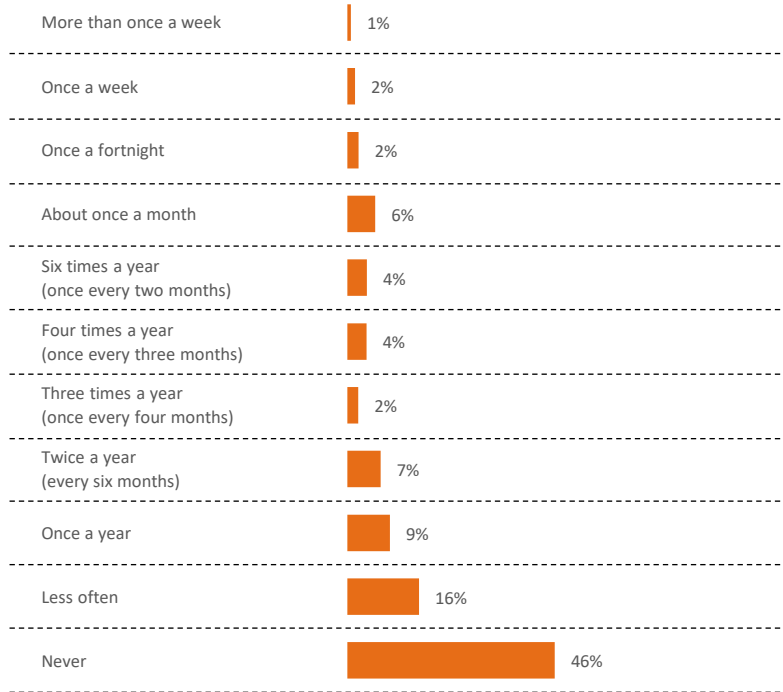
Over the past 12 months, how often would you say that you have eaten **tinned fish or seafood (i.e. tinned tuna, tinned salmon, prawns or mussels)** for a main meal?

RESPONDENT PROFILES

Fishing frequency



Recreational fishers

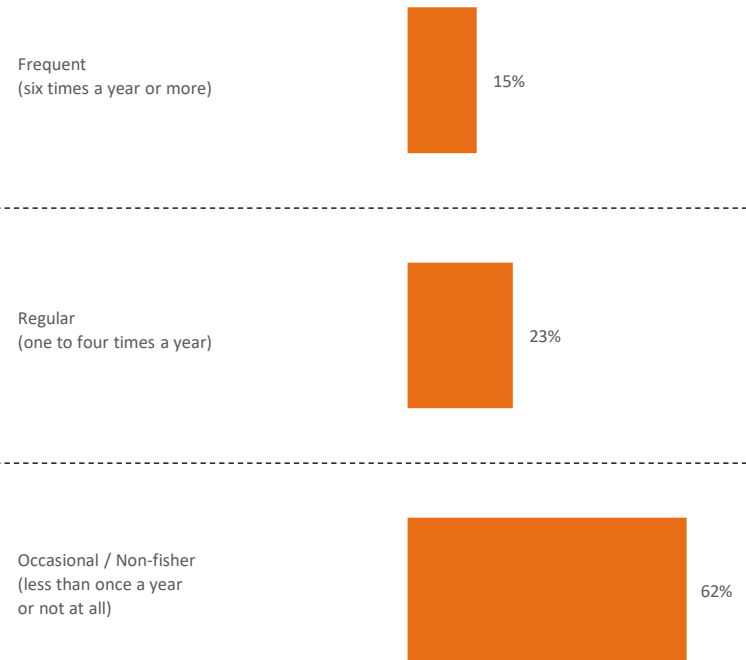


Base: All respondents; n=1,508

Fishing frequency - grouped



Recreational fishers



Base: All respondents; n=1,508

What we asked:

And again over the past 12 months, how often have you gone fishing? Include any occasion you have gone recreational fishing – by yourself, with friends or family, or with others.

Research Design

Research Program

In the context of the ongoing effort directed at ensuring the broader Australian community is informed about and engaged with the Australian fishing industry's progress in achieving environmental sustainability, the level of awareness and engagement stands as an important indication of success. This research aimed to gauge the community's perceptions about the achievements and ongoing investment the industry is making into achieving long term sustainability.

Methodology

An online survey was distributed via an accredited online research panel of respondents over the age of 18 years.

Sample

In total, n = 1,508 surveys were completed by participants, an increase on the n = 1,002 collected in the 2017 research. Respondent demographics from the survey were representative of ABS population estimates across age, gender and location to ensure the final results appropriately reflected the current size and structure of the Australian population.

Questionnaire

Participants were asked to complete a 10 minute online survey which covered a range of topics relating to their awareness and their thoughts about the Australian fishing Industry. These included, but were not limited to:

- Whether the industry is sustainable;
- How the fishing industry benchmarks against other countries and industries; and
- Knowledge and awareness of the efforts being made.

A range of Likert rating scale, closed and open-ended questions were used throughout the survey to accomplish this.

Timing

The online survey was launched on the 4th April 2018 and remained open until the 12th April 2018.

Definitions

Eat fresh fish or seafood; Eat frozen fish or seafood; Eat tinned fish or seafood;

Frequent eaters is defined as those who eat the specified fish or seafood at least once a week.

Regular eaters includes those who eat the specified fish or seafood once a fortnight or once a month.

Occasional / non eaters includes those who eat the specified fish or seafood less frequently or do not eat it at all.

Fishers

Frequent fishers is defined as those who go fishing at least six times a year (after every 2 months).

Regular fishers includes those who go fishing either one, two, three or four times a year.

Occasional fishers includes those who go fishing less often and those who never go fishing.

want more information?

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Unpacking the consumer seafood experience

a 2019 update

June 2019

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background

Seafood consumption is a key focus for the Australian seafood industry. Identifying and then responding to the perceived barriers to the purchase and consumption of fresh seafood among Australian consumers is a priority.

To enable this to happen, a better understanding of the customer seafood journey and their experiences in this seafood journey is vital.

In 2016, FRDC commissioned an initial baseline study to explore and measure consumer experiences with the purchase, preparation and eating of seafood. This research provide valuable insights into consumer attitudes, perceptions and behaviours.

As consumer attitudes towards food (all food including seafood) continues to evolve, a need to update this baseline information was identified.

With that in mind, FRDC commissioned a second research study of Australian adult consumers.

The 2019 research used the same information framework that was used in the 2016 research but looked to expand areas where clear changes in consumer behaviours had been identified. The 2019 research then collected information about what consumers do, what they like and don't like and what information would be useful to help them overcome the challenges they have in buying, cooking and eating seafood.

The results from the 2019 research follow. As part of the analysis of the 2019 data, results from overseas consumer research (particularly that conducted by FMI in the US) has been used to compare where this is possible.

This new dataset provides a refreshed understanding of the challenges facing the seafood industry as it looks to maintain and then grow consumption of seafood among Australian consumers.

about the research

As noted previously, the 2019 research provides an update on the FRDC research undertaken in 2016 – “Unpacking the consumer seafood experience”, November 2016.

This research involved an online survey of n = 2,002 adult Australian main grocery buyers. The research was undertaken over the period 18th April 2019 to 9th May 2019.

The coverage of the research included collecting information on consumers' buying, cooking and eating experiences with seafood, along with their perceptions of the sustainability of the fishing industry.

As there were a number of different pathways through the questionnaire, the length of the questionnaire ranged from 10 to 20 minutes.

Respondents for the survey were sourced from an accredited market research panel.

The sample was nationally represented and consistent with the state | age | gender population structure (as detailed by the ABS).

The key findings from the research now follow.



Context for the
Research

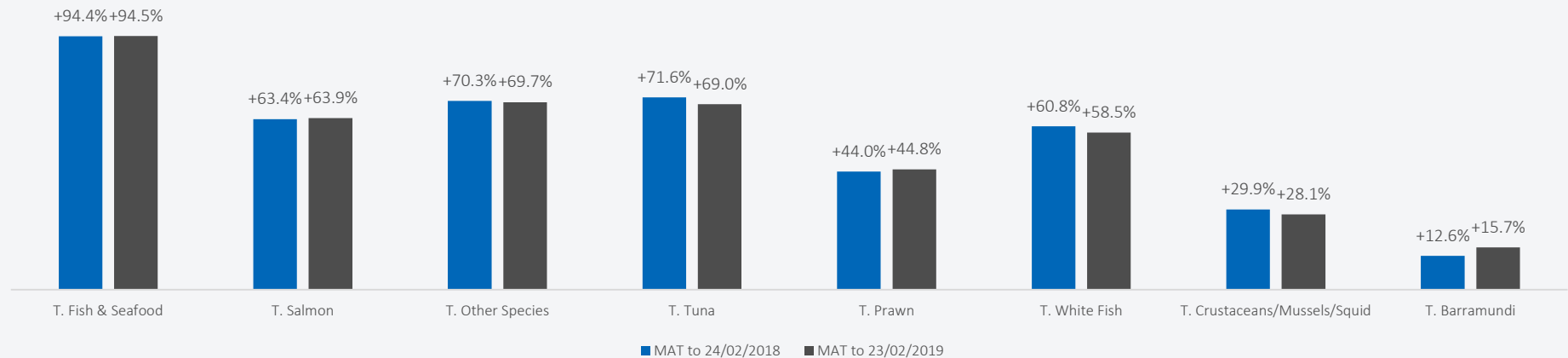
The Nielsen HomeScan™ data provides an overview of sales and volumes of retail products from Australian supermarkets.

This short summary provides a snapshot of the most recent sales data for the 12 month period ending February 2019.

While the results are contained to just supermarket purchases, the results suggest:

- The changes in purchasing patterns change slowly with year on year data largely consistent.
- The overwhelming majority of purchasing householders buy seafood in some form. This result is consistent with the data reported in this research.
- Consumption of specific species varies considerably from salmon down to barramundi. Some species are clearly more popular among purchasing households.

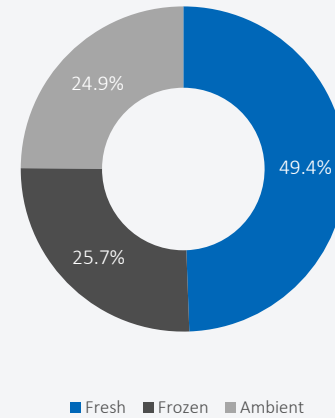
% of Buying Households



Analysis of the Nielsen HomeScan™ data shows changes in the consumption of frozen seafood products with:

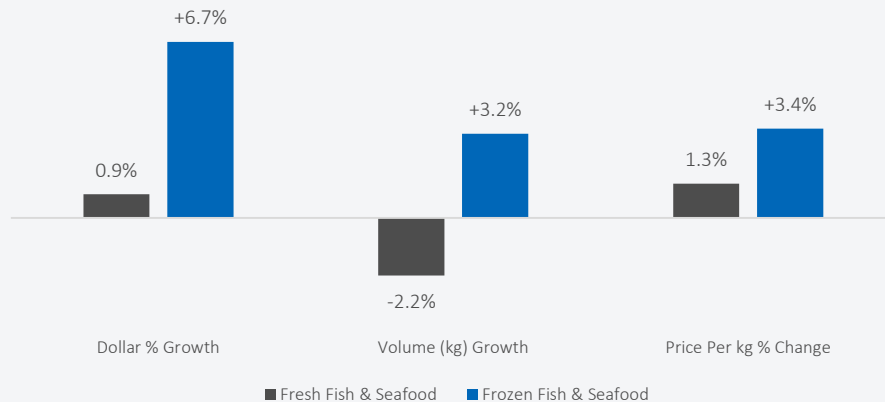
- Frozen product appears to be contributing to driving growth for Total seafood category.
- That said, the fresh category continues to dominate supermarket sales of seafood.
- The data shows some decline in fresh prawns sales with the loss largely attributable to fewer purchasing households.
- By contrast, frozen prawns has seen some increased with this attributable to an increase in households purchasing driving higher sales and volume growth

Fish & Seafood | Value Share | MAT to 23/02/2019

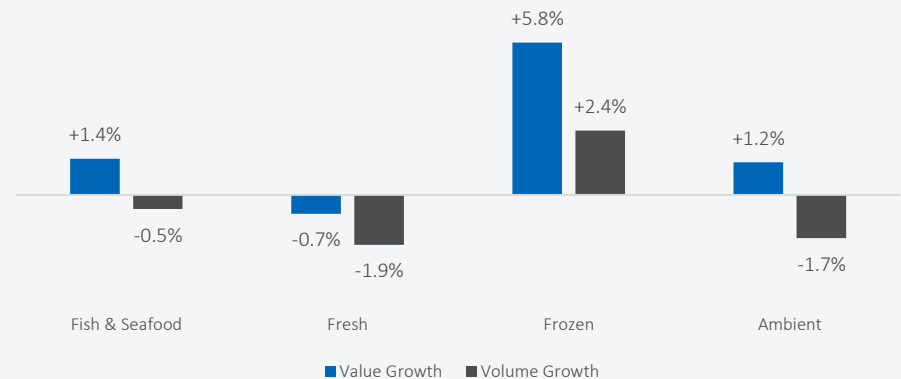


Fresh vs Frozen Fish & Seafood

Dollar Sales, Volume (kg) & Average Price Per kg % Change



Fish | Value & Vol % Growth | MAT to 23/02/2019





Management Summary

This research provides a follow up to a similar program of consumer research undertaken by FRDC in 2016. This report provides an overview of the results from the 2019 research and where appropriate draws comparisons with the 2016 results as well as comparison to results from other international studies.

Australian consumers do buy and eat seafood, and the research has demonstrated:

- Almost all households reported that they had consumed seafood in the last 12 months. This of course doesn't reflect a frequency of consumption nor a volume of consumption but provides an overall incidence of consumption.

The 2019 research has indicated a small uplift in the proportion of people consuming fresh, frozen and tinned seafood (78%, up 1%). The research has also indicated that just 5% of people reported consuming no seafood (fresh, frozen or tinned) at all. The challenge then is to get consumers to buy and eat more seafood, more often.

- The influence of others in the household should not be underestimated in the purchasing decisions. (for example the influence of others is significantly higher among households with kids, influence rating of 6.3, compared to households without kids, rating of 4.9)
- Like the 2016 research, fresh seafood consumers fall into one of three consumption segments (92% reported that they consume fresh seafood), namely:
 - frequent eaters (once a week or more) represent 33% of consumers;
 - regular eaters (once a fortnight to once a month) represent 32% of consumers; while
 - infrequent eaters (no more than once every two months) represent the other 26% of consumers.

The attitudes and behaviours of consumers vary between these consumption segments. The report then focuses on a comparison across these segments for the various measures included in the research.

- Australian consumers report they started eating seafood at a young age (average 8 years of age). This is contrast to the US result which reports that 44% started later in life (teenager or adult)

This early start to consumption points to an opportunity, and arguably a need, for industry to be shaping attitudes and behaviours in the early days of seafood consumption.

what we learnt from the research. . . .

- Supermarkets remain the majority channel for the purchase of seafood.

Changing attitudes and behaviours of consumers in this channel will be necessary to see any shifts in the total market.

- About one in five consumers indicated that they were impulse buyers with price specials or being 'in the mood' the primary triggers for these consumers. Less regular and indeed younger consumers are not surprisingly more likely to be impulse buyers of seafood.

There will likely be growth opportunities for the industry if these consumers can be encouraged to shift their purchases to planned and regular purchases.

- Consumers typically buy and consume a narrow range of seafood.

They look to be reluctant triallers of new or different seafood species, making an extension of the market to a wider range of seafood choices a significant challenge.

- The major obstacles to trialling different species appears to centre around consumer perceptions of the 'taste' of other species and the price considerations.

The industry will need to find a pathway to reset consumer perceptions around the taste (of seafood and of specific species) to entice more consumers to trial different species and alternatives.

- There has been a small but measurable shift in consumer perceptions of the price comparison of seafood to other proteins.

This may be one of the useful tools in helping migrate more consumers towards seafood as a regular and planned purchases (away from an impulse purchase).

- Despite seafood being purchased by most consumers, their confidence in buying and preparing remains moderately weak with:

- 6.4 for preparing and cooking seafood (out of 10); and
- 7.1 confidence in buying seafood (out of 10).



Frequent Eaters



Regular Eaters



Infrequent Eaters

what we know. . . .

- ✓ they represent 33% of fresh seafood consumers
- ✓ it is estimated they account for 77% of all seafood meals eaten
- ✓ they predominantly buy in supermarkets
- ✓ 37% believe seafood offers better value for money than meat
- ✓ they are more likely than the other groups to be married, a baby boomer, a parent, a regular rec fisher and on a higher income
- ✓ 68% buy regularly for meals during the week
- ✓ 72% buy the same types of seafood all the time
- ✓ 63% buy seafood as a planned purchase

- ✓ they represent 32% of fresh seafood consumers
- ✓ it is estimated they account for 20% of all seafood meals eaten
- ✓ they predominantly buy in supermarkets
- ✓ 27% believe seafood offers better value for money than meat
- ✓ they are more likely than the other groups to be a Millennial and on a higher income
- ✓ 28% buy regularly for meals during the week
- ✓ 74% buy the same types of seafood all the time
- ✓ 22% buy seafood as an impulse purchase

- ✓ they represent 26% of fresh seafood consumers
- ✓ it is estimated they account for just 3% of all seafood meals eaten
- ✓ they predominantly buy in supermarkets
- ✓ 17% believe seafood offers better value for money than meat
- ✓ they are more likely than the other groups to be a Millennial or Gen X, less likely to be employed FT and on a lower income
- ✓ 9% buy regularly for meals during the week
- ✓ 81% buy the same types of seafood all the time
- ✓ 25% buy seafood as an impulse purchase

what they think. . . .

- ✓ their overall confidence in buying seafood was 7.8
- ✓ their overall confidence in preparing & cooking was 7.2

- ✓ their overall confidence in buying seafood was 7.3
- ✓ their overall confidence in preparing & cooking was 6.5

- ✓ their overall confidence in buying seafood was 6.4
- ✓ their overall confidence in preparing & cooking was 5.6

where to focus. . . .

- ✓ reaffirming their decision to consume seafood regularly
- ✓ leverage their current consumption of seafood to explore and trial other seafood species – this will need to address the perceived ‘taste’ barrier and use price incentives to encourage trial. A consideration of if and how to partner up species for this segment to explore

- ✓ the aim is to increase the frequency of purchase for these consumers – this looks to be about encouraging seafood to be seen as a weekday meal option (more so than a weekend or special occasion)
- ✓ there is an appetite among these consumers to learn more about things like – how to determine the freshness of seafood and different ways to prepare and cook seafood

- ✓ these consumers are largely special occasion seafood consumers; the challenge will be to migrate them to consuming seafood as a meal of a regular basis
- ✓ they continue to exhibit low levels of confidence in buying and cooking seafood; education remains a priority for these consumers
- ✓ a focus on resetting their price expectations (compared to other proteins) might be an important first step in building greater opportunity amongst these consumers

The detailed results from the research now follows.



Detailed Results
Consumption
Behaviours



Consumption Behaviours

what consumers are saying. . .

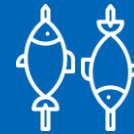
78% (up from 77% in 2016)

Have consumed fresh, frozen and tinned seafood in the past 12 months.



5% (no change from 2016)

Have not consumed fresh, frozen or tinned seafood in the past 12 months.



33% Frequent fresh seafood eaters (at least weekly)

32% Regular fresh seafood eaters (fortnightly/monthly)

26% Occasional fresh seafood eaters (less than monthly)



Taste (perceived or experienced) together with

price look to be the main inhibitors for people trialling different types of seafood.

2019

63%

Everyone in my household eats seafood

2016

74%






18%

Most in my household eat seafood

13%

Over the past 12 months, how often would you say that you have eaten seafood for a main meal?

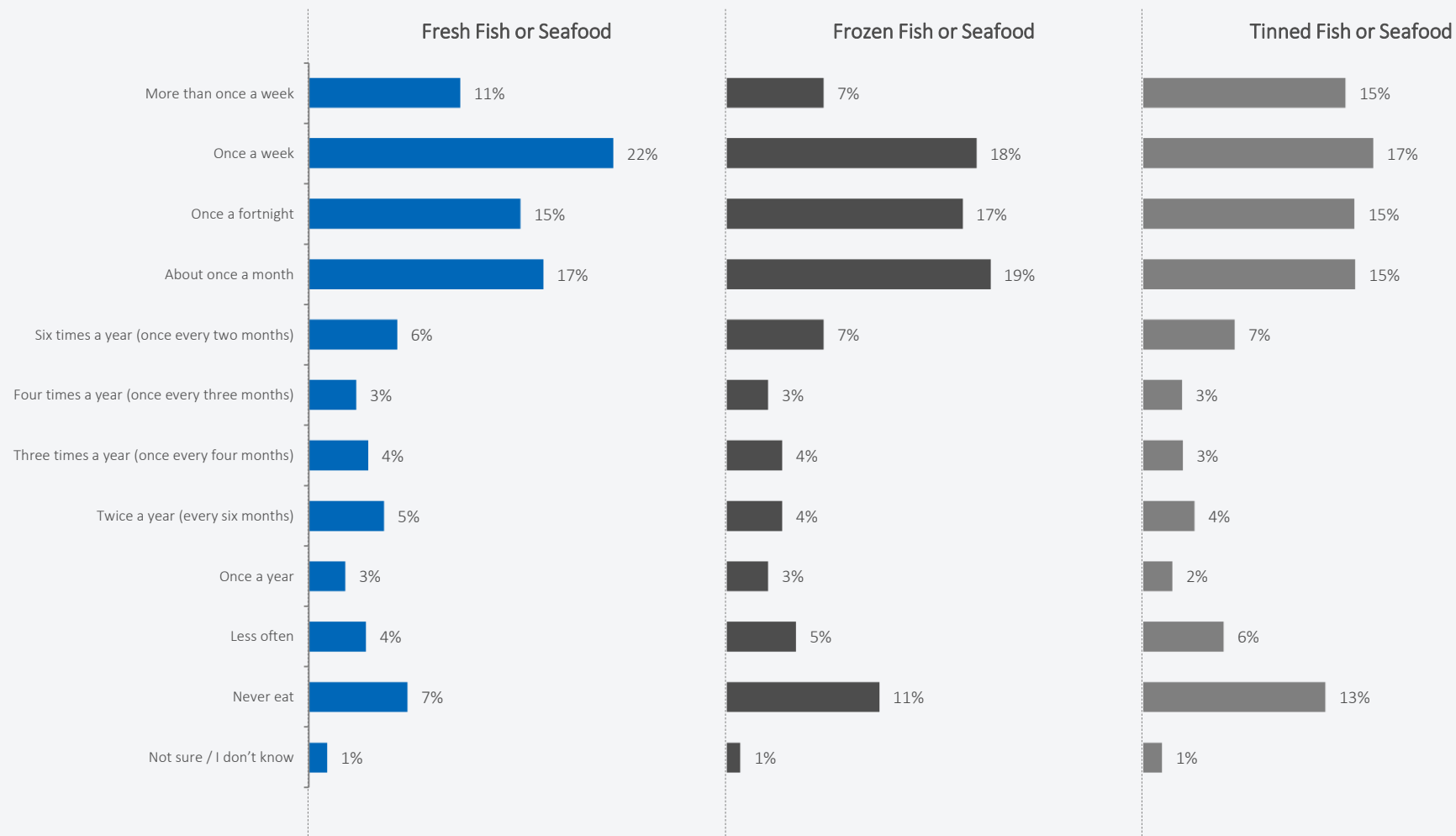
Base: all respondents, n = 2,002

	Fresh Fish or Seafood	Frozen Fish or Seafood	Tinned Fish or Seafood
% who eat seafood	92% 2016: 91%	87% 2016: 86%	86% 2016: 86%
 Frequent Eaters (once a week or more)	33% 2016: 31%	25% 2016: 25%	31% 2016: 30%
 Regular Eaters (once a fortnight to once a month)	32% 2016: 33%	36% 2016: 36%	31% 2016: 33%
 Infrequent Eaters (no more than once every two months)	26% 2016: 27%	27% 2016: 25%	24% 2016: 23%

For the remainder of the report, any mention or use of the **Frequent, Regular or Infrequent Eater categories** refers to the **Fresh Fish or Seafood** results.

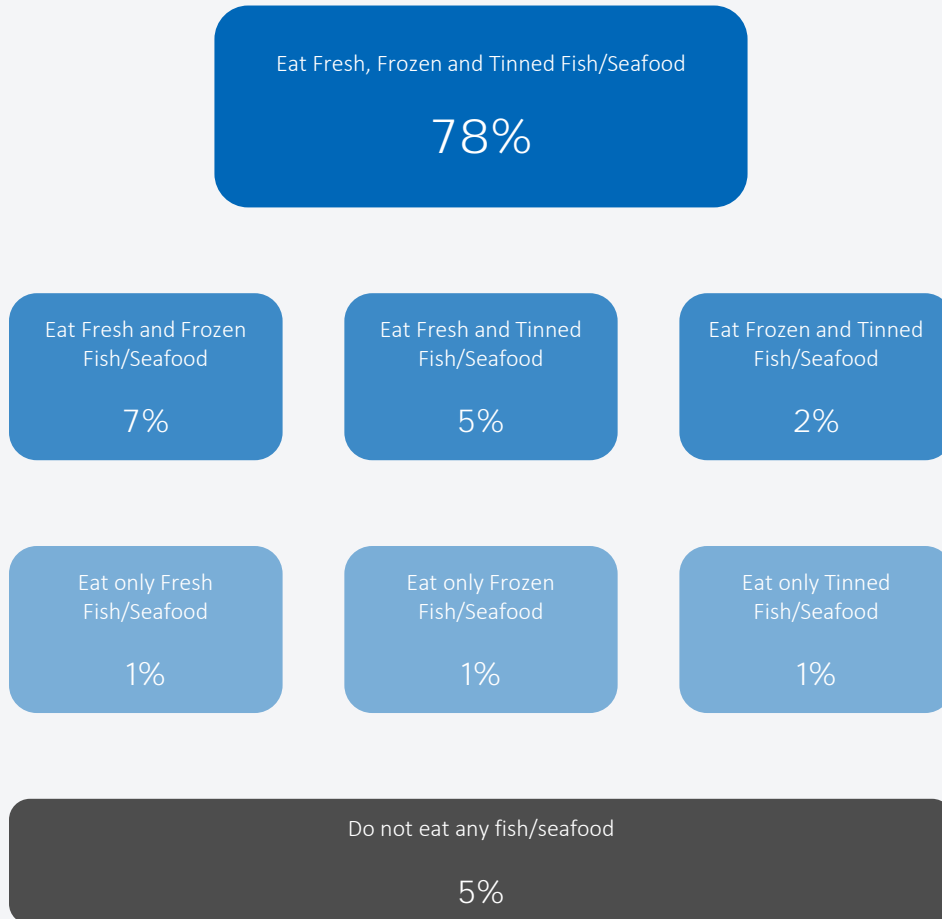
Over the past 12 months, how often would you say that you have eaten seafood for a main meal?

Base: all respondents, n = 2,002



Combinations of consumptions behaviours

Base: all respondents, n = 2,002



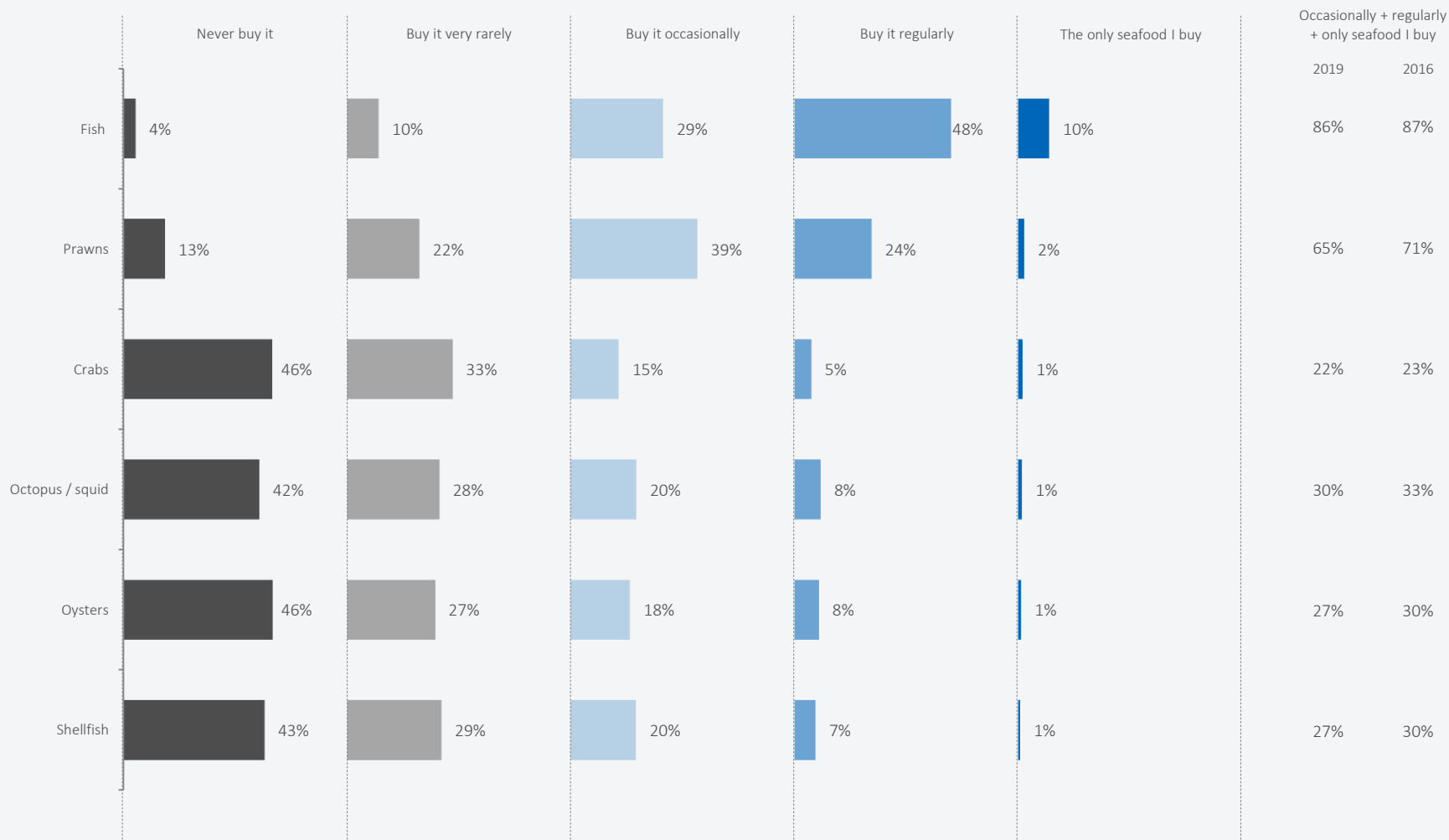
The **majority of Australian consumers** do consumer seafood in most forms – fresh, tinned and frozen. (but obviously in different volumes and with different frequencies).

The uplift in frozen seafood sales (as reported by Nielsen) has also been reflected in this research suggesting a small change in the consumption habits.

Just 5% of Australian consumers reported they did not eat any fish or seafood. This result has remained largely unchanged since the 2016 research.

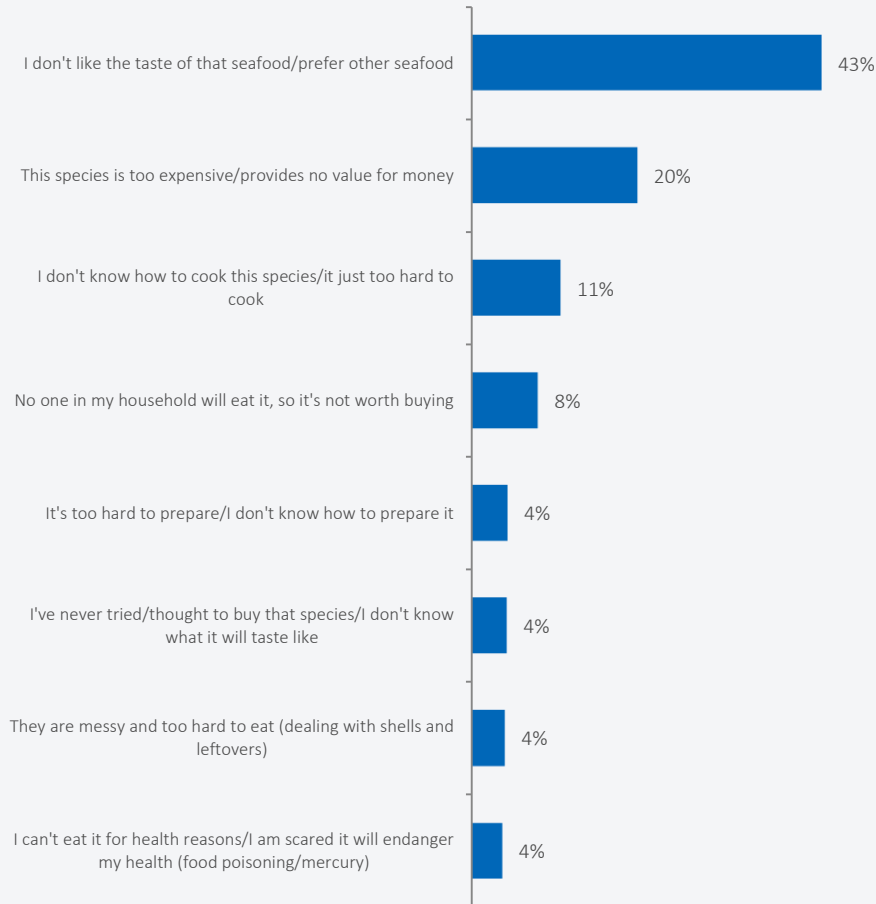
When you buy fresh seafood, what sorts of seafood do you usually buy?

Base: all respondents who eat seafood, n = 1,902



What is it about these species that stops you from buying?

Base: all respondents who eat seafood but don't buy a particular sort of seafood, n = 1,237



Results above exclude responses accounting for <4% of total responses.

Some of what they said...

"These fresh seafood items are on the expensive side and I personally do not eat oysters. We consider these foods as a delicacy because no one in our family would worry too much if we were not eating these expensive foods for dinner or lunch."

"Personally, our family enjoys these foods on occasion and may purchase these types of meals in a restaurant, however they can be quite expensive to buy in the supermarket and I often find it intimidating to cook with these products."

"No real reason, they just don't appeal to me. I'm never sure about the freshness of prawns, crab is 'fiddly' to eat, not really keen on octopus or oysters, and I'm probably too lazy to extract the 'meat' from shellfish!"

"I did not know how to prepare them. I eat them when cooked by friends. My location is not near the coast and the quality of fresh seafood available is significantly inferior than at the coast or in Sydney."

"Price and not being the best cook of octopus or squid. Crabs are hard work to eat and I'm not interested in shellfish apart from Oysters which a friend gives/sells to me from their relations in Ceduna."

"Don't like the taste of oysters. Shellfish don't seem to love me back. Ate too much squid in my 20's and now don't enjoy it. Crab is a lot of expense for very little meat."

"I don't eat Oysters - I don't like them. Crabs - I have only ever eaten fresh caught crabs. Shellfish - not a huge fan so if there is other seafood to choose from I will."

"Oysters is the taste, shellfish I need a recipe for and octopus and crabs are too expensive for our family budget. We only buy prawns occasionally as my son loves them."

"I don't like these foods. My family don't like them enough for me to go to the trouble of preparing them in a meal. They are also too expensive for my budget."

"Crab is too fiddly to eat properly and I only bother with octopus if I order it at a restaurant as I don't really know how to cook it properly at home."

"Excluding Calamari and Crabs which are very expensive and is the main reason I do not buy it. I do not like Octopus or most shellfish."

What is it about these species that stops you from buying?

Base: all respondents who eat seafood but don't buy a particular sort of seafood, n = 1,237

Taste (perceived or experienced) together with **price** look to be the main inhibitors for people trialling different types of seafood.

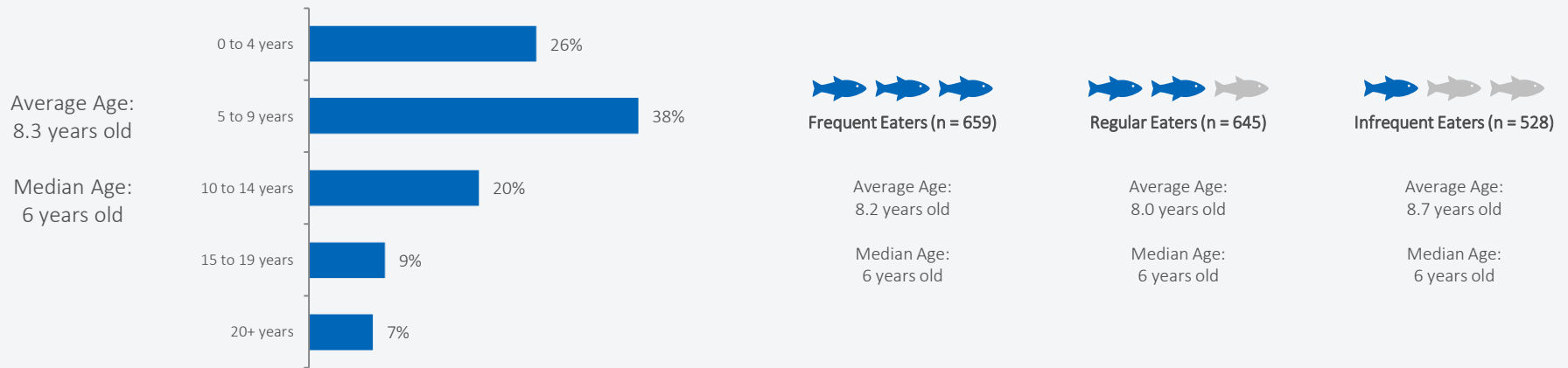
The research also shows consumers are largely conservative when trialling different types of seafood.

Never buy...	At least one of the species	Fish	Prawns	Crabs	Octopus / Squid	Oysters	Shellfish
<i>Base</i>	1237	73	244	870	795	873	826
I don't like the taste of that seafood/prefer other seafood	43%	34%	50%	40%	46%	49%	44%
This species is too expensive/provides no value for money	20%	21%	15%	25%	18%	19%	22%
I don't know how to cook this species/it just too hard to cook	11%	7%	5%	12%	13%	9%	10%
No one in my household will eat it, so it's not worth buying	8%	7%	6%	7%	8%	9%	8%
It's too hard to prepare/I don't know how to prepare it	4%	0%	4%	6%	4%	3%	4%
I've never tried/thought to buy that species/I don't know what it will taste like	4%	3%	4%	4%	5%	5%	5%
They are messy and too hard to eat (dealing with shells and leftovers)	4%	0%	1%	5%	2%	2%	2%
I can't eat it for health reasons/I am scared it will endanger my health (food poisoning/mercury)	4%	5%	9%	5%	4%	4%	4%

Results in the table above reflect those who said they never buy [SPECIES] as well as other species they may possibly buy (e.g. results in the "Fish" column are from those who said they never buy Fish, but may or may not also never buy another species).

You indicated that you were [AGE] years of age. At what age did you first start eating seafood?

Base: all respondents who eat seafood, n = 1,902



When seafood consumers* were asked when they started eating seafood, **18%** started later in life (teenager or adulthood).

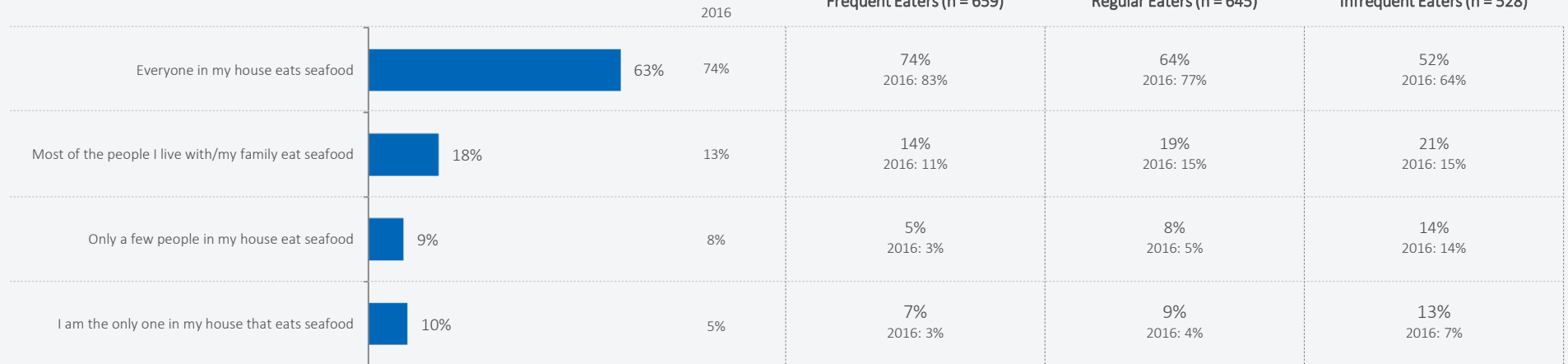
This compares to **44%** as per the FMI's Power of Seafood research†.

*Seafood consumers for the purposes of this result is defined as those who consume fresh, frozen or tinned fish/seafood at least once a month.

†Source: FMI's Power of Seafood 2019, Page 12. Please note that the FMI research is based on US respondents, and also defines the seafood consumer as those who consume at least once a month at home, a restaurant, or elsewhere. This comparison should be treated as indicative only.

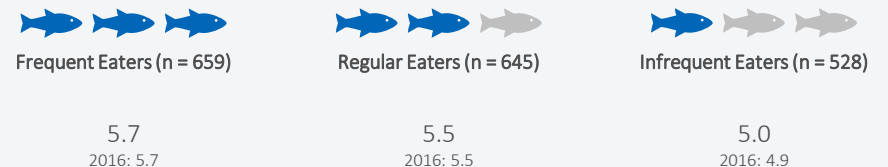
In your household, including yourself, how many people would you say eat seafood?

Base: all respondents who eat seafood, n = 1,902



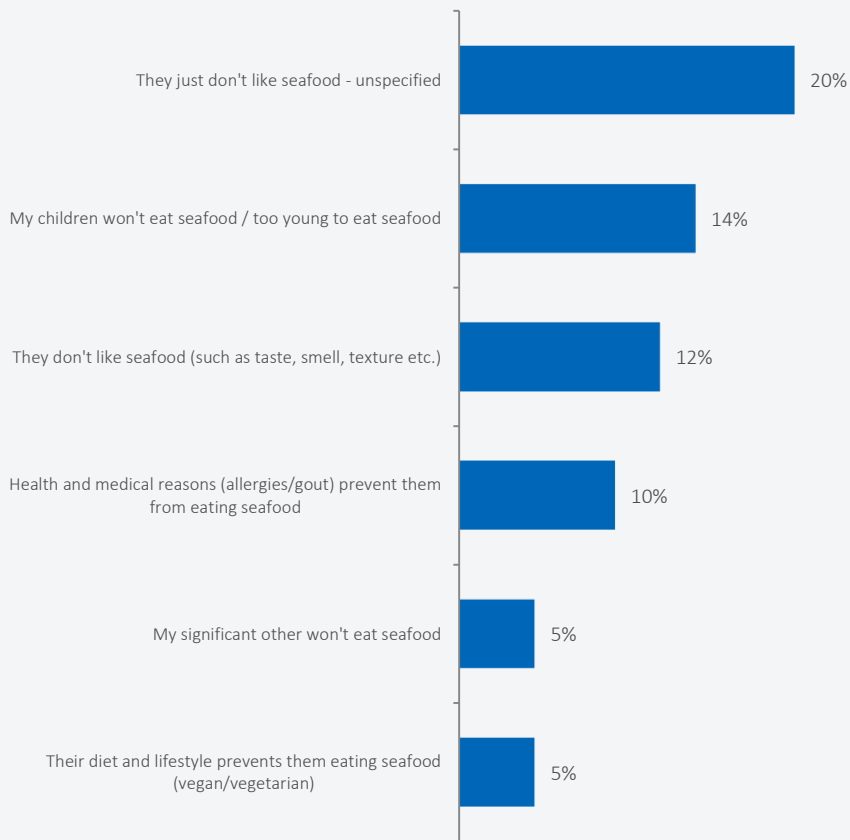
How much would you say the eating habits of others in your household influences your decision to buy seafood?

Base: all respondents who eat seafood, n = 1,902



You mentioned that not everyone in your household eats seafood. Could you please explain to us why this is the case?

Base: all respondents where not everyone in their household eats seafood, n = 696



Results above exclude responses accounting for <4% of total responses.

Some of what they said...

"I have one child that is going vegetarian and I support their choice on the matter. I myself am trying to go that direction, I feel fishing is being over used and we don't have enough supply or fish in the ocean now."

"My kids are not huge fans of seafood unless it comes in batter and chips. My wife and I prefer fresh seafood and seafood that I catch through recreational fishing. We also eat fresh farmed tiger prawns from QLD."

"I have a partner who likes to fish but can't stand to eat it. He says it's too salty and often still has bones. He eats canned tuna but nothing else. Bad experience of choking on fish bones when he was younger."

"This is because one of my children can't eat seafood, as they are allergic, and thus the rest of the family don't consume it so as not to taunt the other."

"For his 21st my husband went to a seafood restaurant here and got food poisoning which he's blamed on the seafood. So he doesn't eat seafood."

"My husband hates seafood of any kind and does not eat it. I only eat fish (usually white-fleshed) and I do not like shellfish of any kind."

"I have a very fussy teenager who wouldn't dare even try it, smells like cat food, all of it apparently. The rest of us like it."

"My husband does not like seafood which is why it is not cooked very often as it makes it difficult cooking separate meals."

"I eat seafood, my partner will only eat fish (no prawns, mussels, etc) and my 1 year old does not eat seafood."

"One of the people in my household doesn't like seafood, the other only likes certain types of seafood."

"Husband doesn't like seafood at all. My son is just learning to eat them. I enjoy seafood very much."

"I never know what to buy and it's got to have no bones and the smell of it sometimes is too much."

"Young daughter refuses to eat seafood and picks at food but does the same with other food groups."



Detailed Results
The Purchasing
Experience



The Purchasing Experience

what consumers are saying. . .



60% (up from 57% in 2016)

Said supermarkets as the location they purchase seafood from most often.



76%

Usually buy the same types of seafood every trip, or buy a few different types of seafood and don't tend to try anything new or different. The results reflect that consumers are very conservative and narrow in their choice of seafood options.



2019

27%

Get better value for money buying seafood compared to buying meat

2016

24%



1 in 5

Were typically impulse purchasers -----> **56%**

Of these impulse purchasers are influenced if the seafood is a good price.



7.1 (out of 10) - Overall confidence in buying seafood

- 7.4 – Buying fresh seafood from main shopping location
- 7.3 – Nutritional benefits of seafood
- 6.9 – How to know the freshness/quality of seafood

If you went looking for information about how and where to buy seafood, which of the following have you or would you use?

Base: all respondents who eat seafood, n = 1,902



Frequent Eaters (n = 659)



Regular Eaters (n = 645)



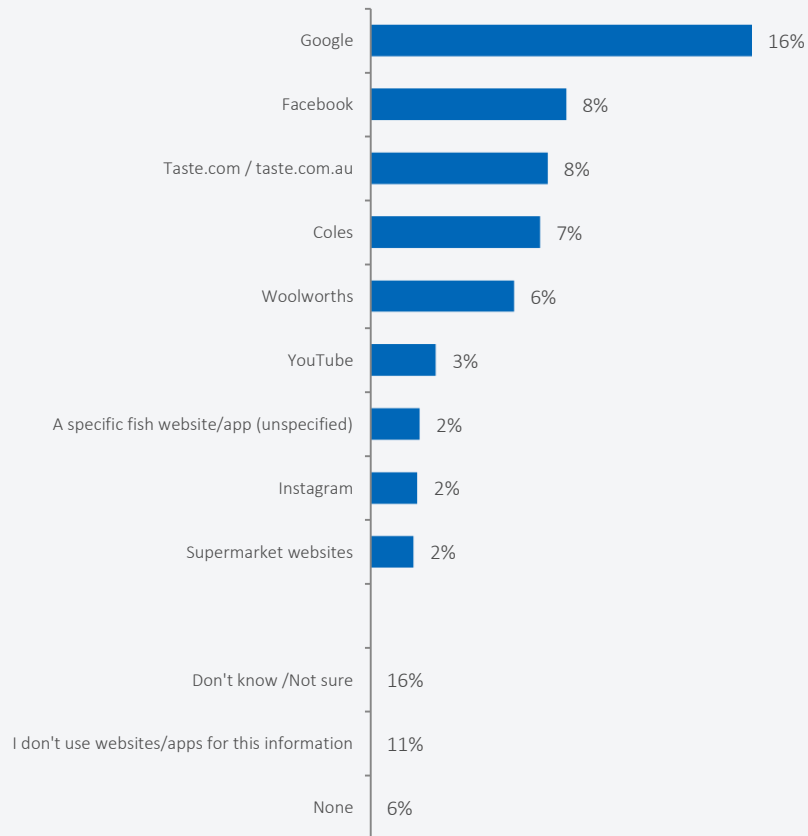
Infrequent Eaters (n = 528)

		Frequent Eaters (n = 659)	Regular Eaters (n = 645)	Infrequent Eaters (n = 528)
Friends	46%	46%	48%	44%
Supermarket websites / apps	34%	34%	37%	31%
Cooking websites / apps	32%	34%	33%	29%
Seafood market websites / apps	26%	30%	27%	21%
Seafood specific or fishing websites / apps	21%	25%	21%	16%
Cooking shows (Masterchef, My Kitchen Rules) – their shows, websites and apps	17%	21%	19%	11%
Well known chefs and cooks (websites, apps, or social media)	14%	16%	16%	9%
Websites with information from people in the fishing industry	14%	18%	12%	11%
Well known influencers/celebrities/personalities (websites, apps, or social media)	6%	7%	5%	4%
Other (please specify)	12%	13%	11%	13%

*Multiple choice question. Results may not add to 100%.

If there were one or two websites, apps, or social media feeds you use most often when looking for information on how and where to buy seafood what would they be?

Base: all respondents who eat seafood, n = 1,902



Some of what they said...

"General google search. If there was a seafood market finder etc. that had info on where to but fresh seafood to buy off boats or at jetty/port markets I would def use it and go as a weekend outing."

"Just through Coles & Woolworths catalogues, which I receive via email. I'm not really aware of a fishmonger in my town, and the Woolworths purchase I made for Good Friday made a terrific meal!"

"Wouldn't use any websites seafood or food in general is not something I'd spend ridiculous amounts of time on, I usually purchase all my groceries and other items at the local plaza."

"I'd use an app from the Fishing Industry and a website for everyday people like me can find out about how, were and what is done to the seafood we buy, procedures etc."

"Any feed on sustainable fishing, there are heaps of accounts out there in Instagram I follow that are about sustainable fishing among other types of sustainable living."

"Food blogging from local food critics, Facebook and local council / recreational sites for reviews and current food rating statuses."

"Facebook have a local fishing company that sells it locally and go to the page for daily specials. Taste.com always good for recipes."

"I simply go to Google and click on the search button to see what is being talked about on various sites."

"I would never look for seafood information including where to buy it. Not sure why anyone would?"

"I usually just use Woolworths and Coles, the websites provide recipes for using their seafood."

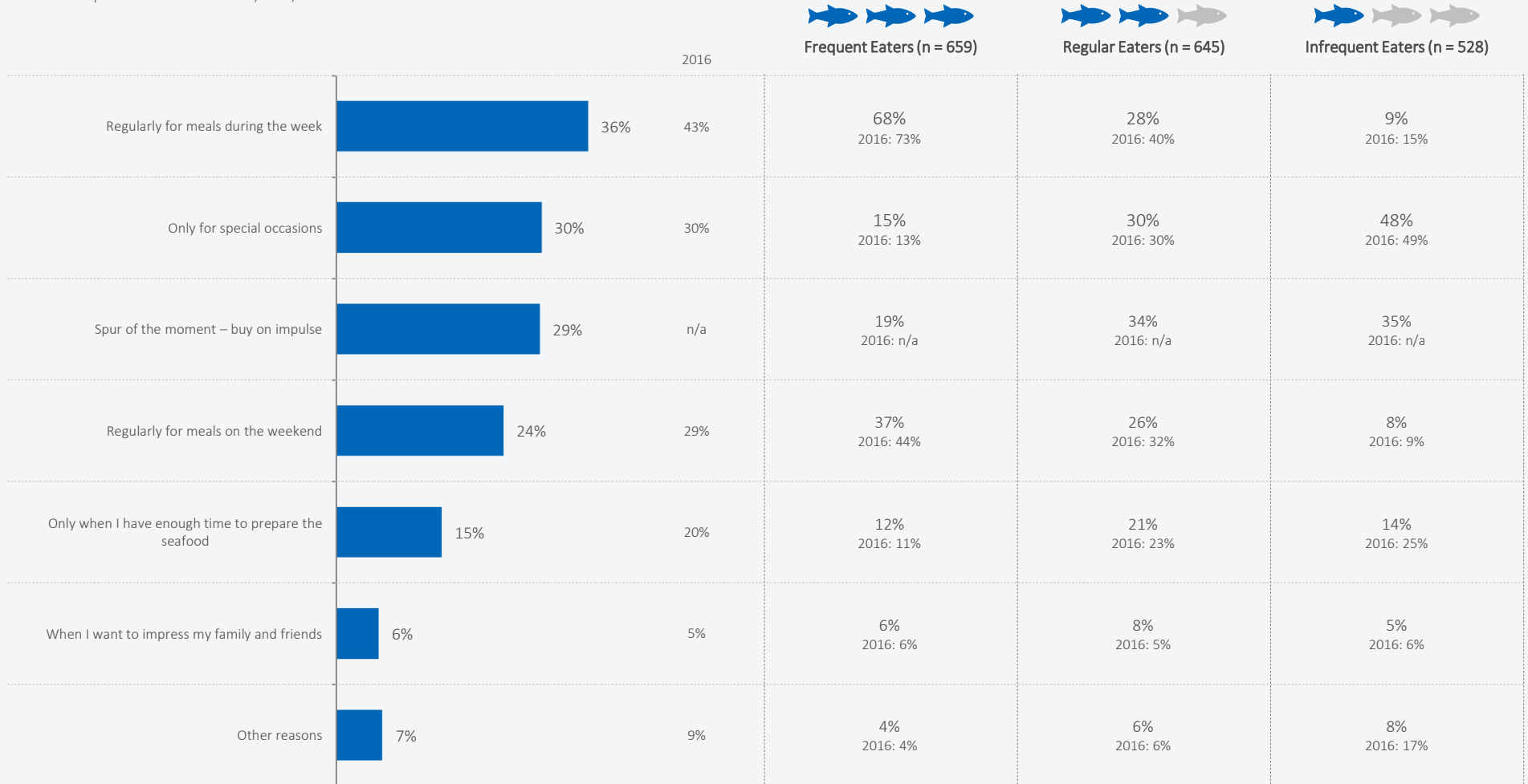
"Ones that appeared genuinely concerned with the sustainability of the industry as a whole."

"I only use Google search engine to look of any and every kind of food that I want to buy."

Results above exclude responses accounting for <2% of total responses.

Which of the following best describes when you buy fresh seafood?

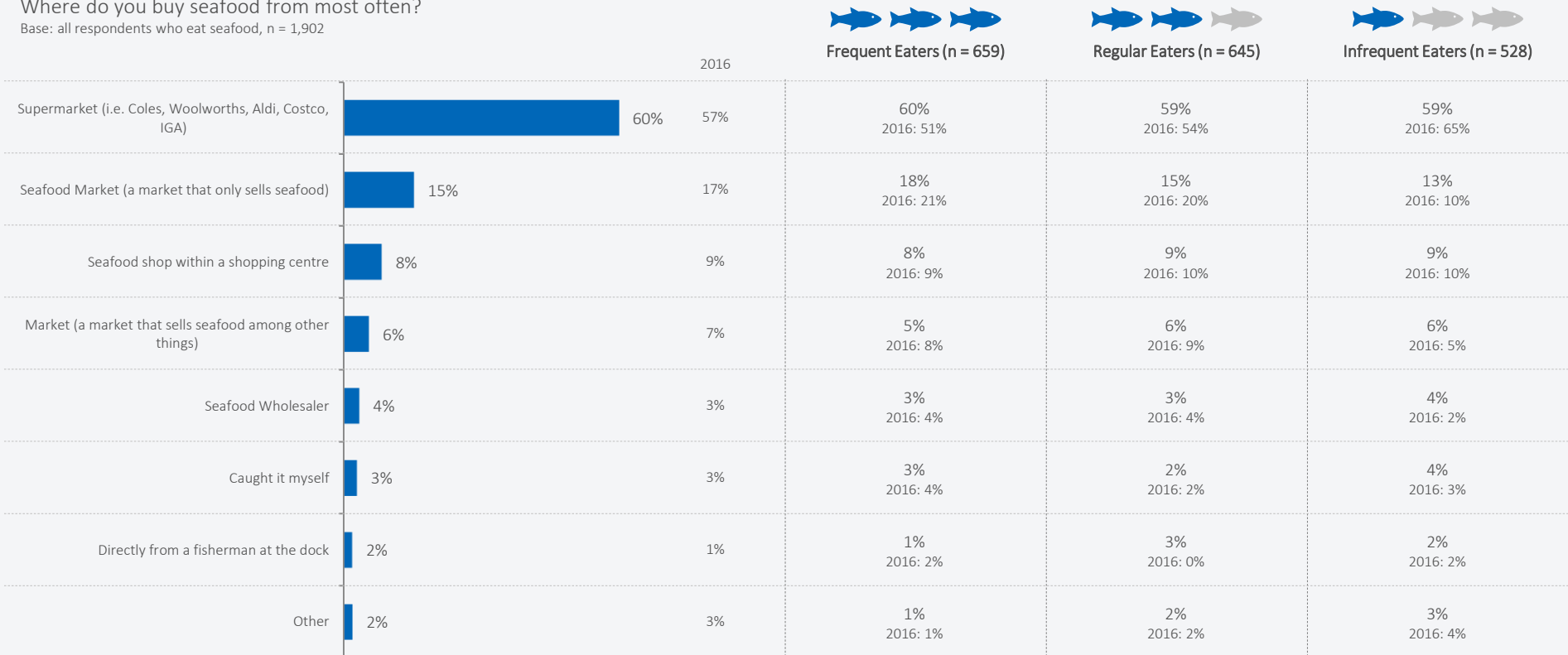
Base: all respondents who eat seafood, n = 1,902



*Multiple choice question. Results may not add to 100%.

Where do you buy seafood from most often?

Base: all respondents who eat seafood, n = 1,902



When seafood consumers were asked where they buy seafood from most often, **60%** mentioned the supermarket with a further **15%** mentioning a seafood market.

This compares to **60%** for supermarket and **20%** for supercenter as per the FMI's Power of Seafood research†.

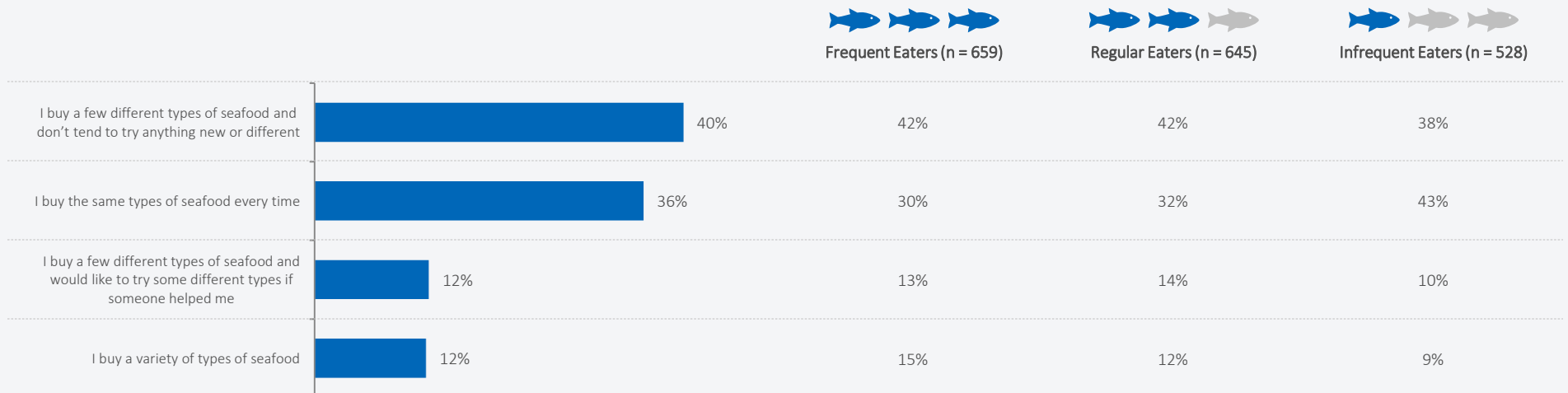
†Source: FMI's Power of Seafood 2019, Page 16. Please note that the FMI research is based on US respondents, and also defines the seafood consumer as those who consume at least once a month at home, a restaurant, or elsewhere. This comparison should be treated as indicative only.

Which of the following best describes what you do when buying seafood to prepare at home?

Base: all respondents who eat seafood, n = 1,902

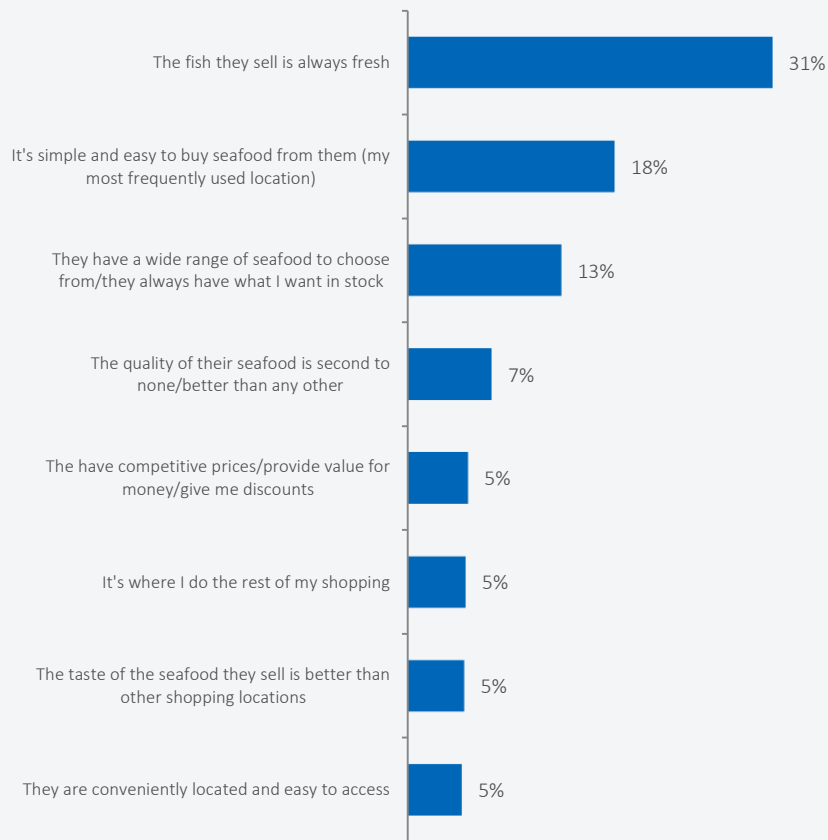
The results reflect that consumers are very **conservative and narrow** in their choice of seafood options.

Opportunities to encourage and assist consumers to explore and trial different seafood options should be explored further.



Other than for the price, what do you like **most** about buying fresh seafood from [LOCATION]?

Base: all respondents who eat seafood, n = 1,902



A random sample of 50% of answers was selected for this analysis. Results above exclude responses accounting for <4% of total responses.

Some of what they said...

"I like buying fresh seafood because I feel like it cooks a lot more nicely than frozen seafood. I also like that I can choose the size of fillet that I want instead of just getting what I'm given in the packet."

"The primary reason is that it is so convenient. Often times I don't have time to go to a completely different store, especially since our local fish store is quite far from the local supermarket."

"You can't get any fresher than when it is caught, cleaned and cooked all on the same day. also it usually involves 3 generations of my family standing on a beach fishing together. Now that is bonding!"

"Different types, sizes, varieties etc. For example when you buy prawns you can get cooked, peeled, deveined, tail on, just meat, fresh and marinated, in a sauce, frozen, refrigerated etc."

"It is a trustworthy source. The fish are local and clean (not imported from dodgy fish farms). They are also provided to me in a form of my choosing, usually boned and filleted."

"You can see clearly what you are buying and staff usually are quite good when you ask I don't go to fish markets I have medical reasons as well and don't eat much seafood."

"I like that seafood is a healthy option instead of red meat, also seafood has a different flavour when eating, it's healthy, easy to cook, good for special occasions."

"Don't always love it, when I have time I prefer to go a specialty store but mainly go to the big supermarkets because they're convenient for after work shopping."

"The fact that it's fresh and has not been handled by a number of different parties, where I would not know how it has been handled and stored, and for how long."

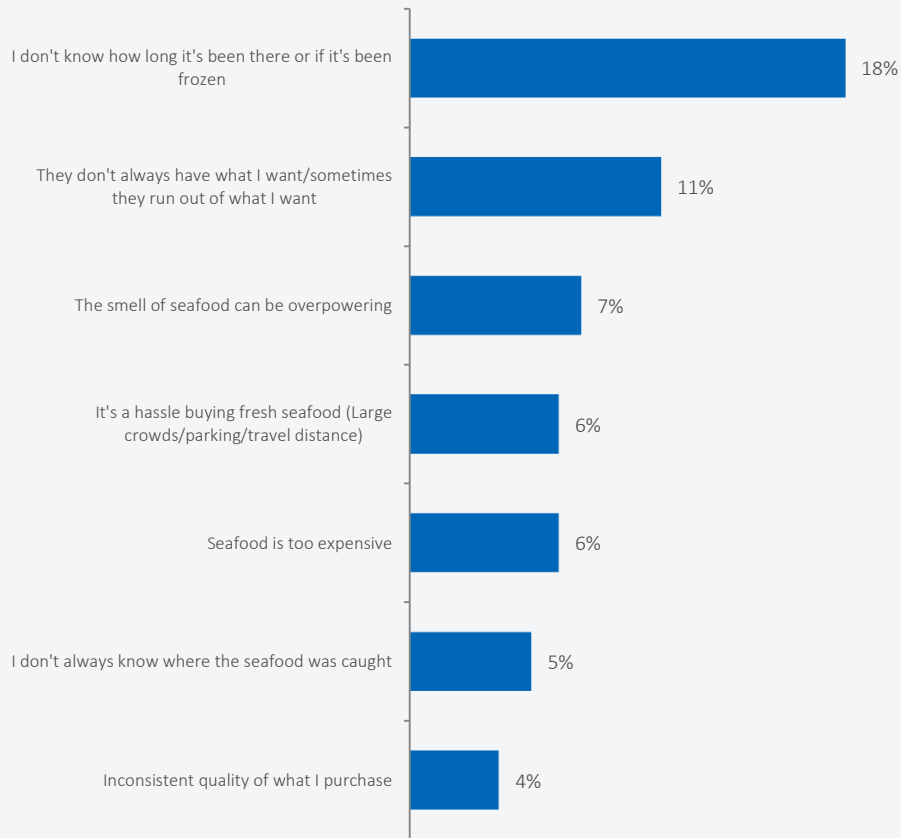
"Ease of buying, am at supermarkets several times a week which are 5 to 10 minutes away. Also consistent quality and reasonable variety of types of fish we buy."

"There is usually plenty of choice in the type of seafood I like to buy, which is something that is reasonably mild in flavour, and is from Australian waters."

"Store is convenient to home, I can check the quality of the seafood in the delicatessen, origin labelling of product, look for Australian seafood!"

Other than for the price, what do you like **least** about buying fresh seafood from [LOCATION]?

Base: all respondents who eat seafood, n = 1,902



A random sample of 50% of answers was selected for this analysis. Results above exclude responses accounting for <4% of total responses.

Some of what they said...

"I think it is the way it is presented in the supermarket the seafood is packed on top of each item so it always looks like the one underneath is the oldest or squashed. And they always take the one from underneath, why they do that I am not sure."

"Not as much information on where the produce comes from etc. Used to live in an area where there was a great seafood supplier who could provide a lot of information on the produce, what was seasonal, local etc."

"For the most part, there is nothing I don't like about buying from a supermarket, however sometimes I may second guess the quality of the produce and occasionally there may be lack of product available."

"Sometimes the smell is a bit overwhelming, can be crowded and not everything is available at times particularly around Christmas, everything is wet and dripping especially the floor."

"It is becoming very expensive to buy fish. We are told we should eat fish regularly but sometimes it gets too expensive so I can only buy the cheapest available."

"Much of what they sell is technically not fresh but rather is frozen fish that has been thawed. They generally do not mark them as one or the other."

"Too much imported seafood - BASA (!!!!) from Vietnam, barramundi from Africa or Blue Grenadier from New Zealand and other seafood from Taiwan???"

"Fresh value for money seafood are not available regularly, when supermarket jacked up the price to coincide with Easter or Xmas periods."

"There's a lack of variety, particularly of fish, so you have to just settle for the limited choices available at the deli counter."

"Never really sure where the product originated from - never confident it hasn't been defrosted previously - how old is it?"

"I find that seafood is getting very expensive but if you like to put variety in your diet then you must include seafood."

"Can they really be trusted to provide fresh product? (We know the fruit and veg is never as fresh as they claim . . .)"

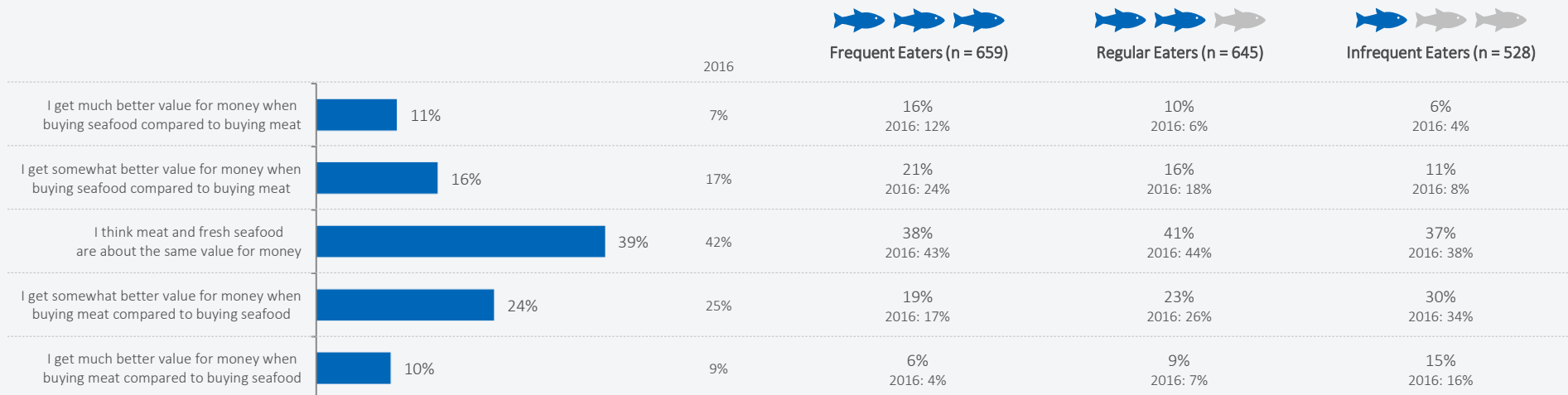
Thinking about the value for money you get when purchasing fresh seafood vs meat (beef, chicken, pork, etc.), how would you rate the value for money of buying fresh seafood vs meat?

Base: all respondents who eat seafood, n = 1,902

The 2019 results suggest a **small shift** on consumer attitudes around the comparative (and favourable) pricing of seafood to other proteins.

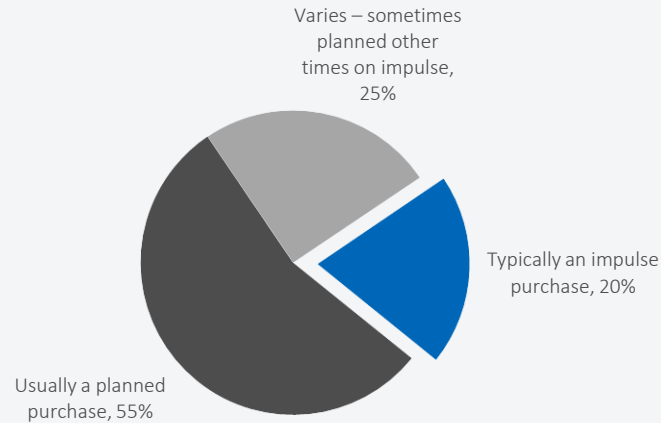
The shifts are likely to continue to take time to re-set the consumer perceptions.

The changes do however indicate a **more positive disposition** to the pricing of seafood compared to other proteins.



Are your seafood purchases typically an impulse or a planned purchase?

Base: all respondents who eat seafood, n = 1,902



15%
Typically an impulse purchase



22%
Typically an impulse purchase



25%
Typically an impulse purchase

One in five seafood consumers are typically an impulse buyer of seafood. Not surprisingly, this is more prevalent among the less regular seafood eaters.

The challenge for industry is to **leverage** the impulse nature of many purchases while at the same time shifting consumers purchasing behaviours to a more **planned** basis.

Over half (**55%**) were planned purchasers – this compares to **62%** as per the FMI’s Power of Seafood research†.



63%
Usually a planned purchase

22%
Varies – sometimes planned other times on impulse



49%
Usually a planned purchase

29%
Varies – sometimes planned other times on impulse



51%
Usually a planned purchase

25%
Varies – sometimes planned other times on impulse

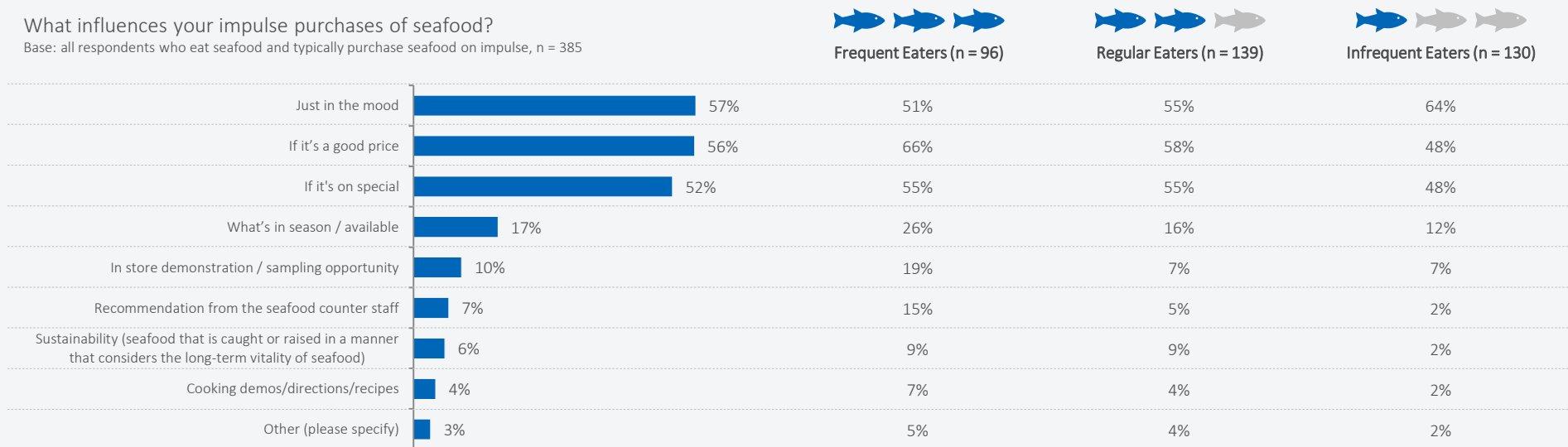
†Source: FMI’s Power of Seafood 2019, Page 20. Please note that the FMI research is based on US respondents, and also defines the seafood consumer as those who consume at least once a month at home, a restaurant, or elsewhere. This comparison should be treated as indicative only.

20%

were typically impulse purchasers

What influences your impulse purchases of seafood?

Base: all respondents who eat seafood and typically purchase seafood on impulse, n = 385



*Multiple choice question. Results may not add to 100%.

When seafood consumers who are impulse purchasers were asked what influences their purchases of seafood, **57%** said it was just because they were “in the mood”, whilst **56%** mentioned if it was a good price.

This compares to **68%** for “in the mood” and **65%** for a good price as per the FMI’s Power of Seafood research†.

†Source: FMI’s Power of Seafood 2019, Page 20. Please note that the FMI research is based on US respondents, and also defines the seafood consumer as those who consume at least once a month at home, a restaurant, or elsewhere. This comparison should be treated as indicative only.

80%

were either planned purchasers or varied between impulse and planned

What, if anything, would influence your impulse purchase of seafood?

Base: all respondents who eat seafood and do not typically purchase seafood on impulse, n = 1,517



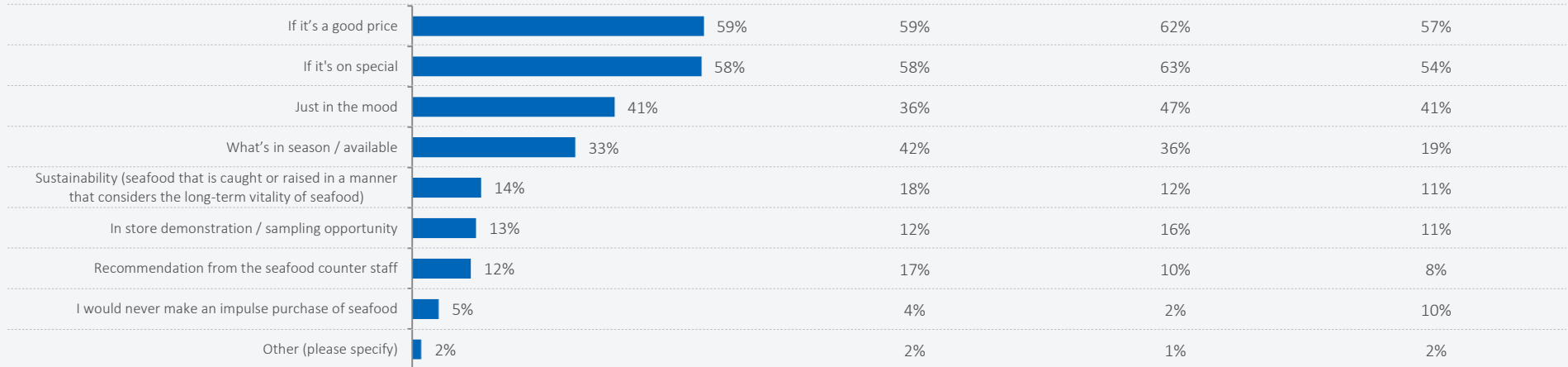
Frequent Eaters (n = 563)



Regular Eaters (n = 506)



Infrequent Eaters (n = 398)



*Multiple choice question. Results may not add to 100%.

Other people have identified things that are important to them when they consider buying seafood. How important are each of the following factors for you?

Base: all respondents who eat seafood, n = 1,902



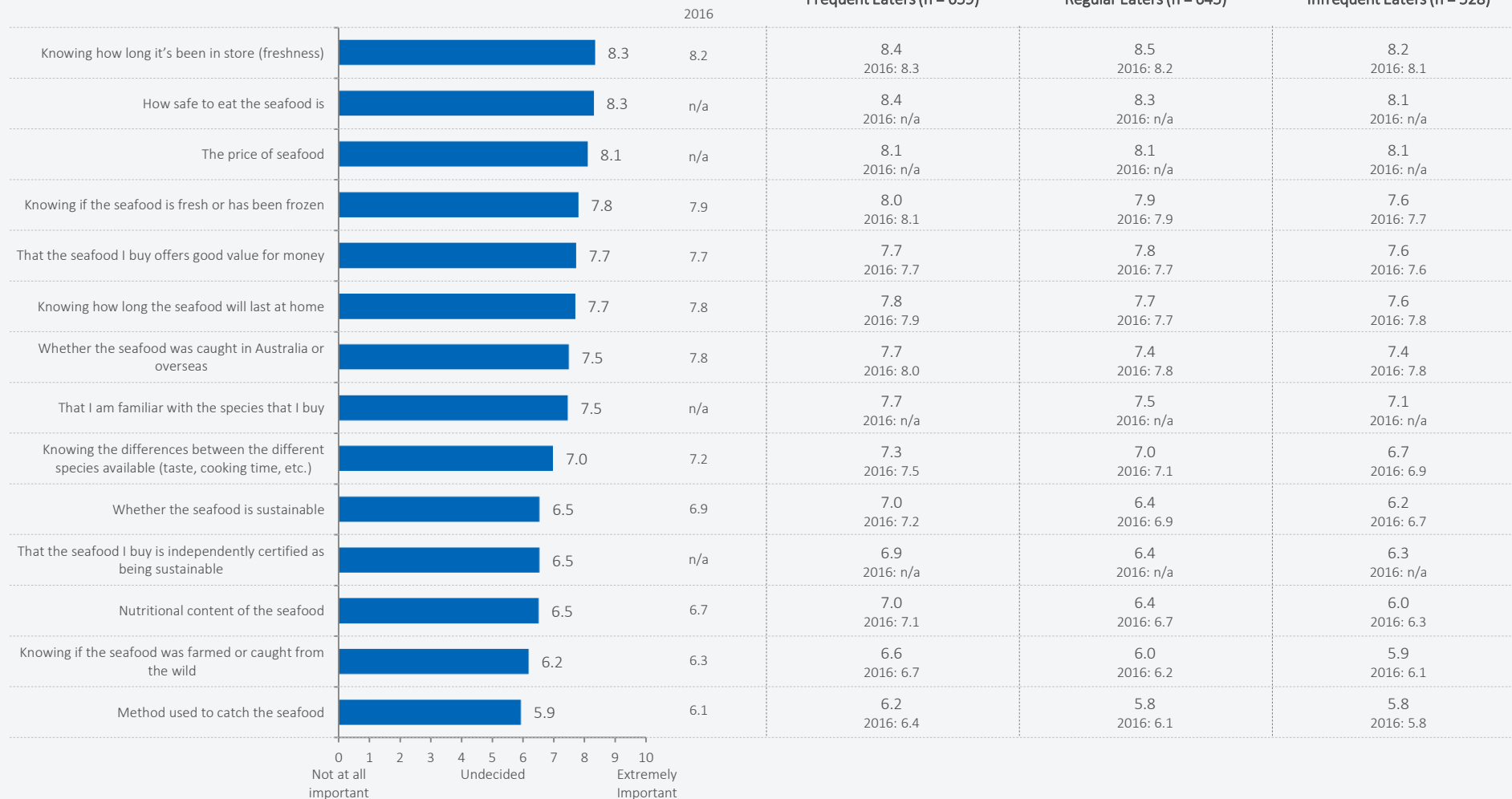
Frequent Eaters (n = 659)



Regular Eaters (n = 645)

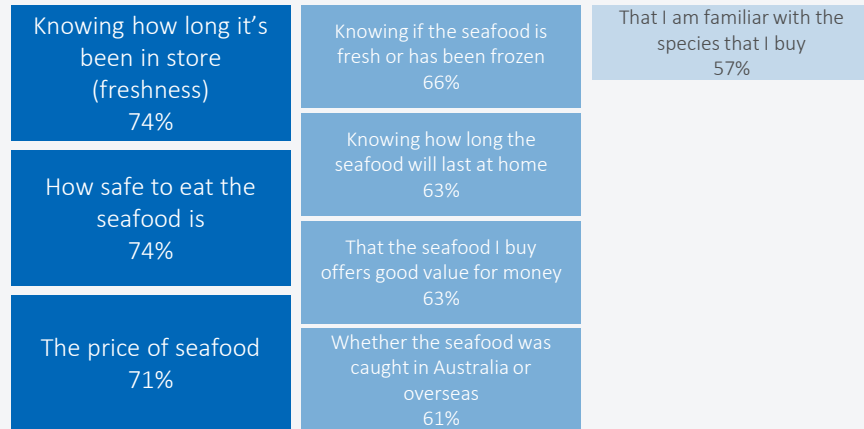


Infrequent Eaters (n = 528)



% rating 8-10 on importance of factors when considering buying seafood

Base: all respondents who eat seafood, n = 1,902

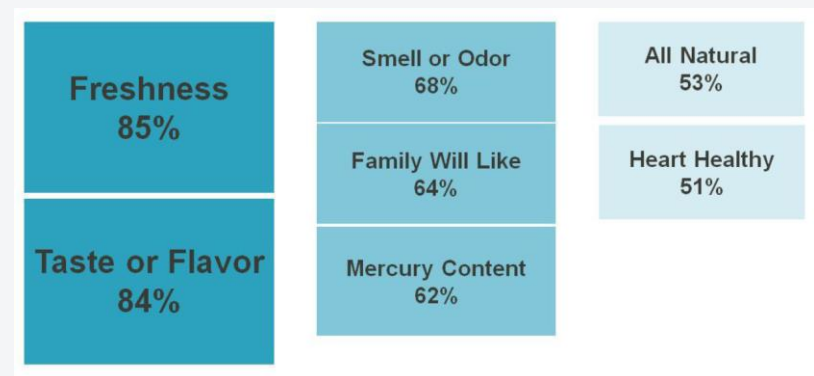
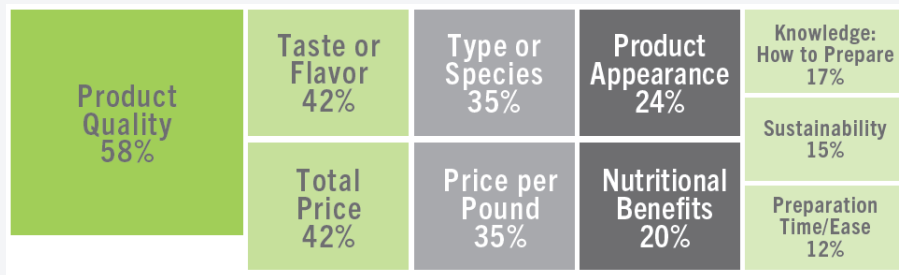


The key purchasing influences of Australian seafood consumers are largely **consistent** with those reported in the US FMI research.

That said, Australian consumers exhibit some cautiousness around issues of **freshness and food safety**.

FMI's Power of Seafood research† - % of those ranking factor as top three in importance (out of 10 factors listed)

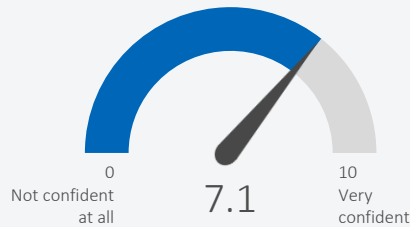
FMI's Power of Seafood research† - % of those reporting factor would have a major impact on their likelihood of purchasing and/or eating seafood



†Source: FMI's Power of Seafood 2019, Pages 21 and 23. Please note that the FMI research is based on US respondents, and also defines the seafood consumer as those who consume at least once a month at home, a restaurant, or elsewhere. This comparison should be treated as indicative only.

Overall, how confident are you in buying seafood?

Base: all respondents who eat seafood, n = 1,902



7.8



7.3



6.4

How confident are you around the following aspects of buying seafood?

Base: all respondents who eat seafood, n = 1,902

2016



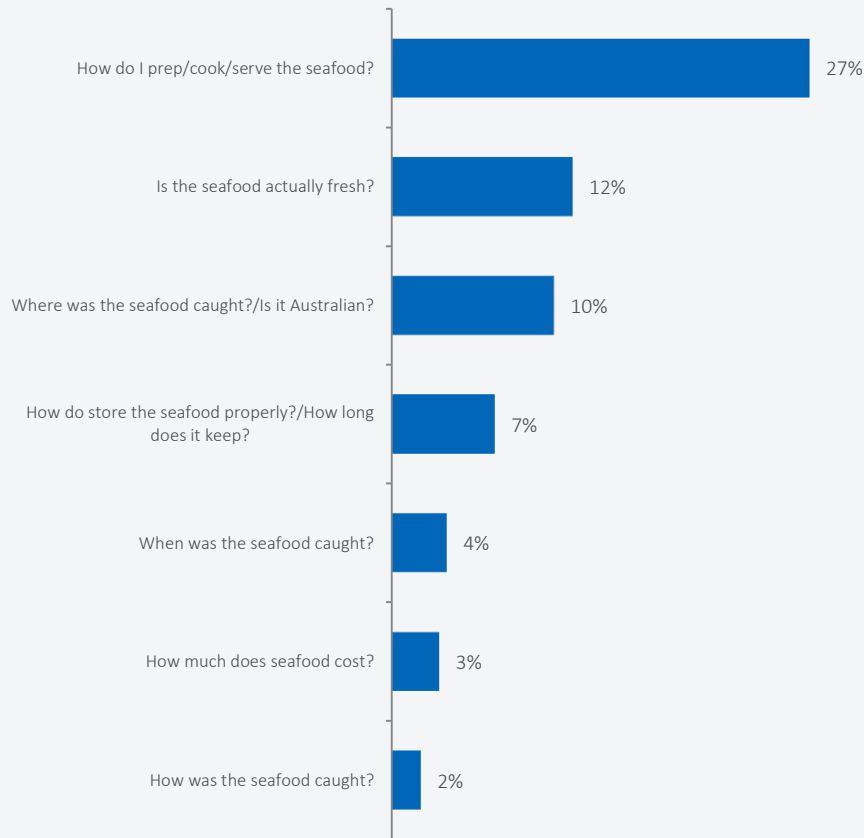
Aspect	2019 Score	2016 Score	Frequent Eaters (n = 659) Score	Regular Eaters (n = 645) Score	Infrequent Eaters (n = 528) Score
Buying fresh seafood from [MAIN LOCATION]	7.4	6.9	7.8 2016: 7.5	7.6 2016: 7.1	6.9 2016: 6.2
Nutritional benefits of seafood	7.3		7.8	7.5	6.7
How to know the freshness/quality of seafood	6.9		7.5	7.1	6.1
Different types/species of seafood	6.6		7.1	6.7	5.9
That staff where you buy seafood are knowledgeable about different types of seafood available	6.4		6.8	6.5	6.0
That staff where you buy seafood are knowledgeable about how to prepare/cook seafood you buy	6.1		6.4	6.1	5.8

The FMI's Power of Seafood research[†] stated that **45%** of seafood consumers thought the seafood counter staff were very knowledgeable, with a further **45%** reporting they were somewhat knowledgeable.

[†]Source: FMI's Power of Seafood 2019, Page 16. Please note that the FMI research is based on US respondents, and also defines the seafood consumer as those who consume at least once a month at home, a restaurant, or elsewhere. This comparison should be treated as indicative only.

What information would help you in buying seafood?

Base: all respondents who eat seafood and rated less than '6' for confidence in buying seafood, n = 424



Results above exclude responses accounting for <2% of total responses.

Some of what they said...

"It is not always stated where it is from, how fresh it is or whether its sustainable. This information would help, I feel nervous asking staff questions, I am more comfortable with written information."

"If the staff at the counter were specialists in that area or was trained to be so as though the staff were fishmongers themselves and had the knowledge you get when you go to the local fishmongers."

"Electric screen showing information on how to buy fish, recipes and how to cook it or flyers or brochures, tasting booths, staff having cooking knowledge."

"Information on whether it is has been frozen or is fresh, what country it has come from and some basic information on the ways in which it can be cooked."

"If I had my parents or brother with me as they love all sorts of seafoods and know all about the industry and would be able to really help me out."

"How to cook, how long can you store it before it loses its freshness, how long do you cook it and what is the best way to cook."

"How to prepare it, how to keep it, how long does it last in the fridge before cooking, recipes and what fish goes best."

"Posters showing different seafood species and where they come from as in country of origin and sustainability i.e. farmed."

"How to know when it isn't fresh anymore, how to fillet a whole fish, how to prepare so it's tasty and not overcooked."

"A chart or system which shows how seafood should look when buying compared to what to what they shouldn't look like."

"How long it can keep in the fridge. How long I can freeze it before use. Simple easy recipes and cooking tips."

"About how to cook the seafood and how price impacts on quality - why certain types of prawns are more expensive."

Would you like to have a better knowledge about...?

Base: all respondents who eat seafood and rated less than '6' for confidence in buying seafood, n = 426



Frequent Eaters (n = 78)



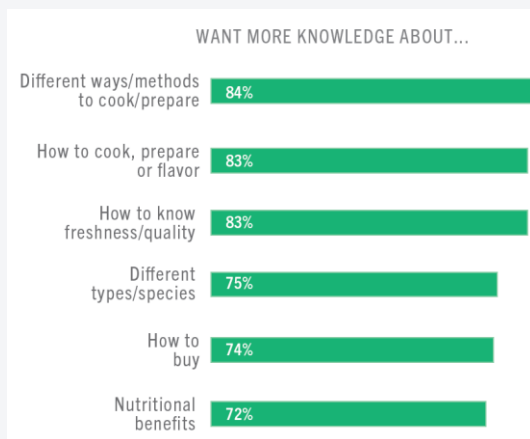
Regular Eaters (n = 126)



Infrequent Eaters (n = 183)

Topic	Overall	Frequent Eaters (n = 78)	Regular Eaters (n = 126)	Infrequent Eaters (n = 183)
How to know the freshness and quality of seafood	80%	82%	88%	79%
How to cook/prepare or flavour seafood	77%	78%	84%	75%
Different ways or methods to cook/prepare seafood	75%	76%	81%	74%
Different types/species of seafood	68%	72%	74%	67%
How to buy seafood	63%	81%	63%	61%
The nutritional benefits of seafood	60%	65%	65%	58%

FMI's Power of Seafood research† - % of seafood consumers wanting to know more knowledge about the following:



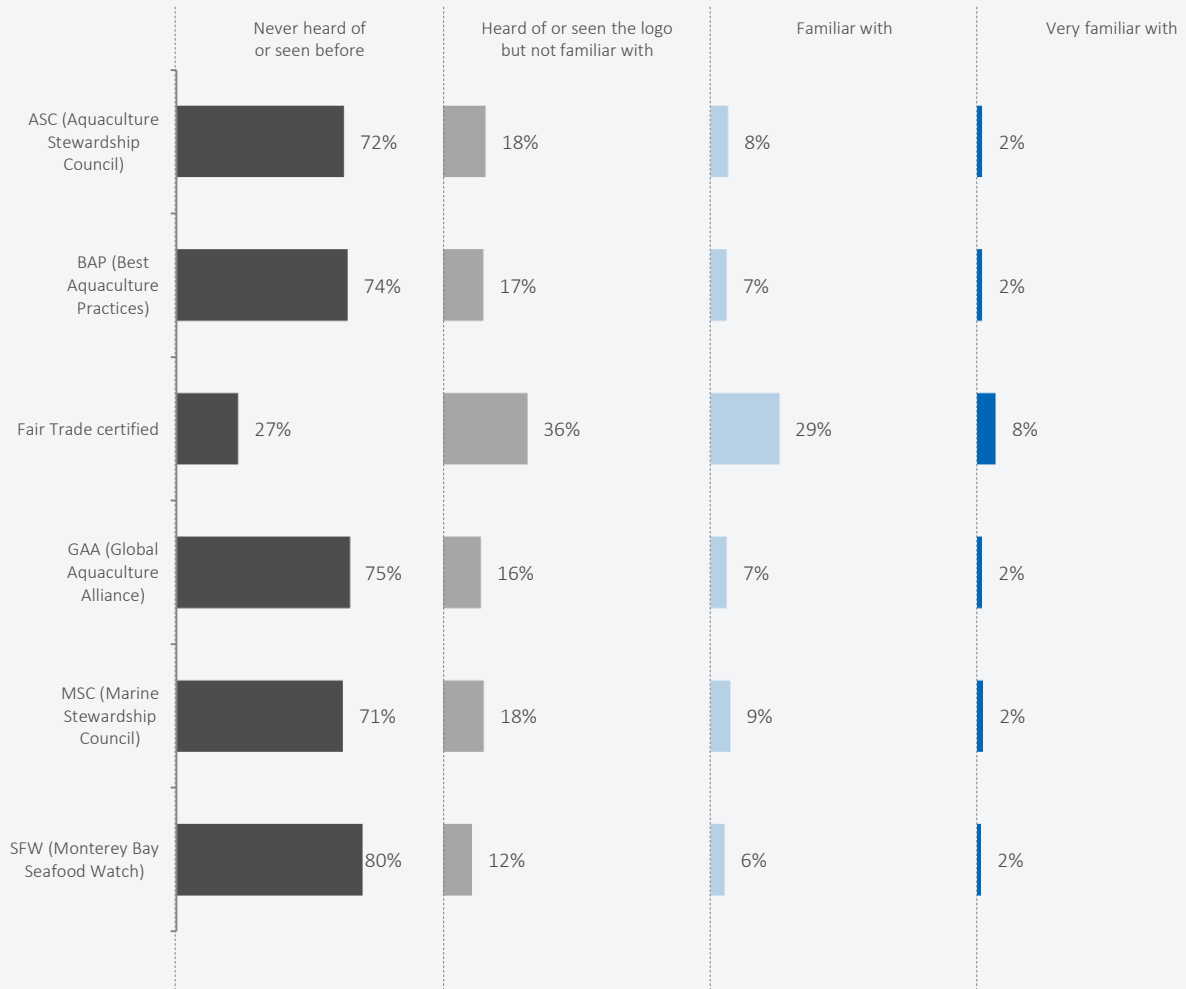
There is a strong 'appetite' among those consumers who indicate they are not confident about buying seafood for more information.

The 'call out' is centred around empowering these consumers to be confident in **knowing the freshness** and quality of seafood and in the different ways of preparing and cooking.

†Source: FMI's Power of Seafood 2019, Page 16. Please note that the FMI research is based on US respondents, and also defines the seafood consumer as those who consume at least once a month at home, a restaurant, or elsewhere. This comparison should be treated as indicative only.

How familiar are you with the following seafood certifications of standards?

Base: all respondents who eat seafood, n = 1,902





Detailed Results
The Consumption
Experience



The Consumption Experience

what consumers are saying. . .



6.4 (out of 10) – Confidence in cooking/preparing seafood

6.0 – How to cook, prepare or flavor seafood

5.9 – Different ways/methods to cook/prepare seafood



What consumers like **MOST** about eating fresh seafood:

55% – Seafood tastes delicious/amazing

22% – Liking all the health and nutritional benefits of eating seafood



What's stopping infrequent eaters from eating **MORE**

OFTEN (scale of 0 – not a problem to 10 – always a problem):

4.8 – The lingering smell of seafood

4.5 – Being careful about eating undercooked seafood

4.1 – The mess it creates when eating



Where consumers go looking for info about how to prepare or cook seafood:

59% – Cooking websites / apps

42% – Friends



What consumers like **MOST**/least about preparing fresh seafood at home:

MOST: 18% – Being in control of what they are eating and knowing the fish is fresh and safe to eat

LEAST: 26% – The smell on fingers and hands, in the waste, and throughout the house

If you went looking for information about how to prepare or cook seafood, which of the following locations would you actually use?

Base: all respondents who eat seafood, n = 1,902



Frequent Eaters (n = 659)



Regular Eaters (n = 645)



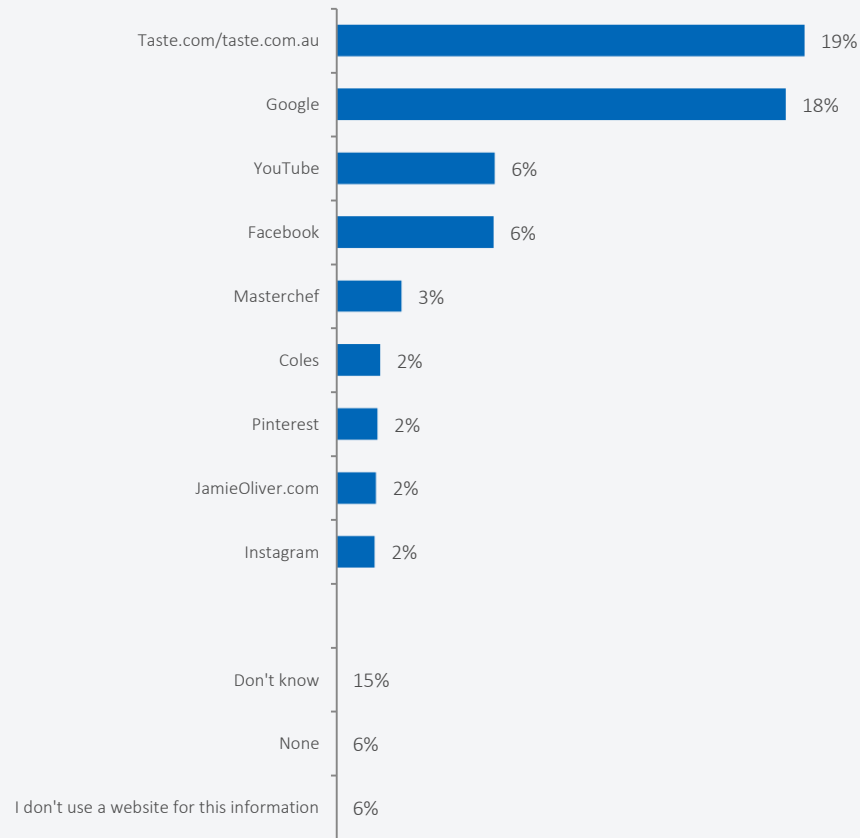
Infrequent Eaters (n = 528)

		Frequent Eaters (n = 659)	Regular Eaters (n = 645)	Infrequent Eaters (n = 528)
Cooking websites / apps	59%	56%	62%	59%
Friends	42%	41%	46%	41%
Cooking shows (Masterchef, My Kitchen Rules) – their shows, websites and apps	21%	25%	23%	15%
Seafood specific or fishing websites / apps	19%	25%	18%	15%
Well known chefs and cooks (websites, apps, or social media)	17%	19%	17%	14%
Review sites on buying, preparing and cooking seafood	16%	18%	17%	11%
Websites with information from people in the fishing industry	10%	13%	9%	8%
Bloggers	7%	9%	7%	5%
Well known influencers/celebrities/personalities (websites, apps, or social media)	6%	7%	6%	5%
Other (please specify)	14%	14%	13%	16%

*Multiple choice question. Results may not add to 100%.

If there were one or two websites, apps, or social media feeds you use most often when looking for information on how to prepare or cook seafood what would they be?

Base: all respondents who eat seafood, n = 1,902



Some of what they said...

"Don't use websites and/or apps. They just trying to get you to become dependent on them and try to get your business. I prefer to use a cookbook by a chef who knows what they are talking about."

"I have on one or two occasions looked up a site but it is not something I do routinely nor very often. I rely on my lifetime of cooking and my tried and true methods. And my Cook Books."

"I most commonly use Facebook and Pinterest when I am looking for recipes, so also having information about how to prepare and cook seafood on the same page/app would be very useful."

"Don't have any, I would just Google and see what comes up. But have never looked online for information on how to prepare or cook seafood. And probably never will."

"I know how to make seafood have been doing it for years, if I want to try something different then I would check with friends or cooking websites or even YouTube."

"Whatever the search results provide. I look at several different ones and choose what I like best at the time. No idea which site it might be though."

"I would never rely on a computer to choose my meal. I would not look at any websites. I do not need technology to tell what I feel like or will eat."

"Again, not being specific here, but would use Google or Bing to type in 'how to prepare or cook (whatever type of fish or seafood I had purchased).'"

"Sites which provide simple recipes with a limited number of ingredients with very clear instructions on how to cook them carefully with success."

"I wouldn't use them. I know what I like and I know how to prepare my seafood. Other people want my recipes after they taste my food."

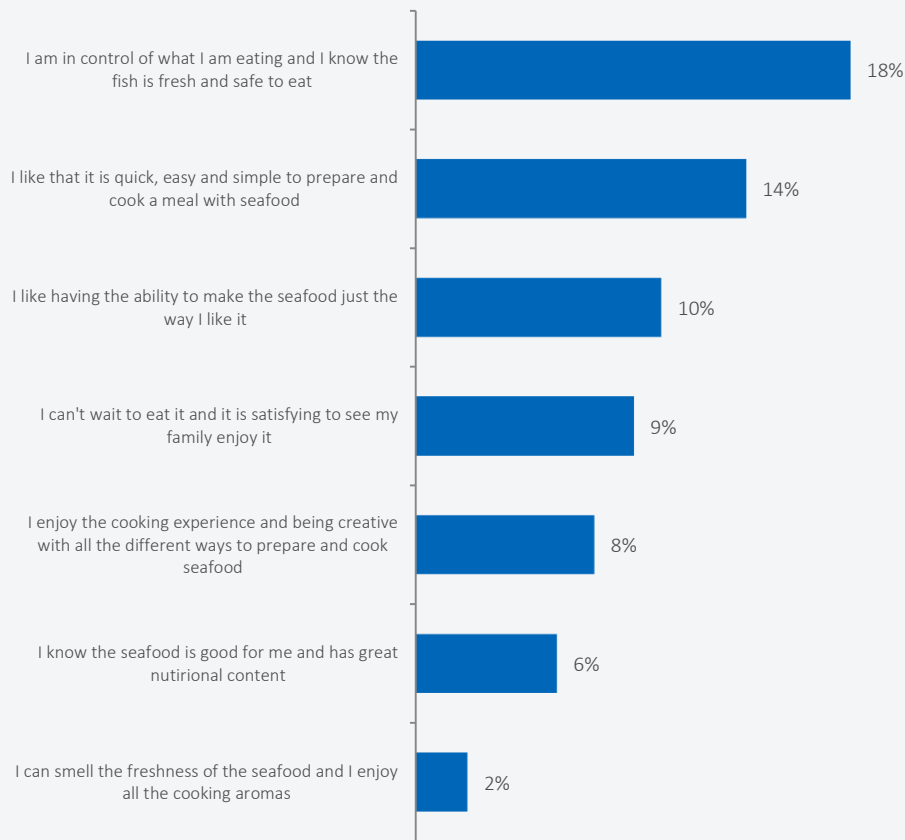
"I would likely look at a YouTube video or whatever top Google search text and image based website I could find for cooking the dish."

"Not too sure. We do look at the store bases recipes and so on e.g. Coles or Woolworths. Also mags such as Women's Weekly are useful."

Results above exclude responses accounting for <2% of total responses.

What do you like **most** about preparing fresh seafood at home

Base: all respondents who eat seafood, n = 1,902



A random sample of 50% of answers was selected for this analysis. Results above exclude responses accounting for <2% of total responses.

Some of what they said...

"I like being able to cook it as much as I prefer. I like fish to be cooked more, it seems, than when it is cooked on TV shows where it only seems to be half-cooked, and therefore if I was going to buy fresh seafood at a restaurant I probably wouldn't be happy with it, but at home I could cook it to the point where I'm happy with it."

"Very versatile - lots you can do with fish to make interesting meals. Healthy. I find it's often too expensive to order at restaurants or I'm otherwise hesitant about whether it will be cooked well so I prefer to cook it myself so I know."

"I get to play with recipes I've seen or have used before I'm a kiwi chef we grew up on seafood from a young age, digging shell fish at the beach, fishing off the rocks & diving for mussels."

"Seafood is tasty and nutritious, quick to prepare and cook, while our family consider it a weekly delicacy. The Seafood we enjoy is versatile with other sides like salad or veggies."

"Brings back memories of fish and chip days on Manly Beach with all the seagulls diving for your chips And frightening the grandchildren. I also know what goes into the meals."

"I like the thought of the nutritional / health benefits. The taste. The specialness. That it's light - a light meal. Great with salad and fruit. Quick to cook."

"I can cook it the way I like it, I can serve it the way I like, I can serve fish (e.g. very large whole fish) which I could not afford to buy in a restaurant."

"Being able to show off my culinary skills and presenting my family and friends with a professionally prepared meal that gives them the wowwwwwww factor lol."

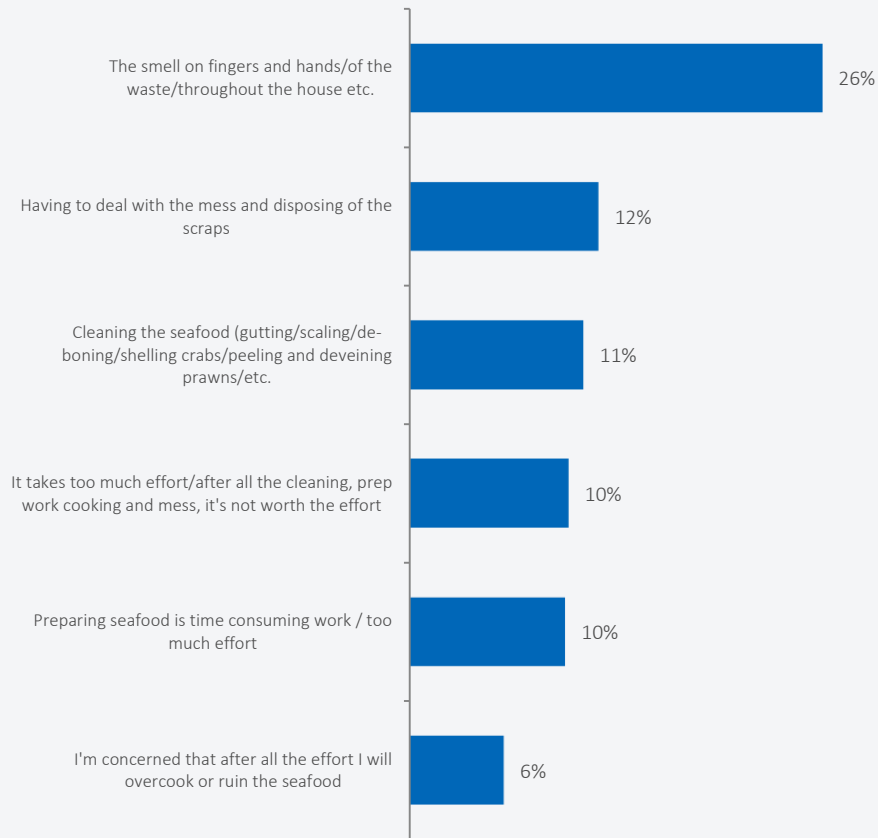
"Knowing what ingredients go into the meal as opposed to buying a prepared meal. Also preparing fresh seafood allows me to be creative with recipe."

"I like being able to barbecue it for a smoky flavour or using fish or seafood in a spicy curry. I like the control I have over the preparation."

"I love cooking and working with fresh, tasty ingredients; it is usually quick and easy to cook seafood and make a delicious recipe."

What do you like **least** about preparing fresh seafood at home

Base: all respondents who eat seafood, n = 1,902



A random sample of 50% of answers was selected for this analysis. Results above exclude responses accounting for <2% of total responses.

Some of what they said...

"Cleaning the guts out of fish and squid; Taking off the fish scales; the seafood shells e.g. prawn shells, fish scales, fish guts etc. stink out my bin; Seafood can be quite messy to cook sometimes and makes my kitchen kind of dirty."

"It is a bit oily and splattery when cooked on the grill or stovetop - it makes more of a mess as I don't have a lot of pans and pots suitable for cooking fish, and it is important to clean up as it smells strongly."

"There is a fine line between under and overcooked fish, and this is where I tend to struggle the most. Also, I get very paranoid about bones in the fish."

"The smell of the fish through the kitchen/house - raw and the cooking smells. We usually cook fish outside on the BBQ or if inside, in the oven."

"Some things take a very long time to prepare e.g. shelling and deveining prawns, sometime preparing squid takes too long. Deboning some fish."

"Time required to prep for the meal which includes cleaning, cutting and marinating the seafood for our meal. Takes a lot of time."

"The amount of mess it makes. And the smell lingering in the air/surfaces when you are filleting the fish. Cleaning up."

"Some need a big clean up like cockles, mussels, crabs, prawns and they can make your bin smell in summer."

"It is time-consuming with all the preparation like the scaling and the deboning of the fish."

"The smell of the prawns, or fish, and all the bones you have to remove from fish sometimes."

"The smell that lingers after cooking and the lack of confidence in cooking it effectively."

"Little knowledge on proper methods. Fear of dangerously cooking the food incorrectly."

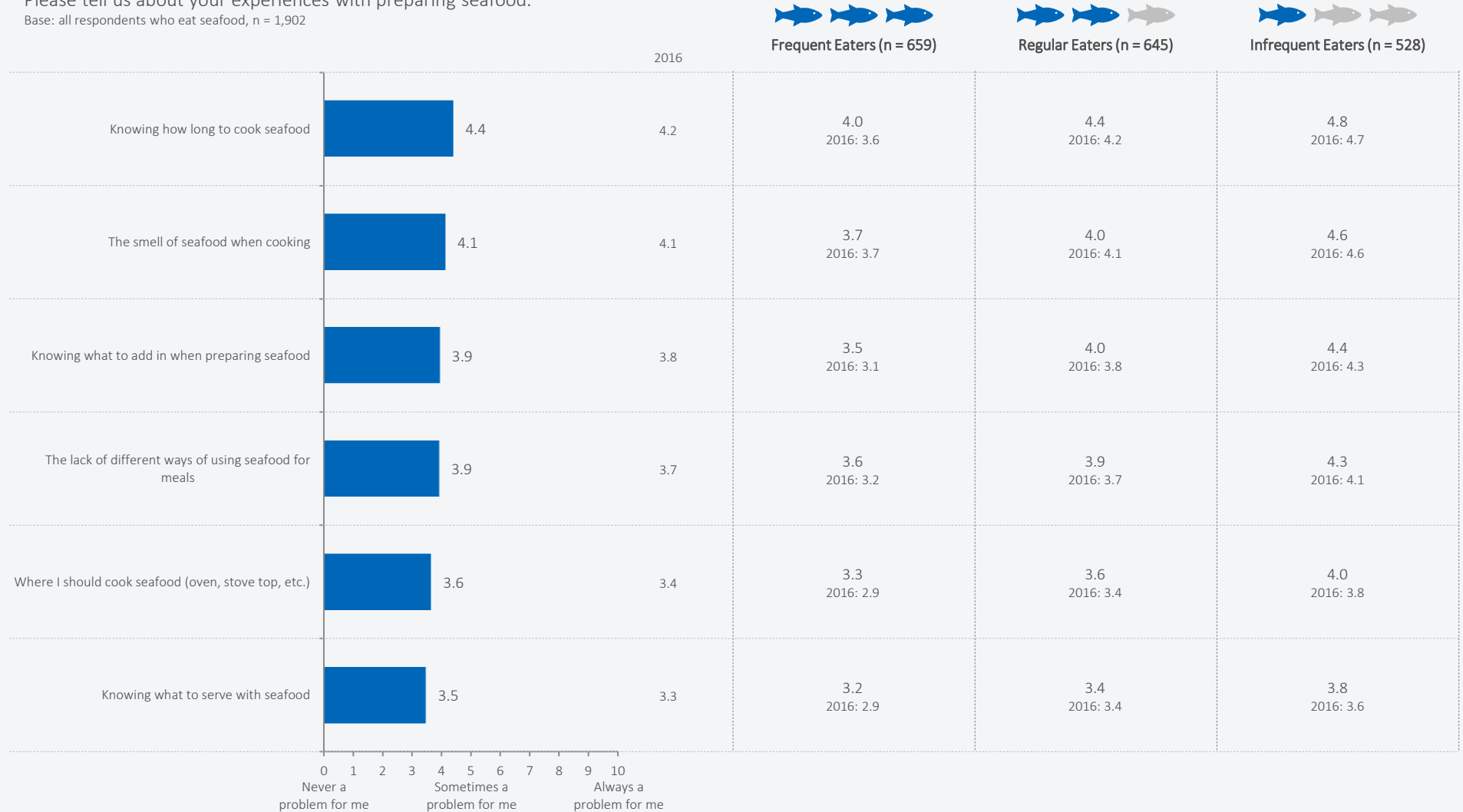
"The off cuts/discards and then left overs can smell out the bins. Easy to overcook."

"Can be a bit messy at times which is why we tend to buy pre-prepared seafood."

THE CONSUMPTION EXPERIENCE

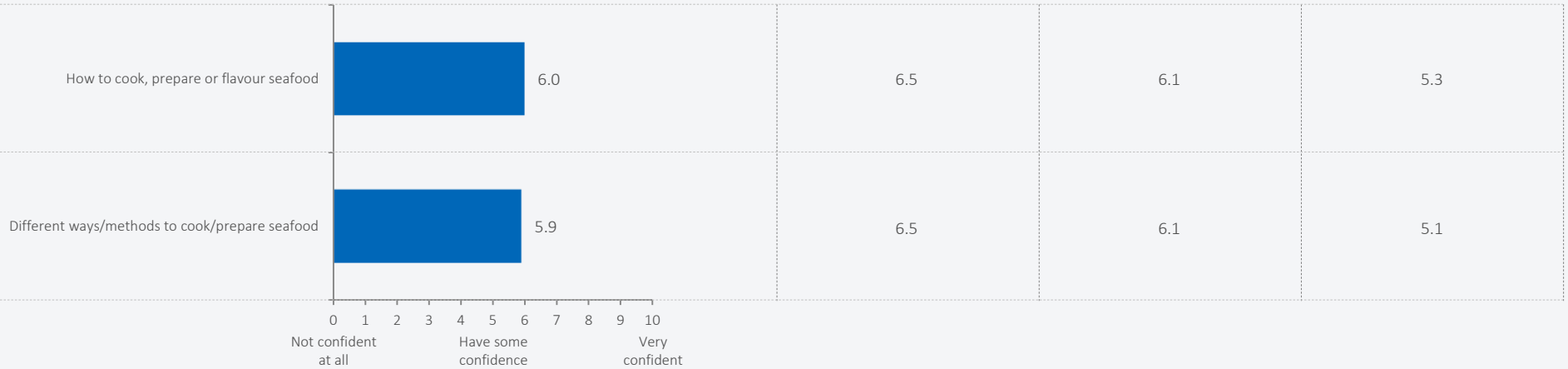
We've listed below the experiences of other people when **preparing** seafood.
Please tell us about your experiences with preparing seafood.

Base: all respondents who eat seafood, n = 1,902



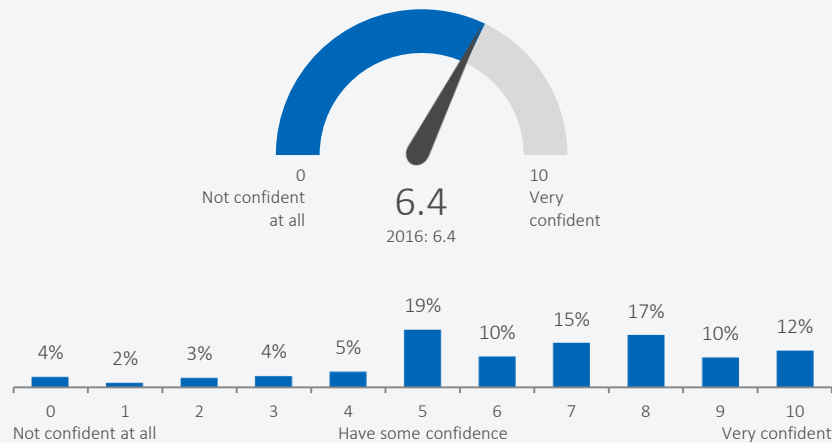
How confident are you around the following aspects of preparing and cooking seafood?

Base: all respondents who eat seafood, n = 1,902



Overall, how confident are you in preparing and cooking seafood?

Base: all respondents who eat seafood, n = 1,902



Frequent Eaters (n = 659)

Regular Eaters (n = 645)

Infrequent Eaters (n = 528)

Frequent Eaters (n = 659)

Regular Eaters (n = 645)

Infrequent Eaters (n = 528)

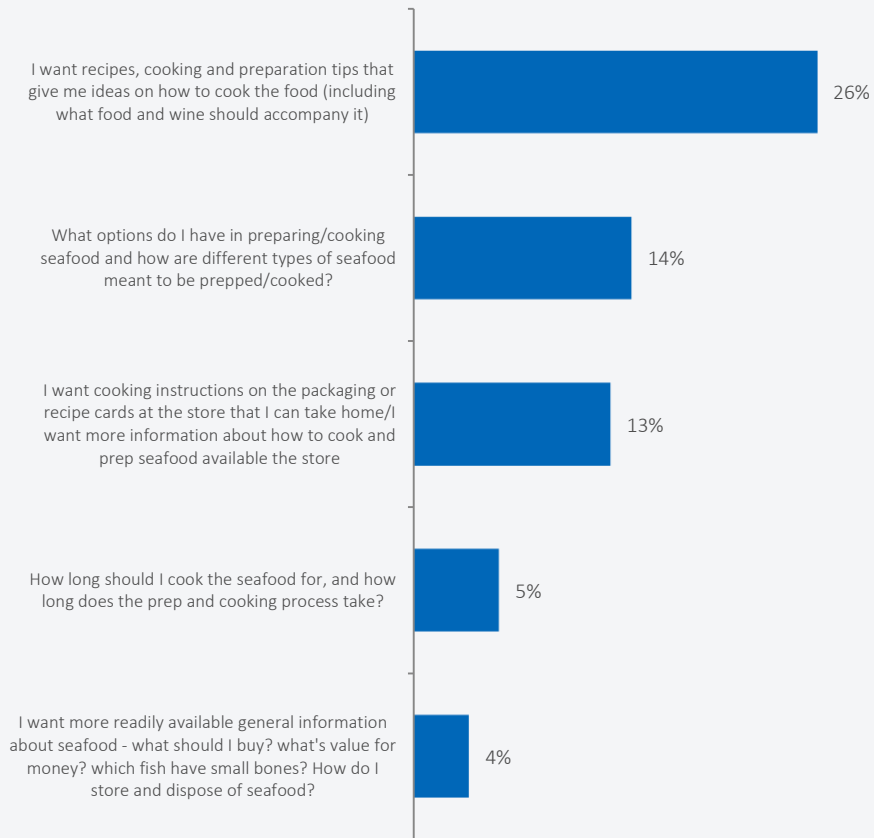
7.2
2016: 7.4

6.5
2016: 6.6

5.6
2016: 5.3

What information would help you in preparing and cooking seafood and encourage you to use it more often than you do now?

Base: all respondents who eat seafood and rated less than '6' for confidence in preparing and cooking seafood, n = 677



Results above exclude responses accounting for <2% of total responses.

Some of what they said...

"Seeing experts on TV cook a similar seafood dish or a YouTube clip showing you how to cook a certain fish or other seafood item. What they recommend are the best flavours to add to your meal. Also, advice from my parents or other first generation Greeks would go a long way in giving me confidence to cook seafood meals."

"Newsletter recipes from the seafood shops at the markets advising specials, what's in season and providing free recipes using fish available locally. So many recipes ask for fish that is not available locally! Fish cookery classes and demonstrations sponsored by the fish shops at the markets."

"More free in-store guides or recipe books/magazines with explanations of different seafood types, how to prep and recognise freshness. more cuisine styles, what the difference is in fish types e.g. salmon vs ling or snapper etc as I feel fish is fish."

"Maybe information at the supermarket that is not from the supermarket itself. I.e pamphlet or mini-magazine. I have picked these up from Woolies before and actually used them."

"More information on the do's and don'ts of seafood all round really. Preparation, Seasonings, complementary side dishes and true accurate nutritional values."

"Tips on how to prepare/clean and cook, and tips on how to choose what type of seafood and how to cook which varieties, and how fresh they look."

"The taste of different species, how long to cook them for, how to cook them. Pretty much everything to do with preparing and cooking it."

"Step by step recipes on how to cook seafood; suggestions for the best flavours to add to the seafood to get the best dish out of it."

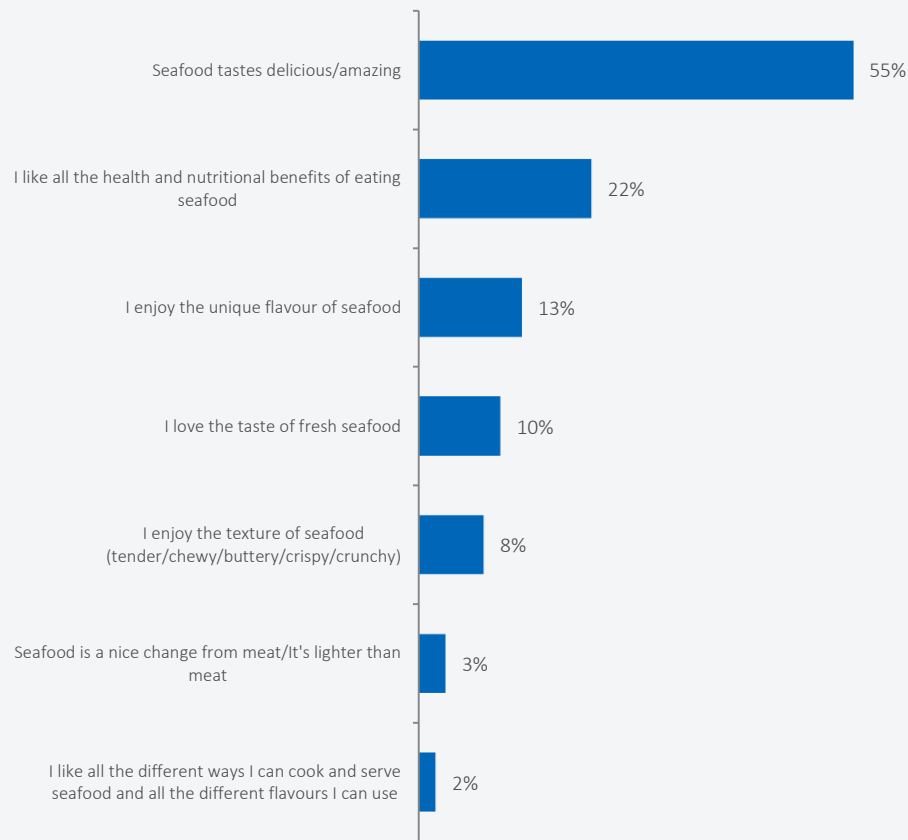
"Chart or list giving info about type of seafood, options to prepare, how to add flavour how to cook and what goes well with it."

"Small instruction cards (or other format info) on how to prepare, cook and what to serve with each type of seafood."

"What sea food is best to cook in which way (stove, oven etc.) and what flavours are best added. How long to cook for."

What do you like **most** about eating fresh seafood?

Base: all respondents who eat seafood, n = 1,902



A random sample of 50% of answers was selected for this analysis. Results above exclude responses accounting for <2% of total responses.

Some of what they said...

"The taste! There is nothing quite like the taste of Fresh and Freshly cooked seafood. The exception is Smoked Cod which we all love and have, usually, as Kedgerree. Unfortunately there does not seem to be any Naturally Smoked Cod nowadays - or, at least, it is not imported into Australia."

"The taste, easily digested, does not sit so heavily in the gut like meat. Can be accompanied by either salads or hot vegetables. It is easy to be complemented with a nice wine if you or your guests are that way inclined. Can be served as an appetiser or a main."

"The flavour is incredible if cooked well and it is something that nice and clean tasting and often light where as red meat for example is heavy and sits like a lead weight in your stomach."

"The flavour of the fish especially if added particular dressings, herbs and spices to the cooking side of things and the added sauces to enhance the flavour when eating."

"The nutritional value of it and the taste. My family like fish, I love it and as the rest of the family like meat it is a personal choice of mine to go with fish."

"The sweetness of the fish, freshness, knowing how much Omega 3 you are getting, how it has been made sustainable, sharing good times with families and friends."

"The great taste of fresh seafood meat in crab and other fish varieties that I love eating. Mixing the fresh fish in fish soup is great as well."

"Some of my favourite things in the world is fresh, beautifully cooked seafood especially king george whiting, scollops, oysters, mussels."

"Fresh taste of seafood/ tangy 'ocean' flavour/ Light flavour of fresh seafood/ GREAT with white wine - both as a drink or as a sauce."

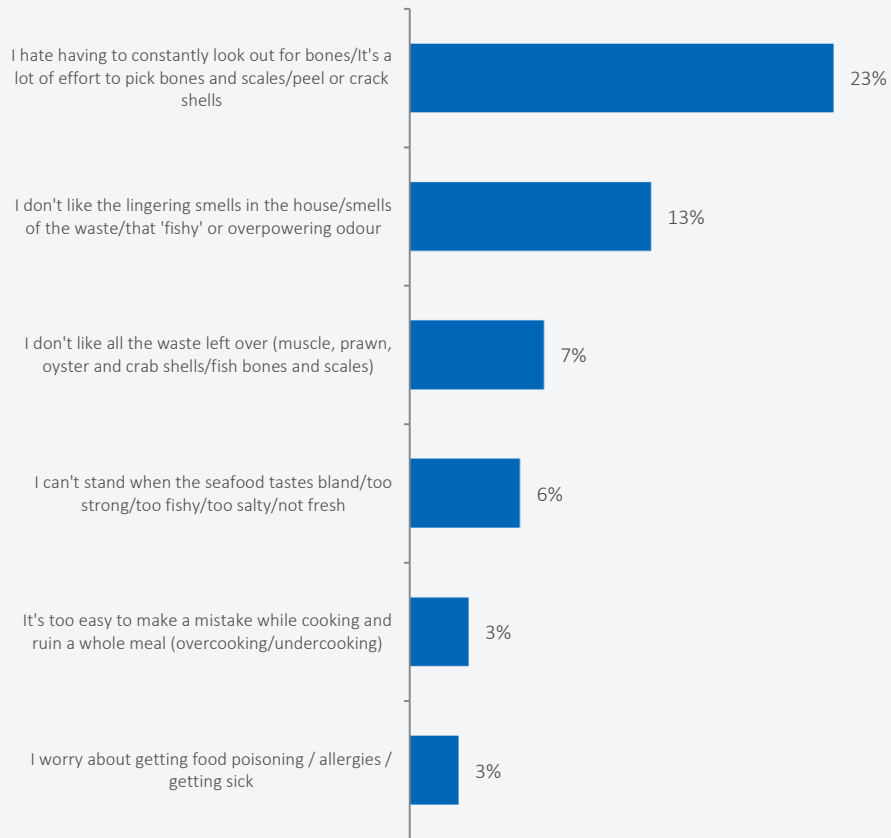
"I know it's good for me and I love the flavour and texture. There are so many great dishes you can prepare using fish and seafood."

"Love it all. Trout, Cod, Salmon, Prawns. Simple to prepare and so many variations and flavours to employ if required."

"It makes a great meal ; its nutritious ; its welcoming ; makes a good party time meal ; to celebrate all festive times ..."

What do you like **least** about eating fresh seafood?

Base: all respondents who eat seafood, n = 1,902



A random sample of 50% of answers was selected for this analysis. Results above exclude responses accounting for <2% of total responses.

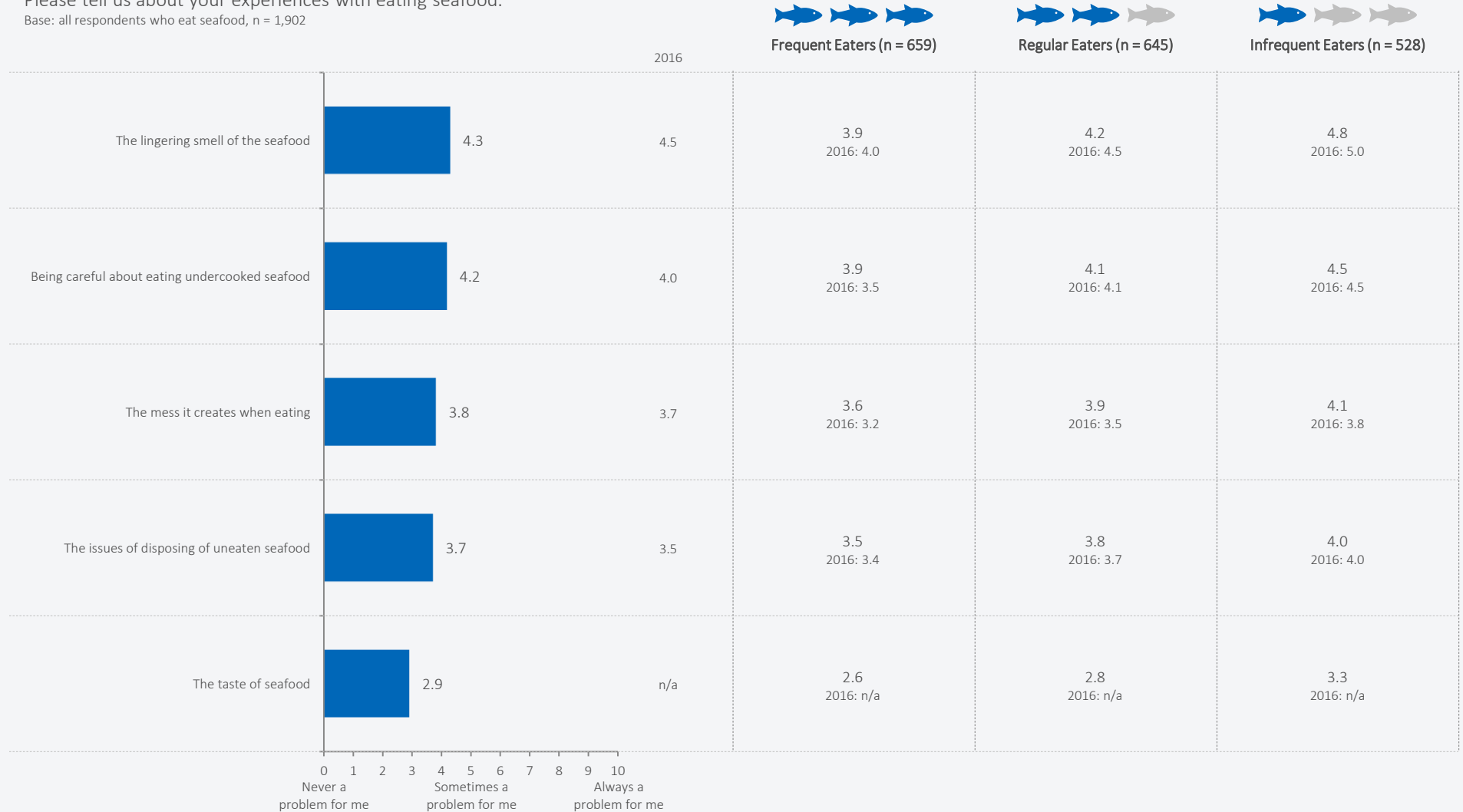
Some of what they said...

- "NOT getting enough meat out of a Lobster/removing shells and veins from Prawns/ Crabs are delicious but the hard shell makes it difficult to get at all of the meat and are harder to judge the cooking time."*
- "Pretty much any flavour put on or near the meat goes straight through it. Has a bigger change of having the flavour of impurities going through the meat."*
- "Often feel like eating something a bit more filling a couple of hours after the meal. Eating crustacea is often cumbersome and messy."*
- "I lack the confidence to vary my recipes for fear of failure as it is an expensive meal unless we catch it ourselves."*
- "Smell mostly, just not my thing, hasn't appealed to me as I got older (I ate it regularly when I was under 5 years old)."*
- "Taking off the shell of prawns and breaking the shell of crab meat but really its half the fun after a wine or two."*
- "How messy it can be sometimes, and the bad smell, and how long it takes to clean up all the mess."*
- "Dealing with bones and if I'm a restaurant, prawns that have not been deveined is pretty bad."*
- "Memories of being poisoned several times which is why I rarely buy it and stick to frozen."*
- "I would not enjoy to filet or remove bones etc. but I have a great fishmonger for that!"*
- "Perhaps in some fish there may be some bones but this is an extreme rarity these days."*
- "The risk of eating bones or storing incorrectly not having the confidence to cook it."*
- "I hate the bones and picking them out, plus the crusty skin sometimes etc."*
- "Removing digestive tract and brown liquid near head. Also smelly remains."*
- "The taste of the ocean in some fish not cooked properly or not cleaned."*

THE CONSUMPTION EXPERIENCE

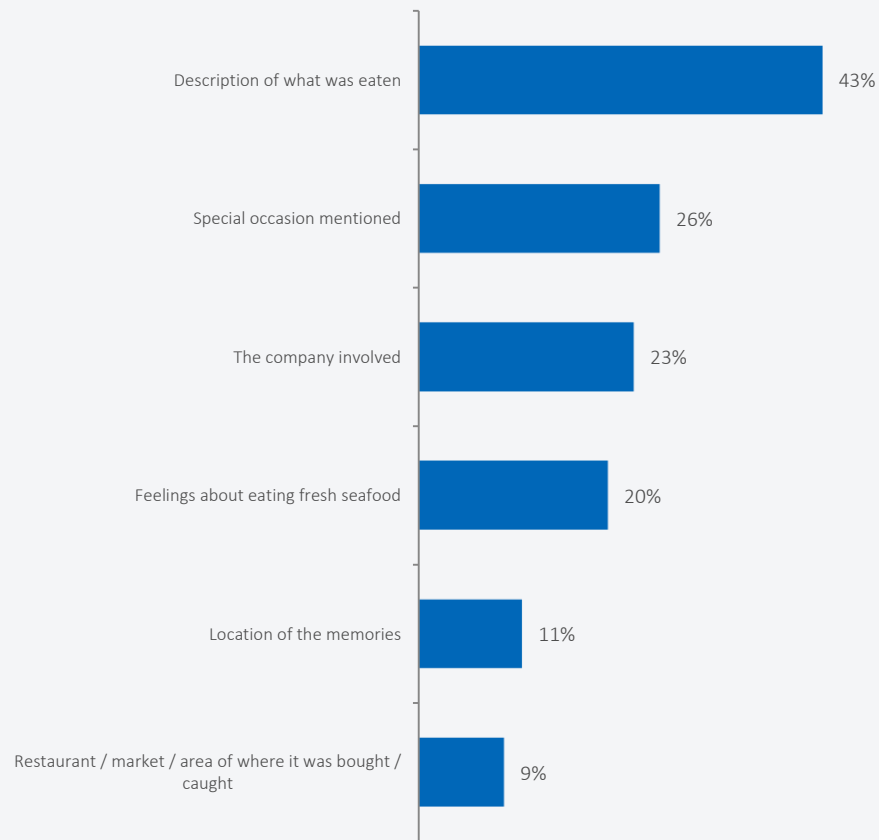
We've listed below the experiences of other people when **eating** seafood.
Please tell us about your experiences with eating seafood.

Base: all respondents who eat seafood, n = 1,902



Thinking about a special time you enjoyed eating fresh seafood, please describe your favourite memories of this time.

Base: all respondents who eat seafood, n = 1,902



A random sample of 50% of answers was selected for this analysis. Results above exclude responses accounting for <5% of total responses.

Some of what they said...

“My family would always eat tiger prawns with lunch on Sundays when my grandma would visit after church. I think most memories with my grandma involve prawns now that I think about it. Even when her dementia got worse and she moved into a home we nearly always kept up the Sunday tradition and it was lovely because it often triggered her memories. I'm not very sentimental about food memories but every time I eat them I think about my grandma and it makes me smile. Whenever the family is together we still joke about her nimble fingers and how particular she was about eating them.”

“Eating crayfish in our then caravan at the McLaren Vale Caravan Park, we had a lovely meal and it was the night my then partner asked me to marry him. Another time we were eating barramundi at the Daly Waters Pub in the NT, it was our first trip in our caravan. I have so many memories of the times we ate seafood on a trips around Australia, too many to list here. We spent 17 years travelling in our van and ate seafood of some sort most weeks. Wonderful memories that I have now of those times.”

“Eating chilli blue swimmer crab dish. I enjoyed the taste of the crab meat, sucking on the parts of the crab like the claws to mop up the sauce. Being able to use my hands to get to the meat. the fact that there were leftovers which I had for lunch the following day. This is one of my favourite meals and takes me back to childhood when my Dad would go crabbing and bring home plenty of crabs which we'd eat as a family.”

“I guess the best memory is my most recent memory. I had decided that we would have oven baked fish in foil for Good Friday instead of the usual frozen fish or the traditional 'fish & chip' meal. it turned out a spectacular success even though I may have been a bit heavy handed with the garlic salt! Really pleased and proud of preparing a good meal, and I'm now encouraged to use seafood more often in future!”

“It was when I was a kid and we would go on our Sunday afternoon drive (uncle, grandmother, great aunt) and we went to Bundeena and my uncle bought me prawns in newspaper and I remember sitting there with him eating and chatting. I don't really know why this memory sticks out to me, maybe it's because it was a time when I really liked prawns and their taste because now I don't like them at all.”

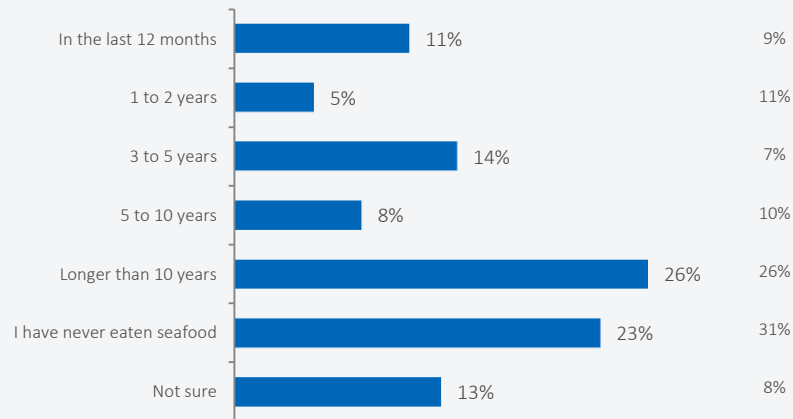
“the first time I ever ate smoked Cod, dear me it was delicious! My friend drizzled some lemon juice over the top and sprinkled a few herbs then wrapped it in some foil then popped it in the oven. 20 mins later served with salad absolutely delicious!!! The smell before it was put in the oven was incredible but then to eat it was so scrumptious! Oh and the company was good too, lol.”



Detailed Results
Non-Eaters of
Seafood

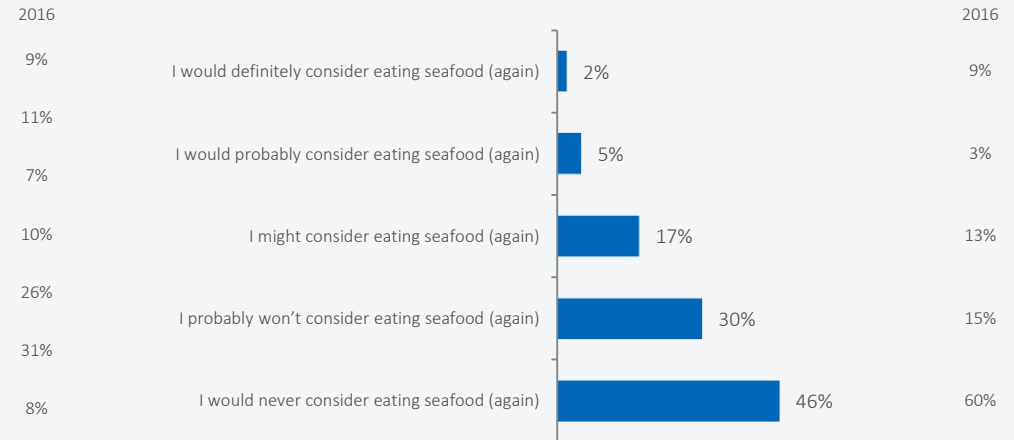
How long has it been since you last ate seafood?

Base: all respondents who do not eat seafood, n = 100



Would you ever consider buying and eating seafood (again)*?

Base: all respondents who do not eat seafood, n = 100



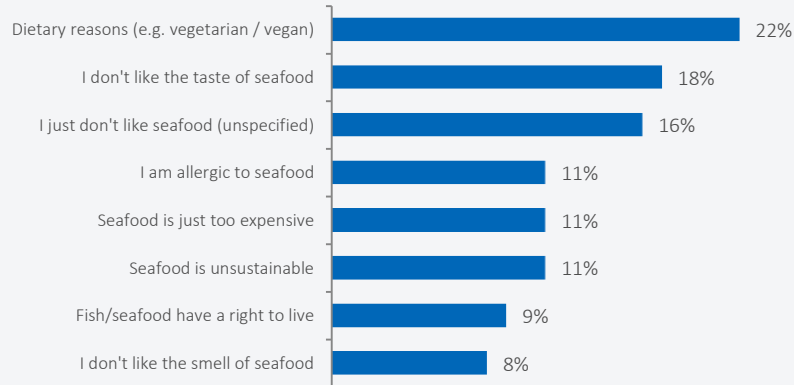
*"again" is asked to those who did not answer "I have never eaten seafood".

Most non-eaters have not eaten seafood for long periods of time. They also show **few indications** of a willingness to consider eating seafood again.

The challenge to 'win-back' the non-eaters will be a significant one.

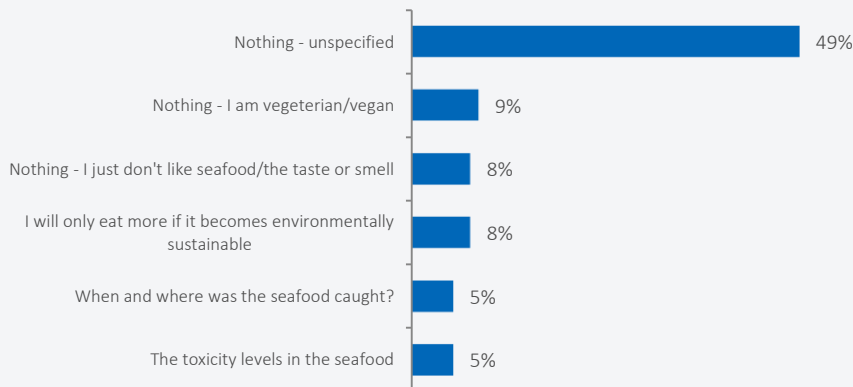
What are the two or three major factors in you not buying and eating seafood?

Base: all respondents who do not eat seafood, n = 100



What information would you like to know that might encourage you to buy, prepare and eat seafood again?

Base: all respondents who do not eat seafood, n = 100



Results for both questions above exclude responses accounting for <5% of total responses.

Some of what they said...

"I'm vegetarian and I work in the fishing industry so know about fish pain research and believe it is the same as other vertebrate animals in regards to pain. Pain in fishing is not considered much. Also a number of species I'd never eat as they are not sustainably fished."

"I never liked seafood but when it was made clear to me how damaging it is for the environment and how close the planet is to losing everything in the ocean I made the decision to stop purchasing and eating seafood."

"The destructive impact eating sea life has on the overall ecosystem. I have never enjoyed the taste of seafood. The lack of empathy the industry has towards sentient beings."

"I chose to become vegetarian, in the time since, I have developed views of refraining from animal cruelty that is meat consumption. Sometimes I purchase seafood for my cat."

"I had to live on fish when I was young when my parents became invalids....I really haven't liked seafood ever since. However, my partner and kids all eat it."

Some of what they said...

"I have disliked the taste of eating seafood for several years now and won't ever be encouraged to eat it. However, putting aside my biased opinion due to the flavour, I believe there evidently is no other argument that can persuade me due to it just not being ethical or environmentally conscious anymore."

"No information would encourage me to eat seafood again while unsustainable fishing practices are being undertaken. Also the levels of mercury in fish concern me as well as micro plastics."

"Don't need to know anything. I know how to fish, how to prepare seafood, I still cook it for the family...just don't want to touch it myself at this point in time."

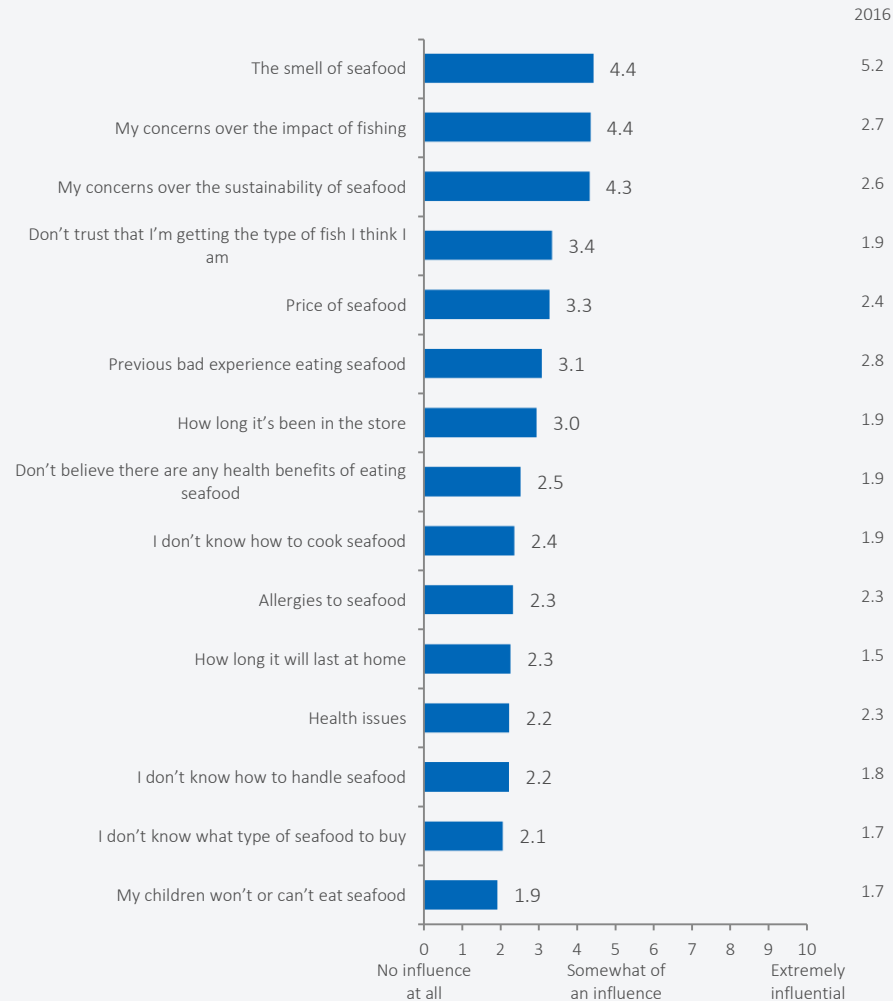
"None, I am a qualified nutritionist, I have read the research and know that the consumption of seafood is detrimental to health and the environment."

"I wouldn't. It is not sustainable to be eating meat/seafood on this planet any more. We need to change our diets."

NON-EATERS OF SEAFOOD

How much of an influence are the following issues in explaining why you don't buy or eat seafood?

Base: all respondents who do not eat seafood, n = 100





Detailed Results
Issues Affecting
Consumer Seafood
Purchasing

ISSUES AFFECTING CONSUMER SEAFOOD PURCHASING

How much of an influence do the following fishing industry issues have on if you buy, how much you buy, and/or how often you buy seafood?

Base: all respondents, n = 2,002



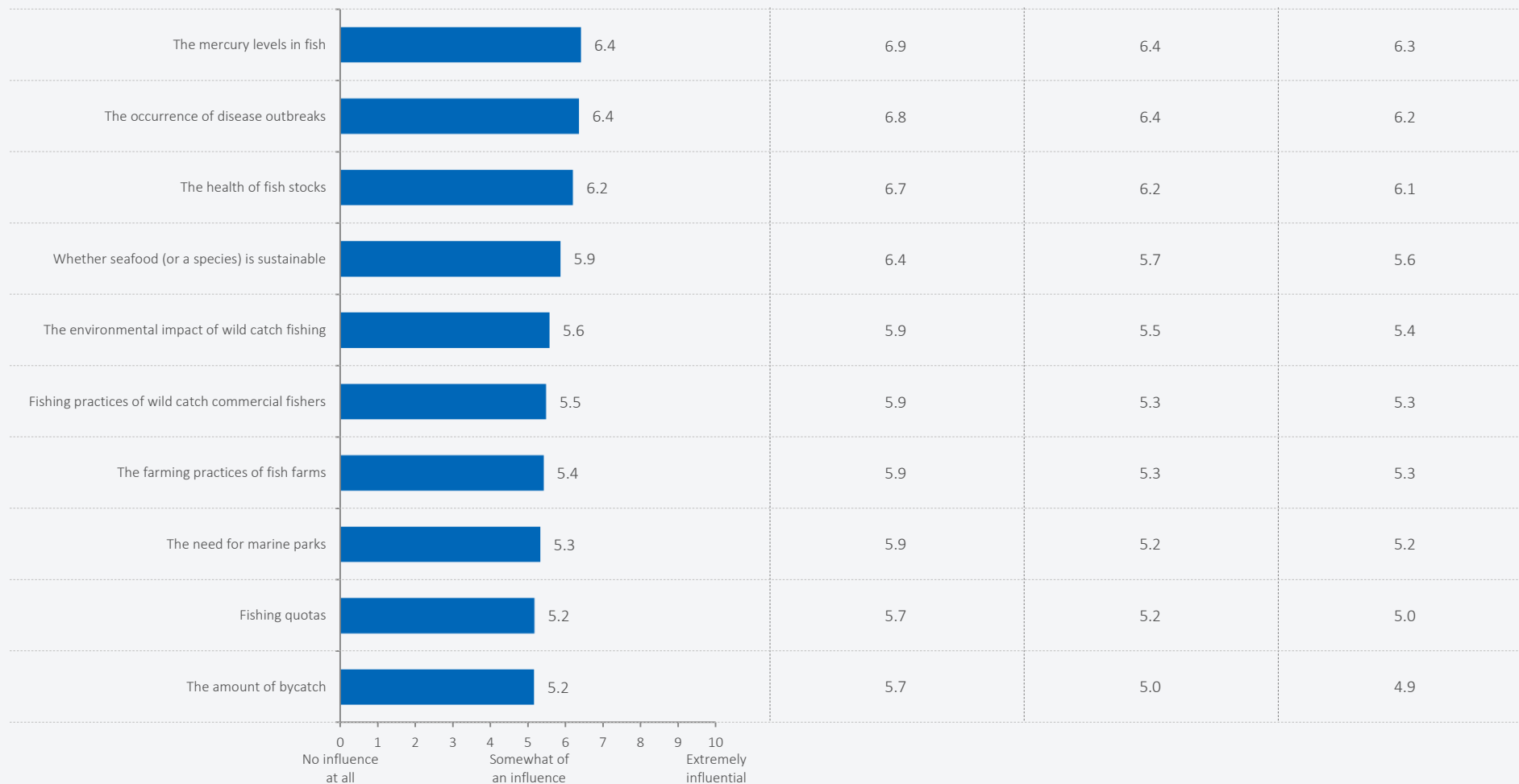
Frequent Eaters (n = 659)



Regular Eaters (n = 645)

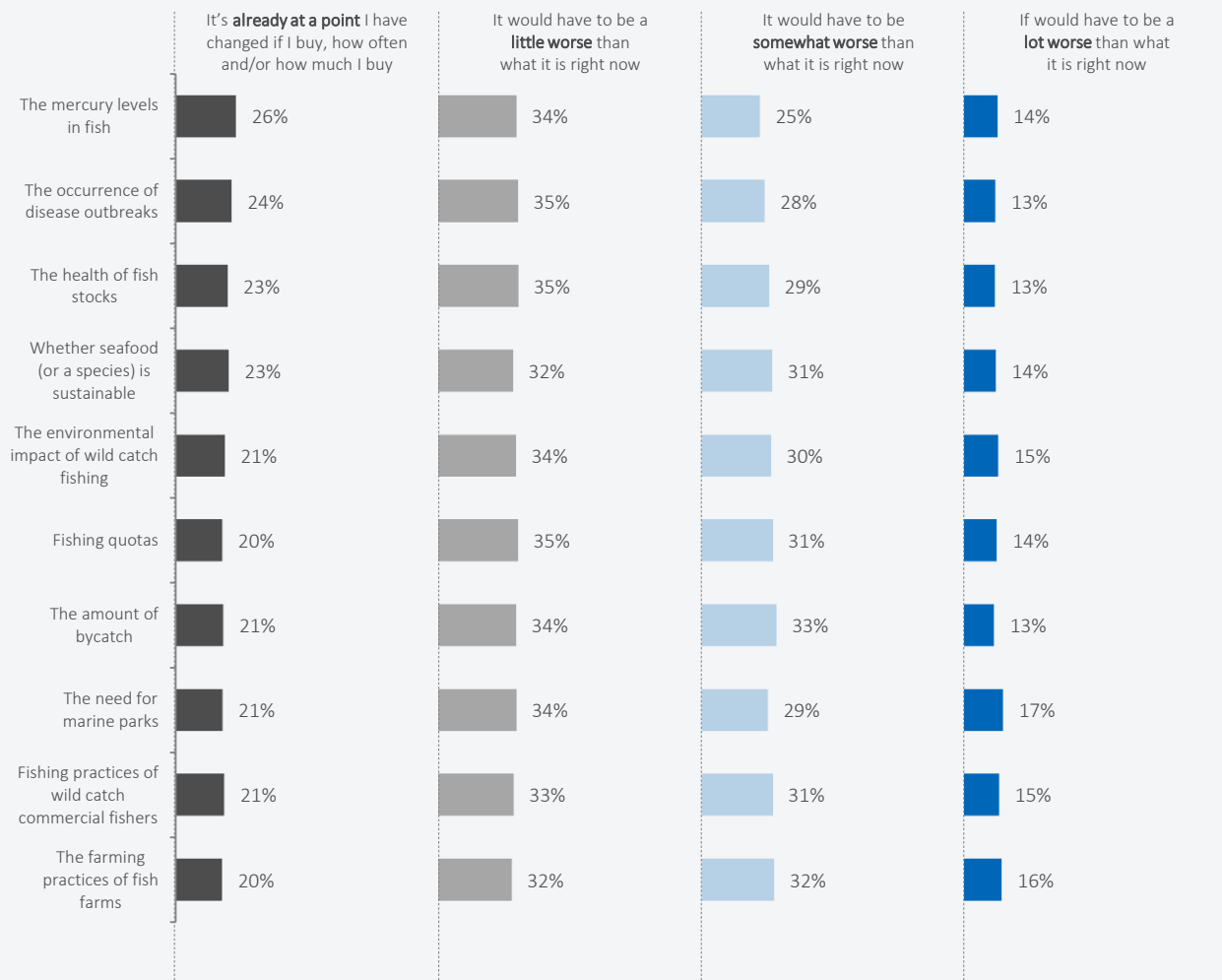


Infrequent Eaters (n = 528)

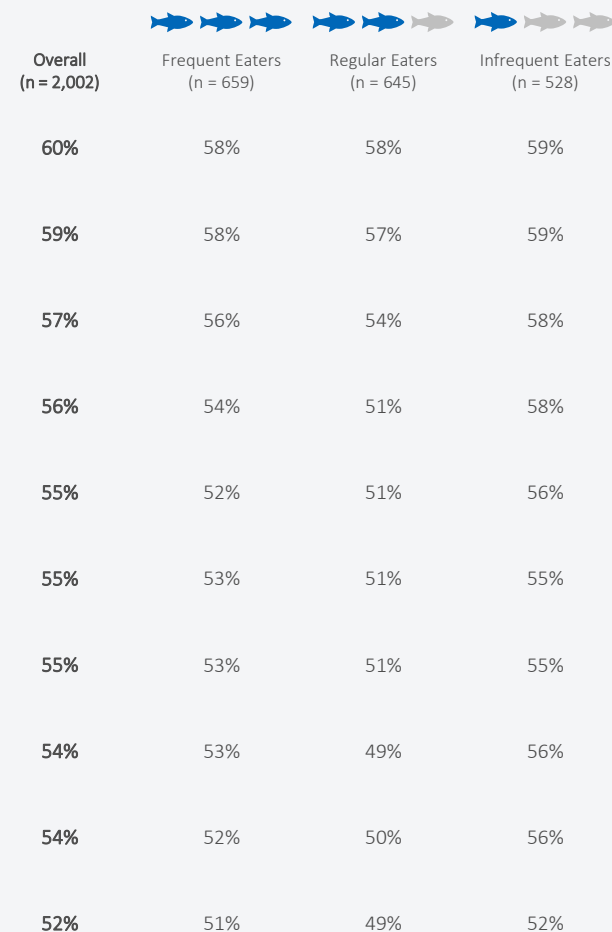


From what you understand of these fishing industry issues today, how much of a change would have to occur to see you stop buying seafood or buy less often or buy smaller amounts of seafood?*

Base: all respondents, n = 2,002



Already changed or would only need to be a little worse to change



*The question was originally asked on a 5-point scale which included "significantly worse" and "extremely worse" in place of the current scale option "a lot worse". Midway through the research period, this was changed to the 4-point scale above – results from the "significantly worse" and "extremely worse" options were merged into the "a lot worse" option. FRDC – unpacking the consumer seafood experience – a 2019 update – June 2019

39% (or about 4 in 10) are highly influenced by at least one industry issue and are at risk* of changing their purchasing habits because of the issue.

- 15% are at risk on one issue only;
- 9% are at risk for two issues;
- 6% are at risk for three issues;
- 4% are at risk for four issues; with
- the remaining 5% are at risk for five or more issues.

Industry Issue	% highly influenced by issue on purchasing habits	Of this % rating 8-10...	% who are at risk – only needs to be a little worse to change purchasing habits	% highly influenced AND at risk across all respondents
The occurrence of disease outbreaks	42%	----->	34%	-----> 14%
The mercury levels in fish	44%	----->	30%	-----> 13%
The health of fish stocks	39%	----->	32%	-----> 13%
Whether seafood (or a species) is sustainable	34%	----->	29%	-----> 10%
Fishing practices of wild catch commercial fishers	29%	----->	32%	-----> 9%
The environmental impact of wild catch fishing	30%	----->	30%	-----> 9%
Fishing quotas	26%	----->	33%	-----> 9%
The need for marine parks	29%	----->	30%	-----> 9%
The farming practices of fish farms	29%	----->	30%	-----> 9%
The amount of bycatch	27%	----->	31%	-----> 8%

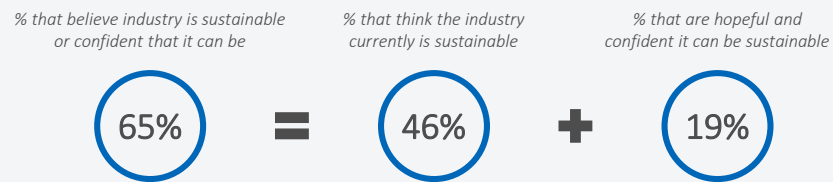
*"At risk" refers to those who would only need the issue to be a little worse to change their purchasing habits.



Detailed Results
Perceptions of
Sustainability

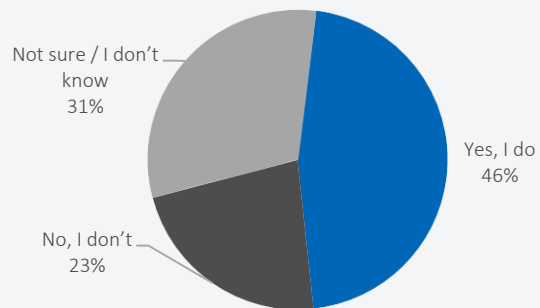
Those who believe sustainability is possible

Base: all respondents, n = 2,002



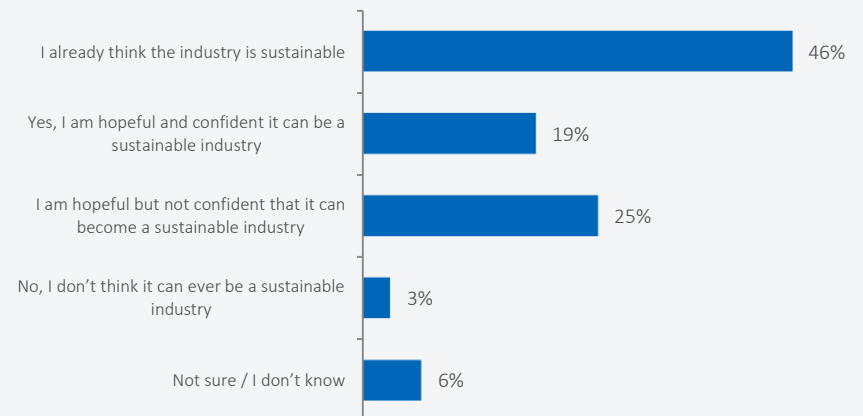
Do you think Australia's fishing industry (that is the industry as a whole) is sustainable?

Base: all respondents, n = 2,002



Do you think Australia's fishing industry can be sustainable?

Base: all respondents, n = 2,002



Those who believe sustainability is possible

Base: all respondents, n = 2,002

Overall (n = 2,002)

% believe it is sustainable
or confident it can be:
65%



Frequent Eaters (n = 659)

% believe it is sustainable
or confident it can be:
73%



Regular Eaters (n = 645)

% believe it is sustainable
or confident it can be:
68%



Infrequent Eaters (n = 528)

% believe it is sustainable
or confident it can be:
59%

Do you think Australia's fishing industry (that is the industry as a whole) is sustainable?

Base: all respondents, n = 2,002

Overall (n = 2,002)

Yes: 46%
No: 23%
Not sure: 31%



Frequent Eaters (n = 659)

Yes: 57%
No: 19%
Not sure: 24%



Regular Eaters (n = 645)

Yes: 48%
No: 21%
Not sure: 31%



Infrequent Eaters (n = 528)

Yes: 39%
No: 25%
Not sure: 36%

Do you think Australia's fishing industry can be sustainable?

Base: all respondents, n = 2,002

Overall (n = 2,002)

Already is: 46%
Hopeful + confident: 19%
Hopeful: 25%
No, never: 3%
Not sure: 6%



Frequent Eaters (n = 659)

Already is: 57%
Hopeful + confident: 17%
Hopeful: 22%
No, never: 1%
Not sure: 3%



Regular Eaters (n = 645)

Already is: 48%
Hopeful + confident: 20%
Hopeful: 25%
No, never: 2%
Not sure: 5%



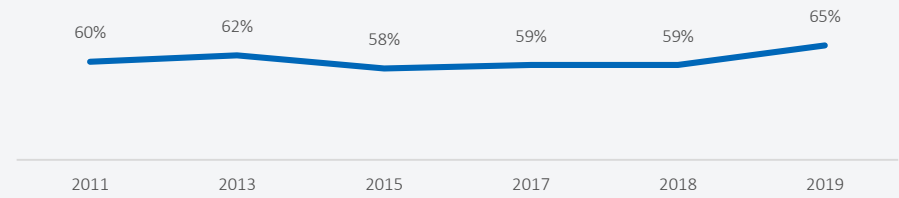
Infrequent Eaters (n = 528)

Already is: 39%
Hopeful + confident: 20%
Hopeful: 28%
No, never: 4%
Not sure: 9%

Those who believe sustainability is possible
 Base: all respondents, n = 2,002

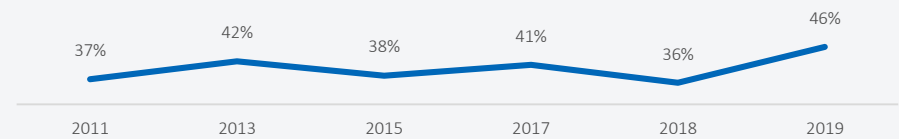
% believe it is sustainable
 or confident it can be:

Results over time



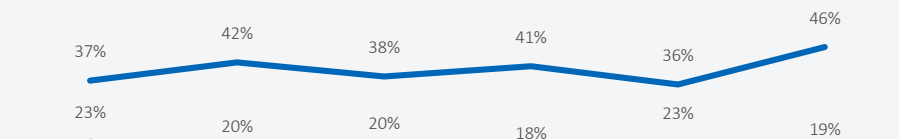
Do you think Australia's fishing industry (that is
 the industry as a whole) is sustainable?
 Base: all respondents, n = 2,002

Yes:

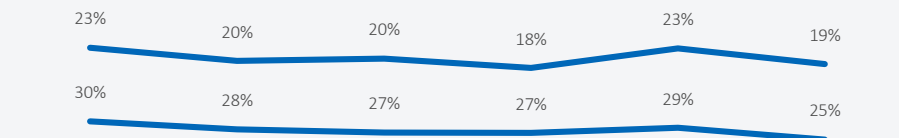


Do you think Australia's fishing industry
 can be sustainable?
 Base: all respondents, n = 2,002

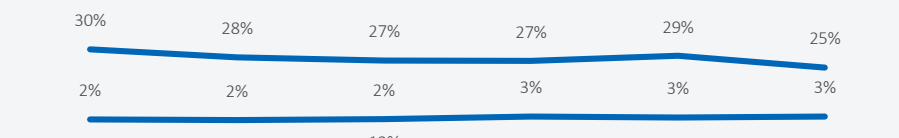
Already is:



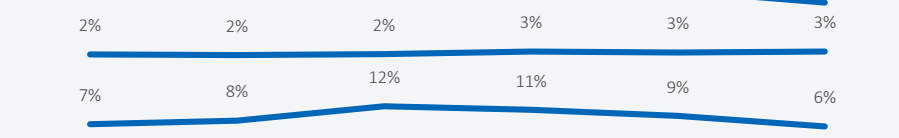
Hopeful + confident:



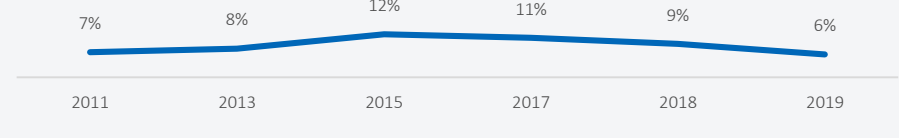
Hopeful:



No, never:



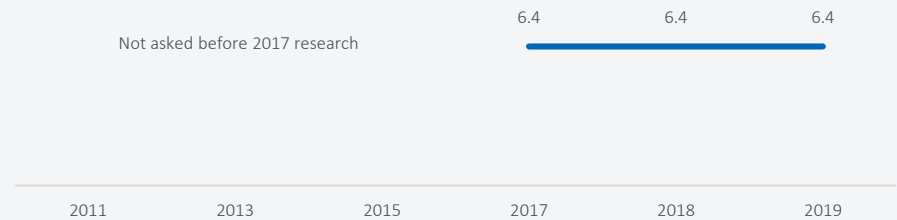
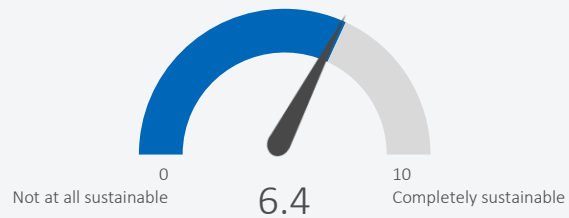
Not sure:



With that in mind, on a scale of 0 to 10, how sustainable do you think the Australian fishing industry is overall?

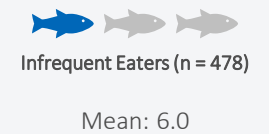
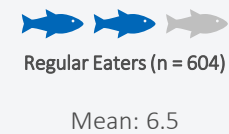
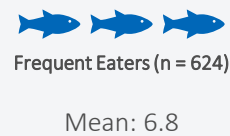
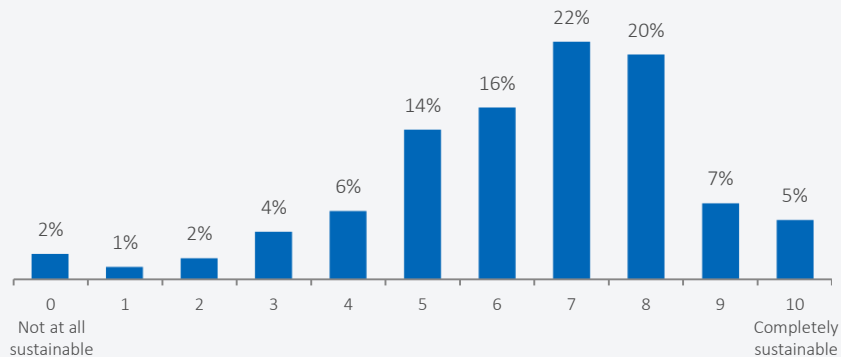
Base: all respondents (excludes 'Not sure' answers), n = 1,849

Results over time



Distribution

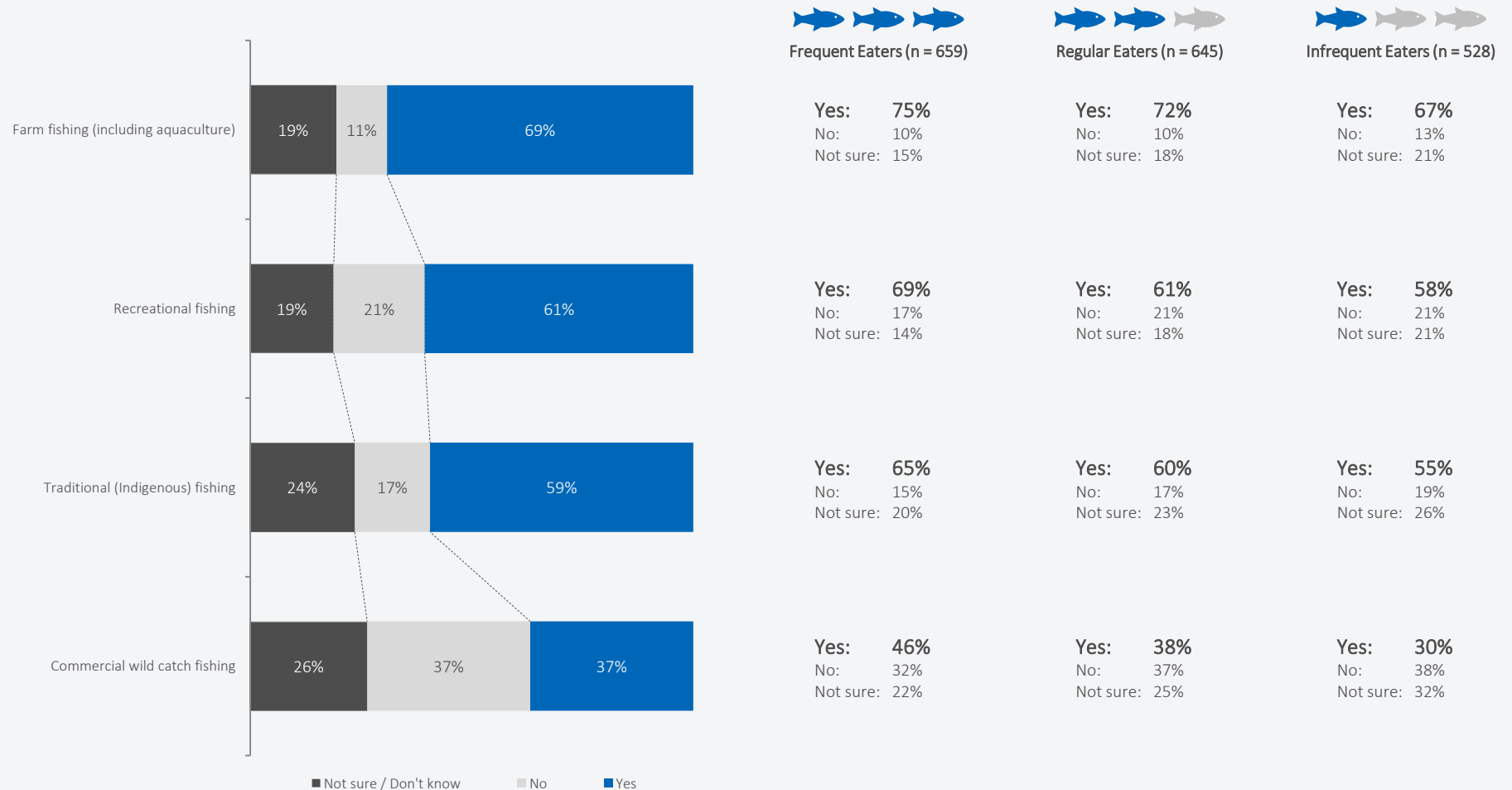
Base: all respondents (excludes 'Not sure' answers), n = 1,849



PERCEPTIONS OF SUSTAINABILITY

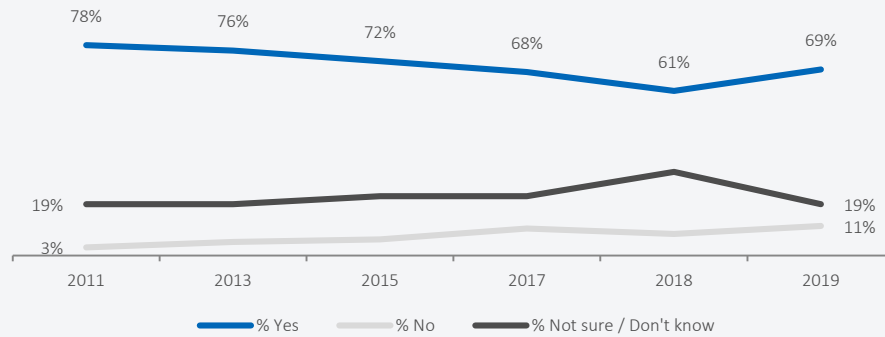
Do you think the following sectors of the Australian fishing industry are sustainable?

Base: all respondents, n = 2,002

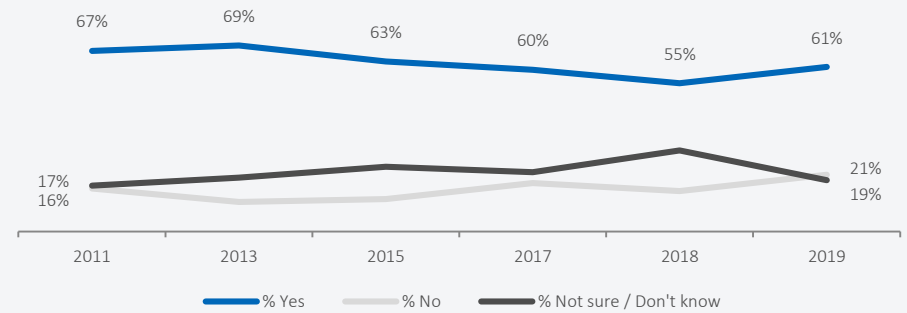


Results over time

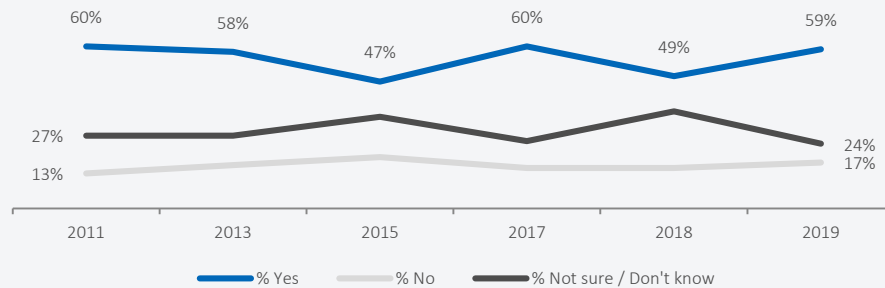
Farm fishing (including aquaculture)



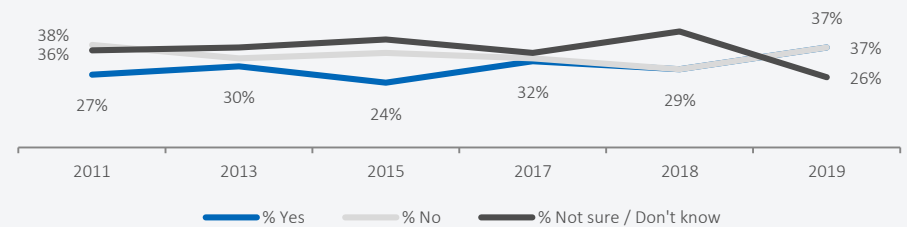
Recreational fishing



Traditional (indigenous) fishing



Commercial wild catch fishing








Appendices

RESPONDENT PROFILES




Key Results by Fresh Fish Eater Segment

Base: all respondents, n = 2,002

	 Frequent Eaters (once a week or more)	 Regular Eaters (once a fortnight to once a month)	 Infrequent Eaters (no more than once every two months)
% of respondents:	33%	32%	26%
Accounts for % of all main fresh seafood meals eaten: (estimate based on freq. of eating fresh fish over last 12 months)	77%	20%	3%
Mainly shop for seafood at:	Supermarket: 60% Seafood Market: 18%	Supermarket: 59% Seafood Market: 15%	Supermarket: 59% Seafood Market: 13%
Best describes when they buy seafood:	Regularly for means during week: 68% Spur of the moment: 19% Only for special occasions: 15%	Spur of the moment: 34% Only for special occasions: 30% Regularly for means during week: 28%	Only for special occasions: 48% Spur of the moment: 35% Regularly for means during week: 9%
% believe better value for money buying seafood over buying meat:	37%	27%	17%
What they do when buying seafood to prepare at home:	72% usually buy the same types, or buy a few different types and don't tend to try anything new	74% usually buy the same types, or buy a few different types and don't tend to try anything new	81% usually buy the same types, or buy a few different types and don't tend to try anything new
Typically purchase seafood:	On impulse - 15% / 85% - planned or varied	On impulse - 22% / 78% - planned or varied	On impulse - 25% / 75% - planned or varied




Key Results by Fresh Fish Eater Segment

Base: all respondents, n = 2,002

	 Frequent Eaters (once a week or more)	 Regular Eaters (once a fortnight to once a month)	 Infrequent Eaters (no more than once every two months)
Mean confidence in buying seafood: (scale of 0 – Not confident at all to 10 – Very confident)	7.8 – overall confidence buying seafood	7.3 – overall confidence buying seafood	6.4 – overall confidence buying seafood
Looking for info on preparing and cooking seafood:	Cooking websites / apps: 56% Friends: 41% Cooking shows (inc. website/app): 25%	Cooking websites / apps: 62% Friends: 46% Cooking shows (inc. website/app): 23%	Cooking websites / apps: 59% Friends: 41% Cooking shows (inc. website/app): 15%
Experiences preparing seafood: (scale of 0 – Never a problem for me to 10 – Always a problem for me)	4.0 – knowing how long to cook seafood 3.7 – smell of seafood when cooking 3.6 – lack of different ways using seafood in meals	4.4 – knowing how long to cook seafood 4.0 – smell of seafood when cooking 4.0 – knowing what to add when preparing seafood	4.8 – knowing how long to cook seafood 4.6 – smell of seafood when cooking 4.4 – knowing what to add when preparing seafood
Mean confidence in preparing and cooking seafood: (scale of 0 – Not confident at all to 10 – Very confident)	7.2 – overall confidence preparing/cooking seafood 6.5 – how to cook, prepare, flavor seafood 6.5 – different ways to cook/prepare seafood	6.5 – overall confidence preparing/cooking seafood 6.1 – how to cook, prepare, flavour seafood 6.1 – different ways to cook/prepare seafood	5.6 – overall confidence preparing/cooking seafood 5.3 – how to cook, prepare, flavour seafood 5.1 – different ways to cook/prepare seafood
Experiences eating seafood: (scale of 0 – Never a problem for me to 10 – Always a problem for me)	3.9 – the lingering smell of the seafood 3.9 – being careful about undercooked seafood 3.6 – the mess it creates when eating	4.2 – the lingering smell of the seafood 4.1 – being careful about undercooked seafood 3.9 – the mess it creates when eating	4.8 – the lingering smell of the seafood 4.5 – being careful about undercooked seafood 4.1 – the mess it creates when eating

Key Demographics by Fresh Fish Eater Segment




Base: all respondents, n = 2,002

	 Frequent Eaters (once a week or more)	 Regular Eaters (once a fortnight to once a month)	 Infrequent Eaters (no more than once every two months)
Mean Age:	48.6 years of age	45.4 years of age	44.5 years of age
Generation:	Boomers: 33% Millennials: 30% Gen X: 25%	Millennials: 33% Gen X: 28% Boomers: 28%	Millennials: 33% Gen X: 31% Boomers: 26%
Education:	45% have a postgrad or bachelor degree	37% have a postgrad or bachelor degree	29% have a postgrad or bachelor degree
Employment:	41% are employed full time	40% are employed full time	28% are employed full time
Household:	56% are married	50% are married	38% are married
Parental Status:	70% are a parent to a child or children	62% are a parent to a child or children	60% are a parent to a child or children
Mean Household Income:	29% have a household income of \$100k or more	29% have a household income of \$100k or more	18% have a household income of \$100k or more
Regular Fishers:	29% fish once a month or more	18% fish once a month or more	12% fish once a month or more

RESPONDENT PROFILES




Key Results by Generation Segment

Base: all respondents, n = 2,002

	 Millennials (23-38 years old)	 Gen X (39-54 years old)	 Boomers (55-73 years old)
% of respondents:	32%	28%	28%
Accounts for % of all main fresh seafood meals eaten: (estimate based on freq. of eating fresh fish over last 12 months)	31%	26%	31%
Mainly shop for seafood at:	Supermarket: 63% Seafood Market: 16%	Supermarket: 58% Seafood Market: 17%	Supermarket: 58% Seafood Market: 14%
Best describes when they buy seafood:	Only for special occasions: 37% Regularly for meals during the week: 33% Spur of the moment: 25%	Regularly for meals during the week: 33% Only for special occasions: 30% Spur of the moment: 28%	Regularly for meals during the week: 42% Spur of the moment: 38% Only for special occasions: 22%
% believe better value for money buying seafood over buying meat:	33%	25%	22%
What they do when buying seafood to prepare at home:	83% usually buy the same types, or buy a few different types and don't tend to try anything new	73% usually buy the same types, or buy a few different types and don't tend to try anything new	70% usually buy the same types, or buy a few different types and don't tend to try anything new
Typically purchase seafood:	On impulse - 25% / 75% - planned or varied	On impulse - 18% / 82% - planned or varied	On impulse - 17% / 83% - planned or varied

Key Results by Generation Segment




Base: all respondents, n = 2,002

	 Millennials (23-38 years old)	 Gen X (39-54 years old)	 Boomers (55-73 years old)
Mean confidence in buying seafood: (scale of 0 – Not confident at all to 10 – Very confident)	6.7 – overall confidence buying seafood	7.0 – overall confidence buying seafood	7.7 – overall confidence buying seafood
Looking for info on preparing and cooking seafood:	Cooking websites / apps: 67% Friends: 38% Cooking shows (inc. website/app): 28%	Cooking websites / apps: 58% Friends: 42% Cooking shows (inc. website/app): 22%	Cooking websites / apps: 53% Friends: 48% Seafood specific or fishing websites/apps: 17%
Experiences preparing seafood: (scale of 0 – Never a problem for me to 10 – Always a problem for me)	5.3 – knowing how long to cook seafood 4.8 – smell of seafood when cooking 4.7 – lack of different ways using seafood in meals	4.3 – knowing how long to cook seafood 4.0 – smell of seafood when cooking 3.8 – lack of different ways using seafood in meals	3.7 – knowing how long to cook seafood 3.6 – smell of seafood when cooking 3.3 – knowing what to add when preparing seafood
Mean confidence in preparing and cooking seafood: (scale of 0 – Not confident at all to 10 – Very confident)	5.9 – overall confidence preparing/cooking seafood 5.7 – how to cook, prepare, flavor seafood 5.6 – different ways to cook/prepare seafood	6.5 – overall confidence preparing/cooking seafood 5.9 – how to cook, prepare, flavour seafood 5.8 – different ways to cook/prepare seafood	6.9 – overall confidence preparing/cooking seafood 6.4 – how to cook, prepare, flavour seafood 6.3 – different ways to cook/prepare seafood
Experiences eating seafood: (scale of 0 – Never a problem for me to 10 – Always a problem for me)	5.0 – the lingering smell of the seafood 5.0 – being careful about undercooked seafood 4.4 – the issues of disposing of uneaten seafood	4.3 – the lingering smell of the seafood 4.1 – being careful about undercooked seafood 3.9 – the mess it creates when eating	3.7 – the lingering smell of the seafood 3.5 – being careful about undercooked seafood 3.3 – the mess it creates when eating

RESPONDENT PROFILES

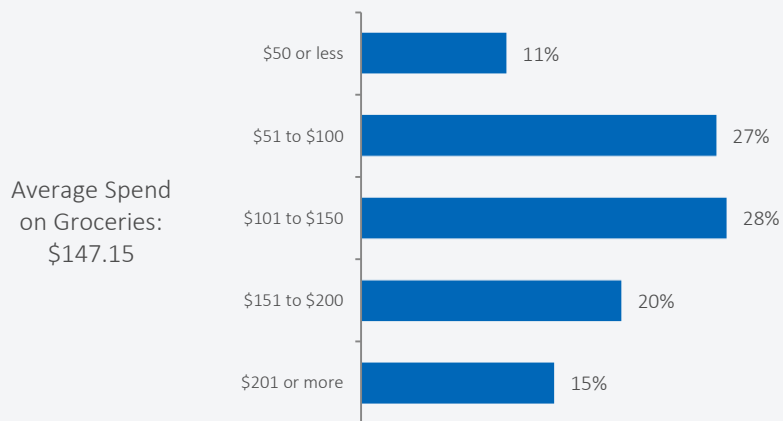
Key Demographics by Generation Segment

Base: all respondents, n = 2,002

	 Millennials (23-38 years old)	 Gen X (39-54 years old)	 Boomers (55-73 years old)
Mean Age:	30.7 years of age	46.6 years of age	63.9 years of age
Fresh Fish Eater:	Frequent Eaters: 30% Regular Eaters: 33% Infrequent Eaters: 27%	Frequent Eaters: 29% Regular Eaters: 32% Infrequent Eaters: 29%	Frequent Eaters: 39% Regular Eaters: 32% Infrequent Eaters: 24%
Education:	50% have a postgrad or bachelor degree	33% have a postgrad or bachelor degree	27% have a postgrad or bachelor degree
Employment:	46% are employed full time	48% are employed full time	22% are employed full time
Household:	42% are married	49% are married	58% are married
Parental Status:	53% are a parent to a child or children	68% are a parent to a child or children	76% are a parent to a child or children
Mean Household Income:	30% have a household income of \$100k or more	31% have a household income of \$100k or more	18% have a household income of \$100k or more
Regular Fishers:	26% fish once a month or more	16% fish once a month or more	11% fish once a month or more

What would you say you spend per week on groceries?

Base: all respondents who provided valid responses (removing outliers), n = 1,961*



Frequent Eaters (n = 645)

Average Spend on Groceries: \$155.35



Regular Eaters (n = 634)

Average Spend on Groceries: \$151.68

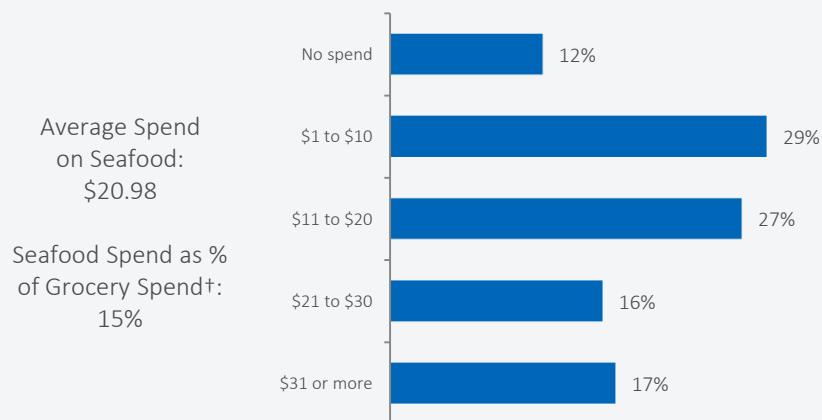


Infrequent Eaters (n = 514)

Average Spend on Groceries: \$135.51

And what would you say you spend per week on seafood in particular?

Base: all respondents who provided valid responses (removing outliers), n = 1,961*



Frequent Eaters (n = 645)

Average Spend on Seafood: \$31.77

Seafood Spend as % of Grocery Spend†: 22%



Regular Eaters (n = 634)

Average Spend on Seafood: \$20.93

Seafood Spend as % of Grocery Spend†: 15%



Infrequent Eaters (n = 514)

Average Spend on Seafood: \$12.90

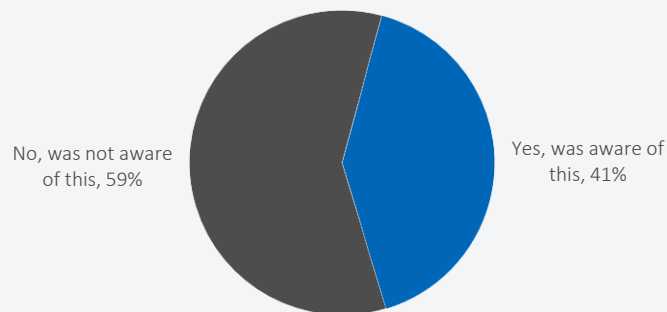
Seafood Spend as % of Grocery Spend†: 11%

*Outliers were deemed as responses that were far and away above all other responses, or those who provided a seafood spend higher than their grocery spend.

†The average seafood spend as % of grocery spend was calculated as an average of each respondents % of seafood spend, as opposed to the % of the respondent means for spend. RDC – unpacking the consumer seafood experience – a 2019 update – June 2019

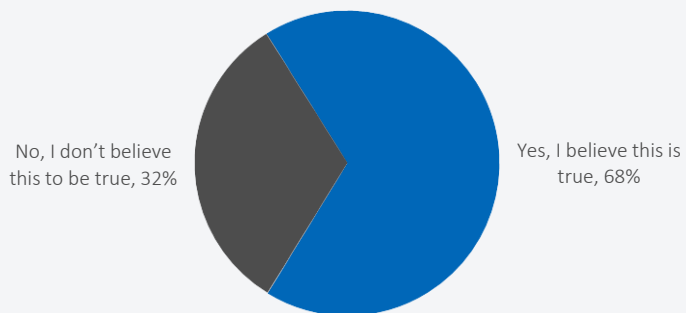
Were you aware that FSANZ (Food Standards Australia New Zealand) recommends that Australians (excluding pregnant women and children under 6) eat 2-3 serves of fish/seafood per week?

Base: all respondents, n = 2,002



Do you believe the statement previously (most Australians should be 2-3 serves of fish/seafood per week)?

Base: all respondents, n = 2,002



Yes, aware:
53%



Yes, aware:
38%



Yes, aware:
34%

The FMI's Power of Seafood research† states the following:

- 59%** aware of USDA's recommendation to eat at least two servings of seafood per week
- 54%** aware of FDA's advisement that seafood is good for children's growth and development
- 51%** aware of FDA/EPA's advisement that seafood contributes to healthy diet before/during pregnancy/while breastfeeding.



Yes, true:
78%



Yes, true:
68%

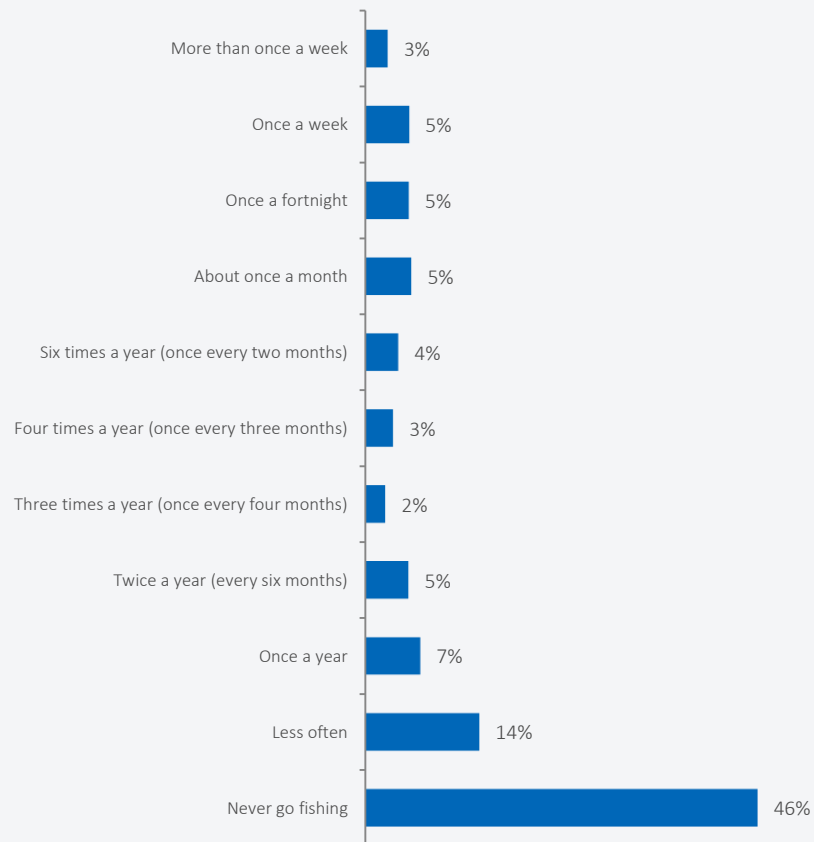


Yes, true:
63%

†Source: FMI's Power of Seafood 2019. Please note that the FMI research is based on US respondents, and also defines the seafood consumer as those who consume at least once a month at home, a restaurant, or elsewhere. This comparison should be treated as indicative only.

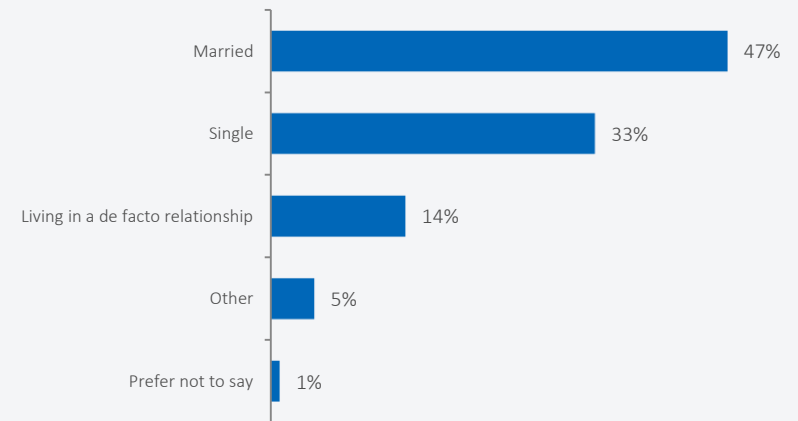
Over the last 12 months, how often have you gone fishing? Include any occasion you have gone recreational fishing – by yourself, with friends or family or with others.

Base: all respondents, n = 2,002



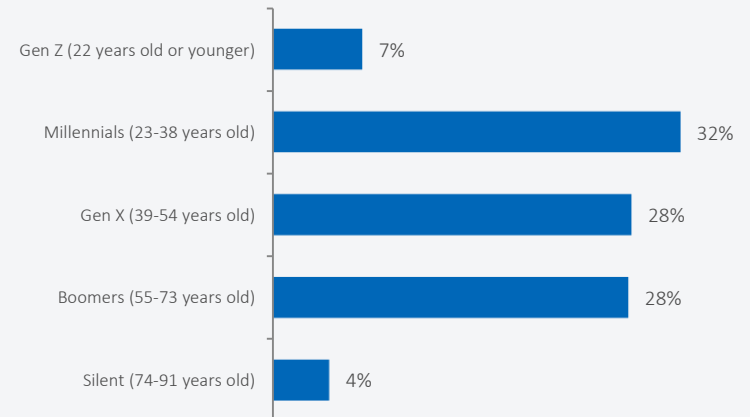
Which one of the following best describes your household situation?

Base: all respondents, n = 2,002



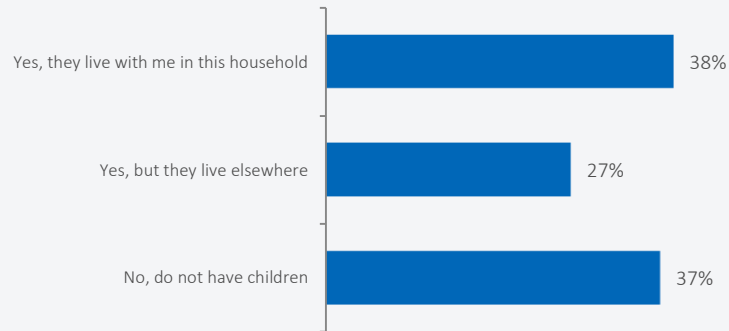
Generation of respondent (based off age of respondent)

Base: all respondents, n = 2,002



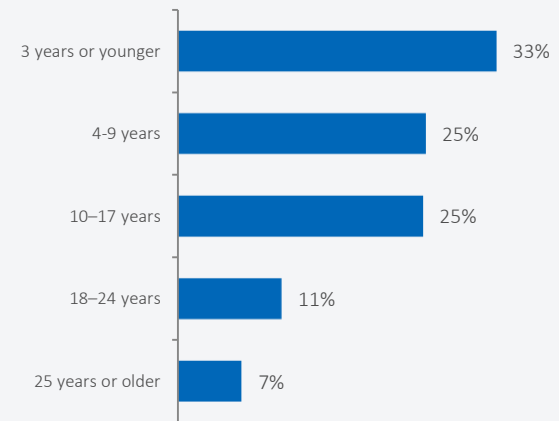
Do you have any children?

Base: all respondents, n = 2,002



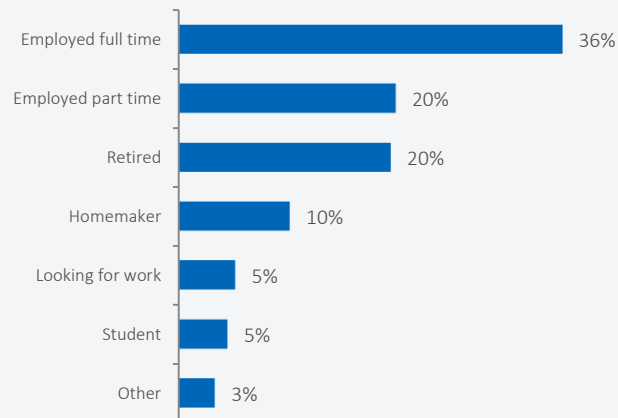
What is the age of the youngest child living with you?

Base: all respondents who has a child or children living with them in the household, n = 763



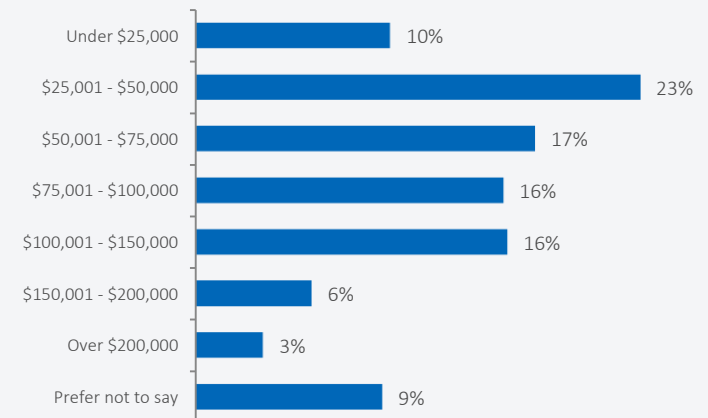
What is your current employment status?

Base: all respondents, n = 2,002



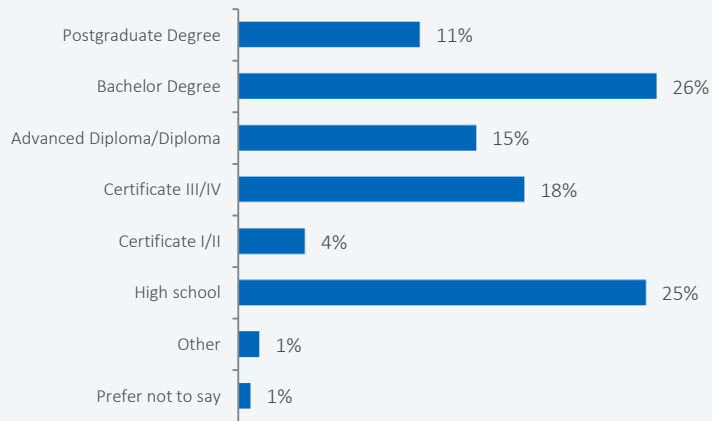
What is your current household income before tax?

Base: all respondents, n = 2,002



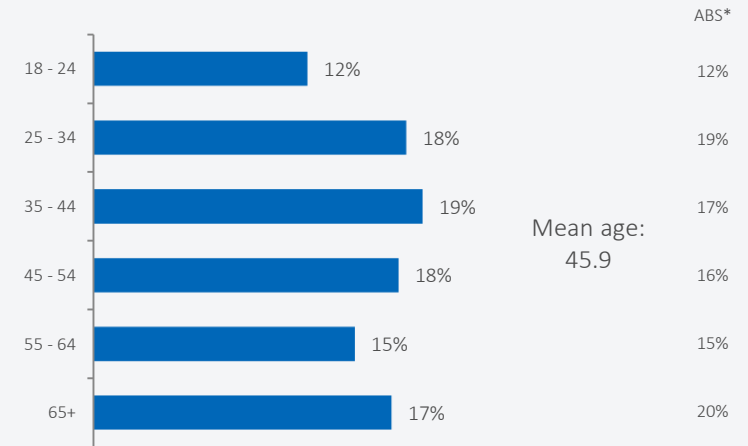
What is the highest level of education you have completed?

Base: all respondents, n = 2,002



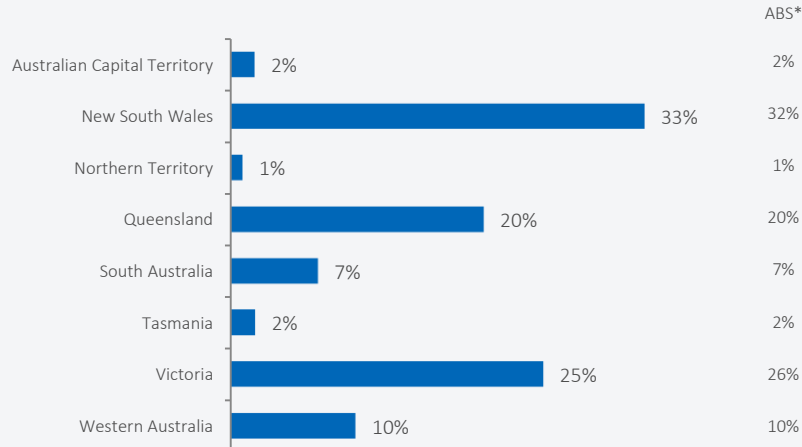
Age Group of respondent

Base: all respondents, n = 2,002



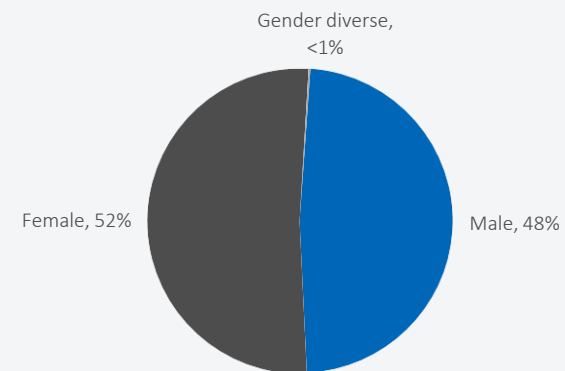
State/Territory of respondent

Base: all respondents, n = 2,002



Gender of respondent

Base: all respondents, n = 2,002



ABS*: Males 49.6%, Females 50.4%

Methodology

The study involved an online survey amongst adults (18+) who fulfilled the position of main grocery buyer (MGB) for their household.

Consumers were sourced via an accredited online market research panel provider; TEG Insights. This methodology provides a random and representative sample of consumers in a highly cost efficient way.

Sample

The final sample size for the market research was n = 2,002 representative of Australia by age, gender and geographical location as matched by ABS estimates:

ACT:	n = 39	QLD:	n = 404	VIC:	n = 499
NSW:	n = 660	SA:	n = 140	WA:	n = 200
NT:	n = 20	TAS:	n = 40		

As final age and gender profile of this sample was matched back to the ABS estimate of the population profile, it was decided that, given the similarity of the profiles, no weighting of the market research data would be required.

Questionnaire

A 15 minute online survey was conducted with respondents. This survey measured, amongst other things:

- o Consumption Behaviours
- o The Purchasing Experience
- o The Consumption Experience
- o Non-Eaters Of Seafood
- o Issues Affecting Consumer Seafood Purchasing
- o Perceptions Of Sustainability
- o Respondent Profiles

A range of Likert rating scale, closed and open-ended questions were used throughout the survey to accomplish this.

Response and Timing

Throughout the survey period, n = 2,002 respondents completed the survey. The survey was open for response on 18th April 2019 and remained open until 9th May 2019.



Unpacking the consumer seafood experience

a 2019 update

June 2019

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MSC Consumer Insights 2020 Australia

Prepared by GlobeScan
June 2020

Contact Us

Share
widely

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evidence and ideas. applied.

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Project: 3690



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Changes to Seafood Consumption



Background and Approach

Understanding the Consumer in this Study

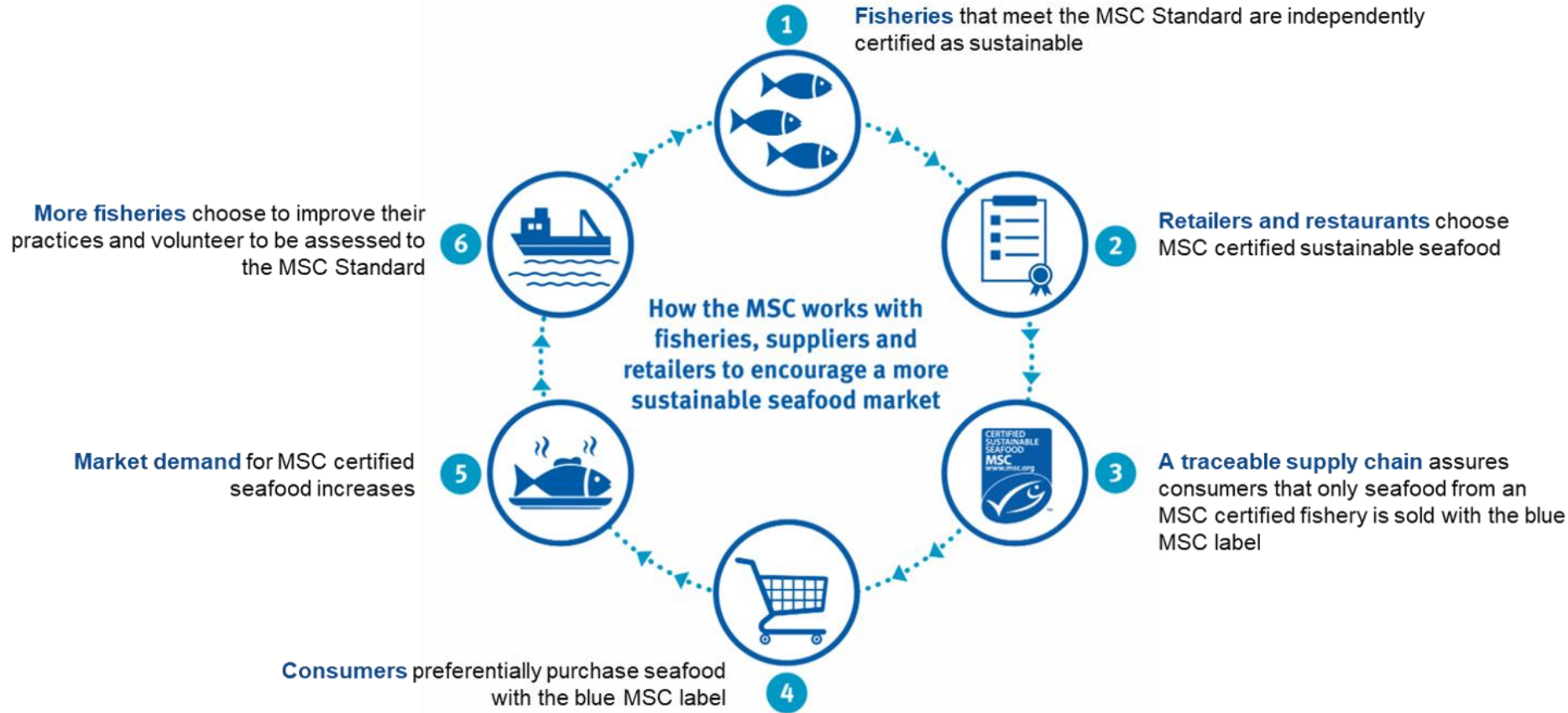
Share carefully

Type of consumer	Description	Australia sample size 2020	How do we know if changes since 2018 are significant?
 General Public	A representative sample of consumers across the country (as far as possible using online surveys)	n=831	Differences of +/- 3 percentage points are statistically significant (approx.)
 Seafood Consumers	Consumers in a household where someone has purchased seafood in the past 2 months and/or who regularly eat seafood at home or in a restaurant	n=627	Differences of +/- 4 percentage points are statistically significant (approx.)
 MSC Aware Consumers	Seafood consumers who recall having seen the MSC label "often" or "occasionally"	n=217	Differences of +/- 7 percentage points are statistically significant (approx.)
 MSC Blues	Seafood consumers who care about the planet alongside a love of shopping. When purchasing seafood, they value sustainability highly and prefer buying certified products	n=93	<i>No tracking included</i>
 Younger Consumers (Aged 18-34)	Seafood consumers aged between 18 and 34 – representing a future growth opportunity for MSC	n=187	<i>No tracking included</i>

*Where sample sizes are small, please approach data with caution

How Consumer Intelligence Supports MSC Theory of Change

Share widely





Executive Summary

MSC Australia Country Dashboard

Share carefully

Love of seafood and the oceans



76%

Regularly purchase seafood

Base: General public, Australia



26%

Love to eat seafood

Base: General public, Australia



63%

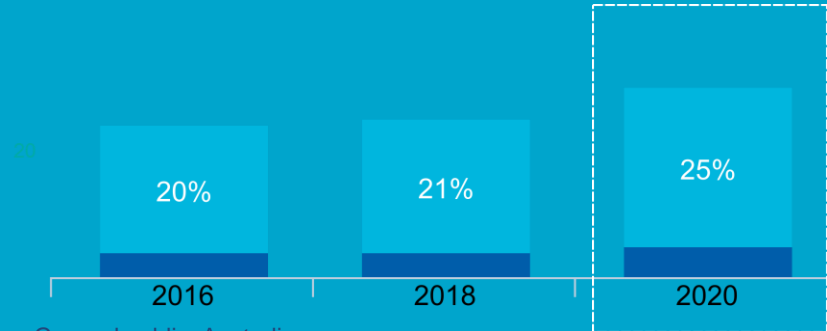
Believe we need to switch to only sustainable sources

Base: Seafood consumers, Australia

MSC awareness

Awareness of MSC label

■ Seen often ■ Seen occasionally



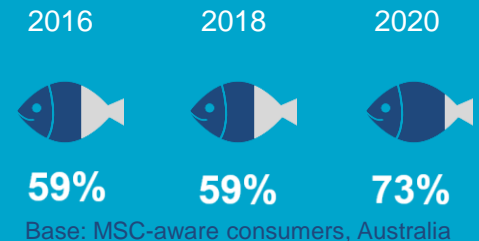
Base: General public, Australia

MSC understanding

Unprompted understanding

“ **28%** have at least some understanding, mentioning **sustainability and/or certification**
26% in 2018
20% in 2016

Trust in MSC



Base: MSC-aware consumers, Australia

Base: Seafood consumers, Australia

Top six motivators of seafood purchase (of 21 factors tested):

- 1 Safe to eat
- 2 Fresh
- 3 Taste
- 4 Good for my health / my family
- 5 Price
- 6 Knowing where product originally comes from

Base: Seafood consumers, Australia



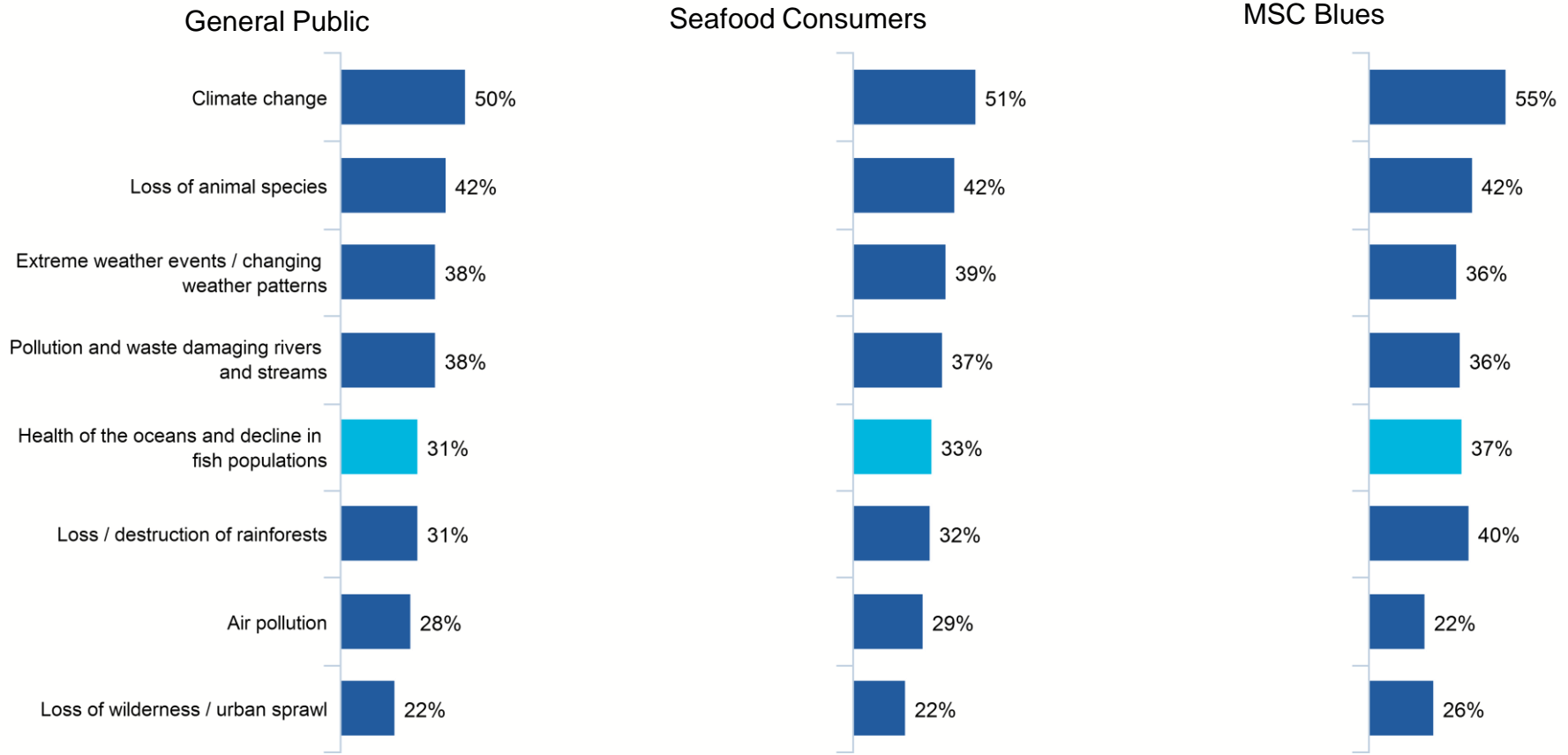


Attitudes to Ocean Sustainability

Most Concerning Environmental Threats



Environmental Issues (each respondent selected three issues)



Base: General Public, Australia

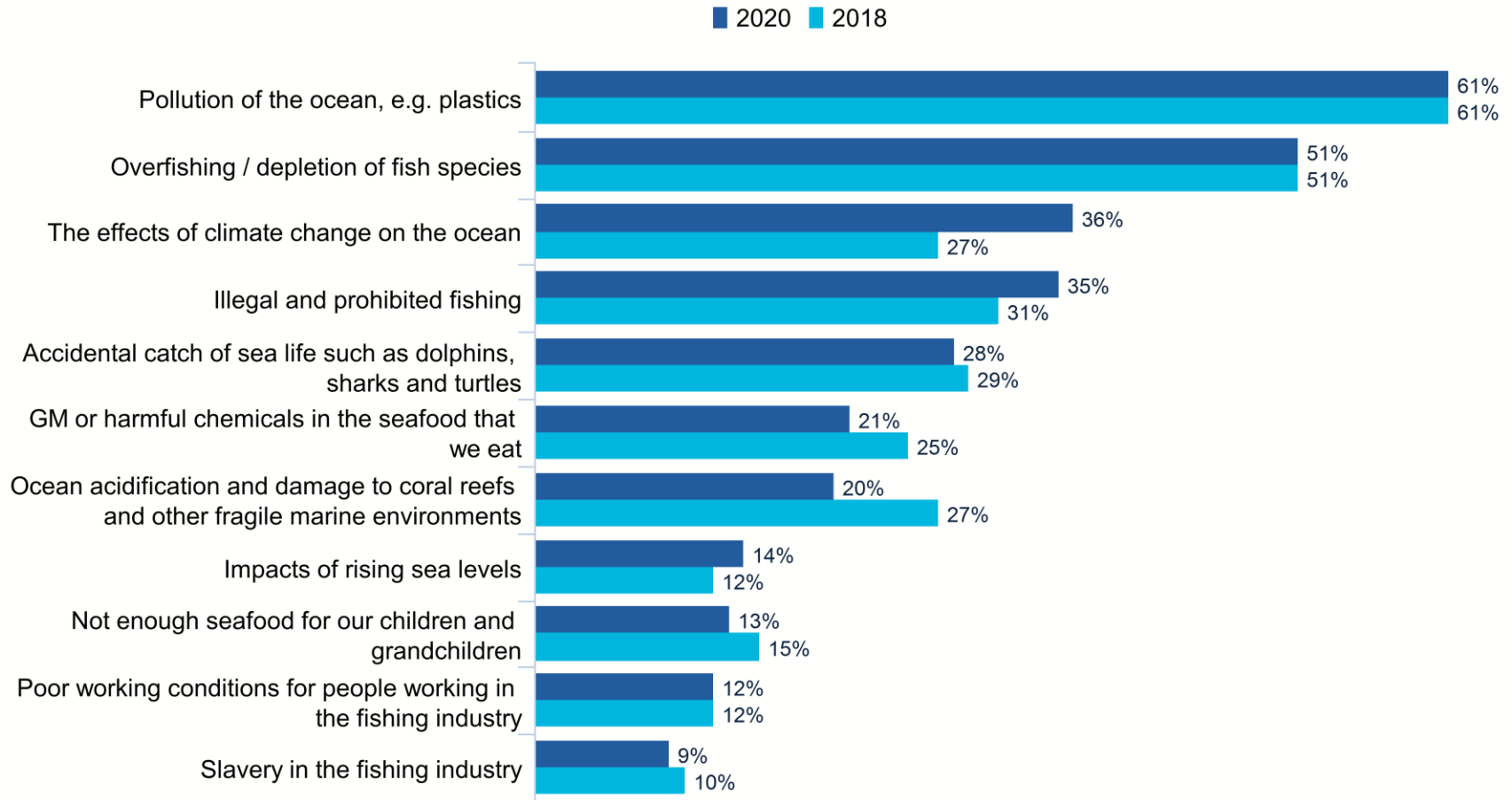
Q1.2: Which, if any, of the potential environmental issues are you most worried about?.
Which of these potential issues worries you the most?



Most Concerning Threats to Oceans



Issues (each respondent selected three issues)



Base: Seafood consumers, Australia

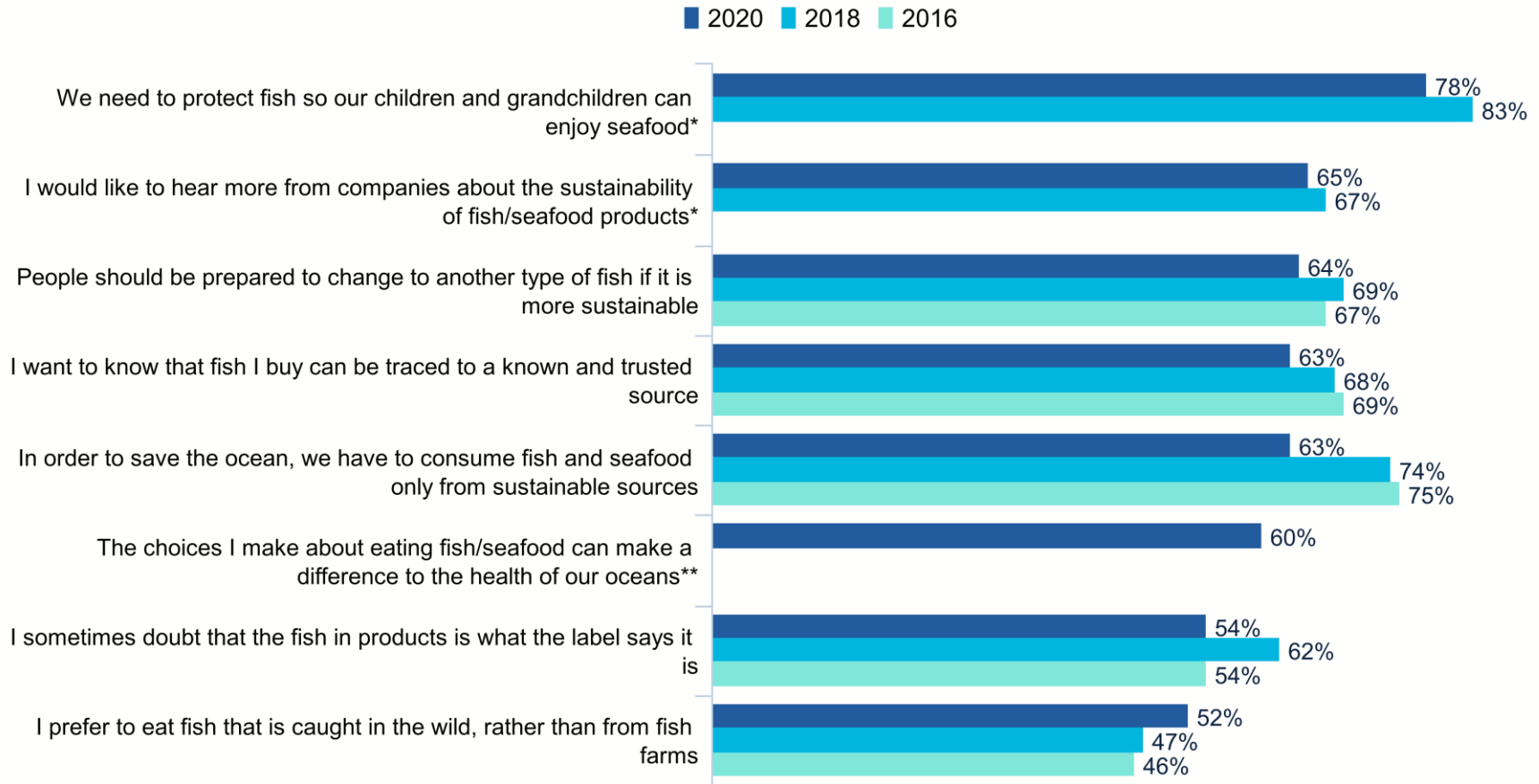
Q11.2: There are many different potential threats to the world's oceans, the wildlife living there and the people who work there. Which of these potential issues worries you the most?



Perspectives on Ocean Sustainability and Fish



Describes opinion well, top three (5+6+7 on 7-pt scale)



Base: Seafood consumers, Australia

Q5.1: How well does each of the following statements describe your opinions? 7-pt scale: 1 = "Does not describe my opinion very well", 7 = "Describes my opinion very well"

*No 2016 data available; **New statement in 2020

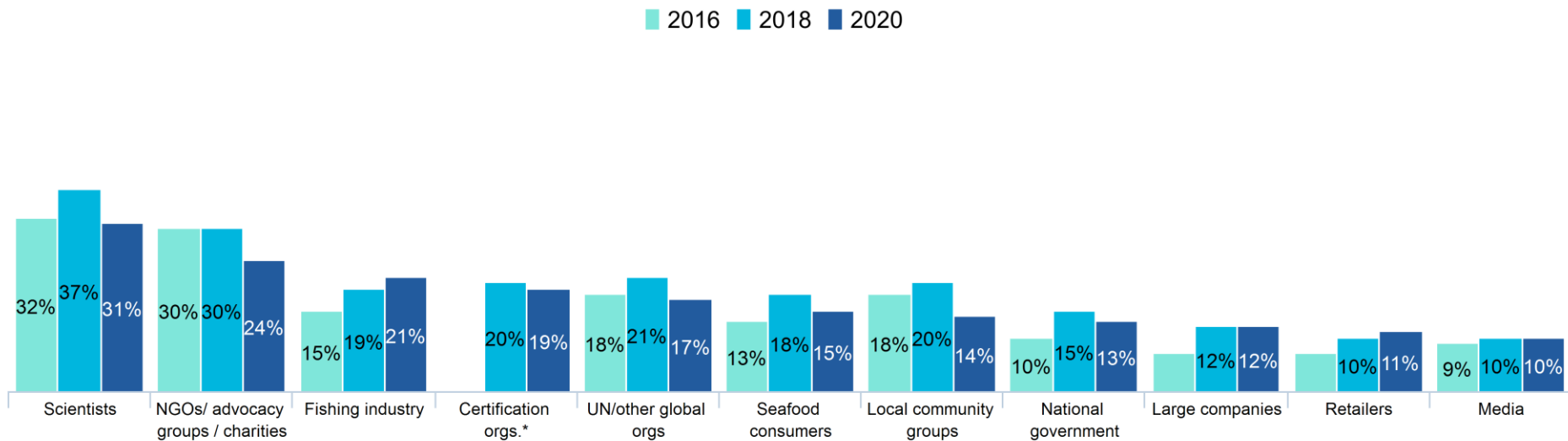


Expectations of Other Actors

Performance of Different Groups in Protecting Oceans



Contributing “very well” to protecting oceans, top two (6+7 on 7-pt scale)



Base: Seafood consumers, Australia

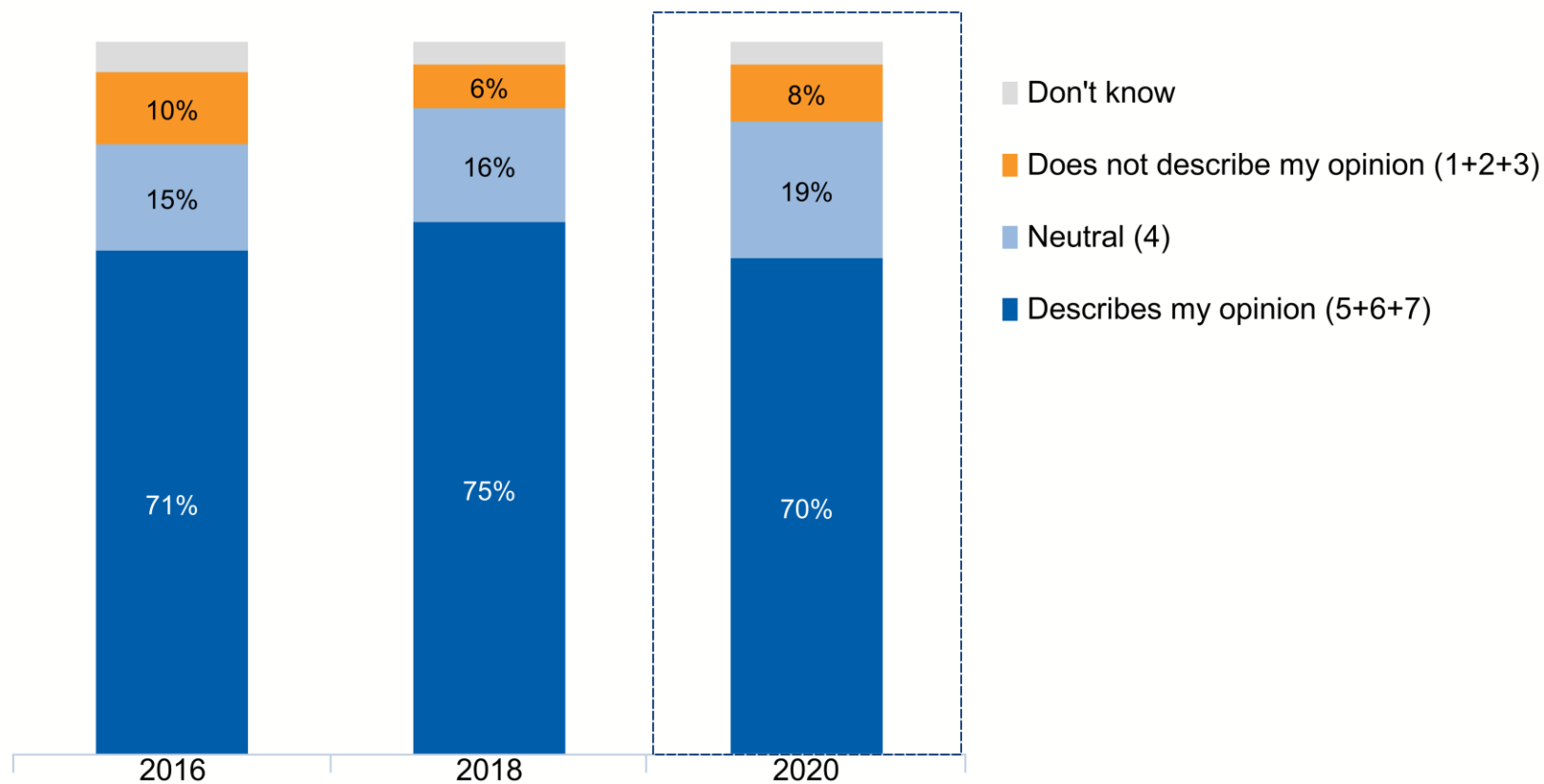
*No 2016 data available

Q3.1: How well do you think the following institutions are contributing to protecting the ocean environment?

Demand for Independent Certification

Share
carefully

“Supermarkets' and brands' claims about sustainability and the environment need to be clearly labelled by an independent organisation”



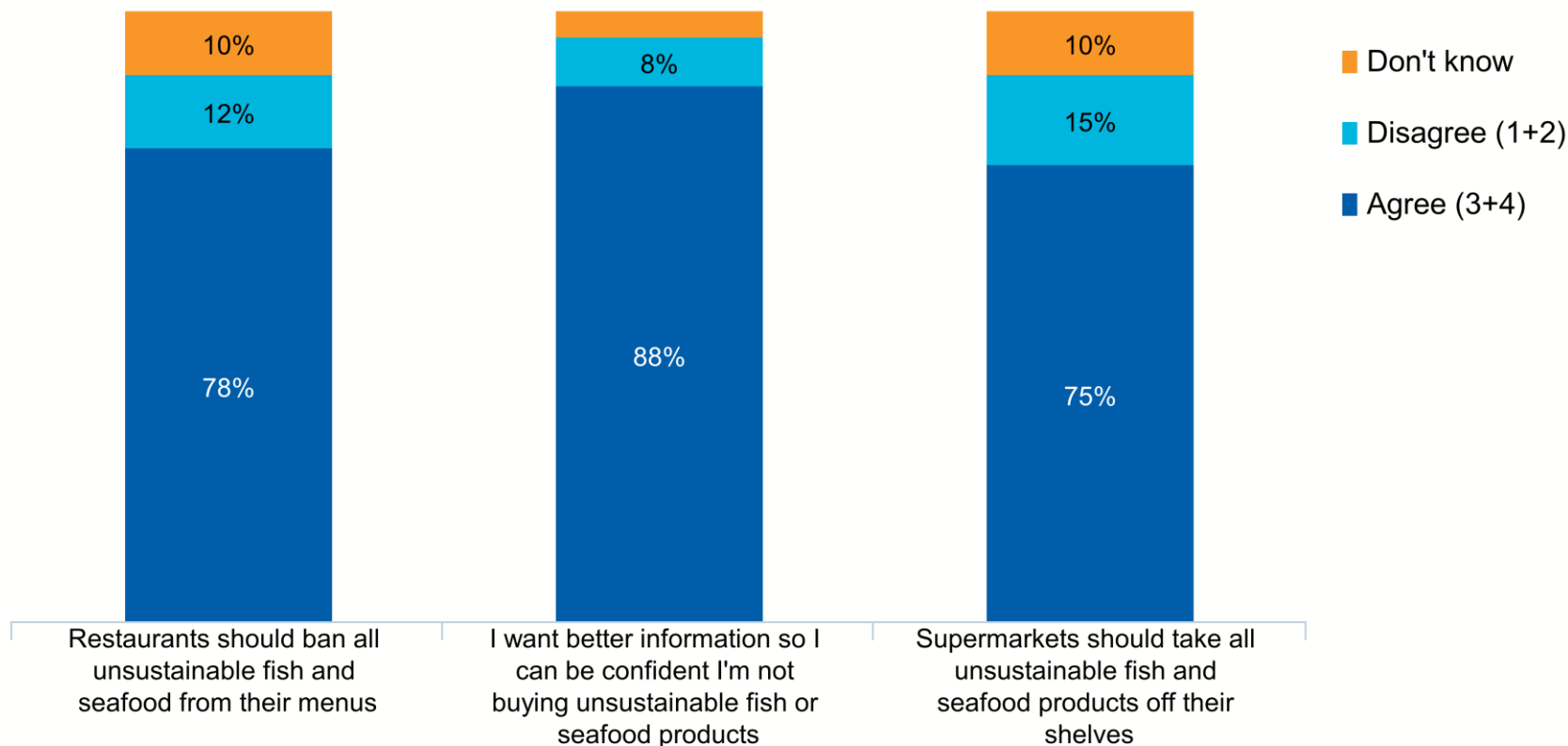
Base: Seafood consumers, Australia

Q5.1: How well does each of the following statements describe your opinions? 7-pt scale: 1 = “Does not describe my opinion very well”, 7 = “Describes my opinion very well”

Action on Unsustainable Fish and Seafood

Share widely

Consumer beliefs on actions regarding unsustainable fish



Base: Seafood consumers, Australia

Q11.3: The following question relates to how you feel about unsustainable fish and seafood products. These products contain fish or seafood from areas where their numbers are under threat or are captured in ways that may damage the environment. Please indicate below how much you agree or disagree with the following statements.

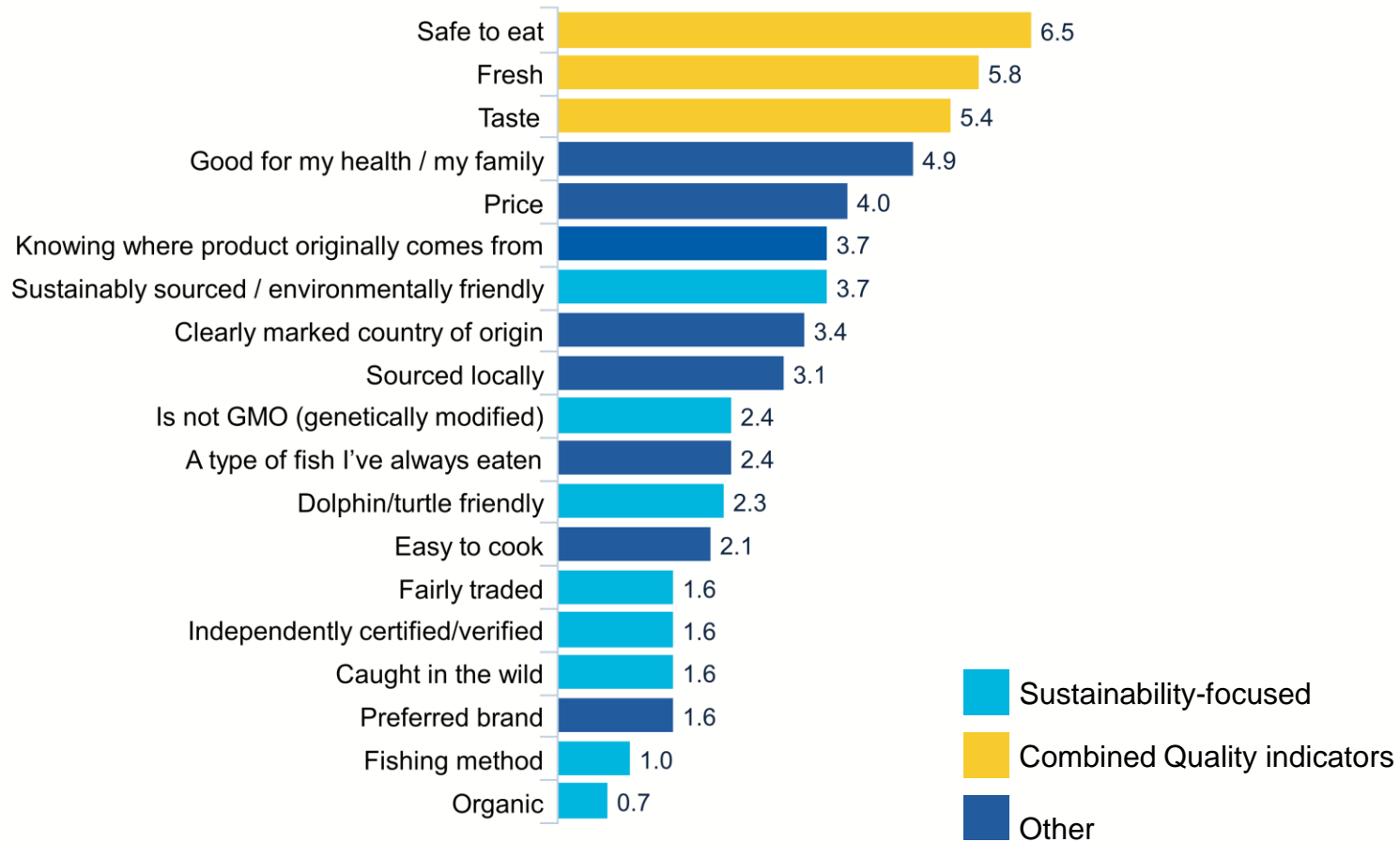


Motivators of Purchase and Ecolabels

Motivators when Purchasing Fish and Seafood

Share carefully

Relative importance scores



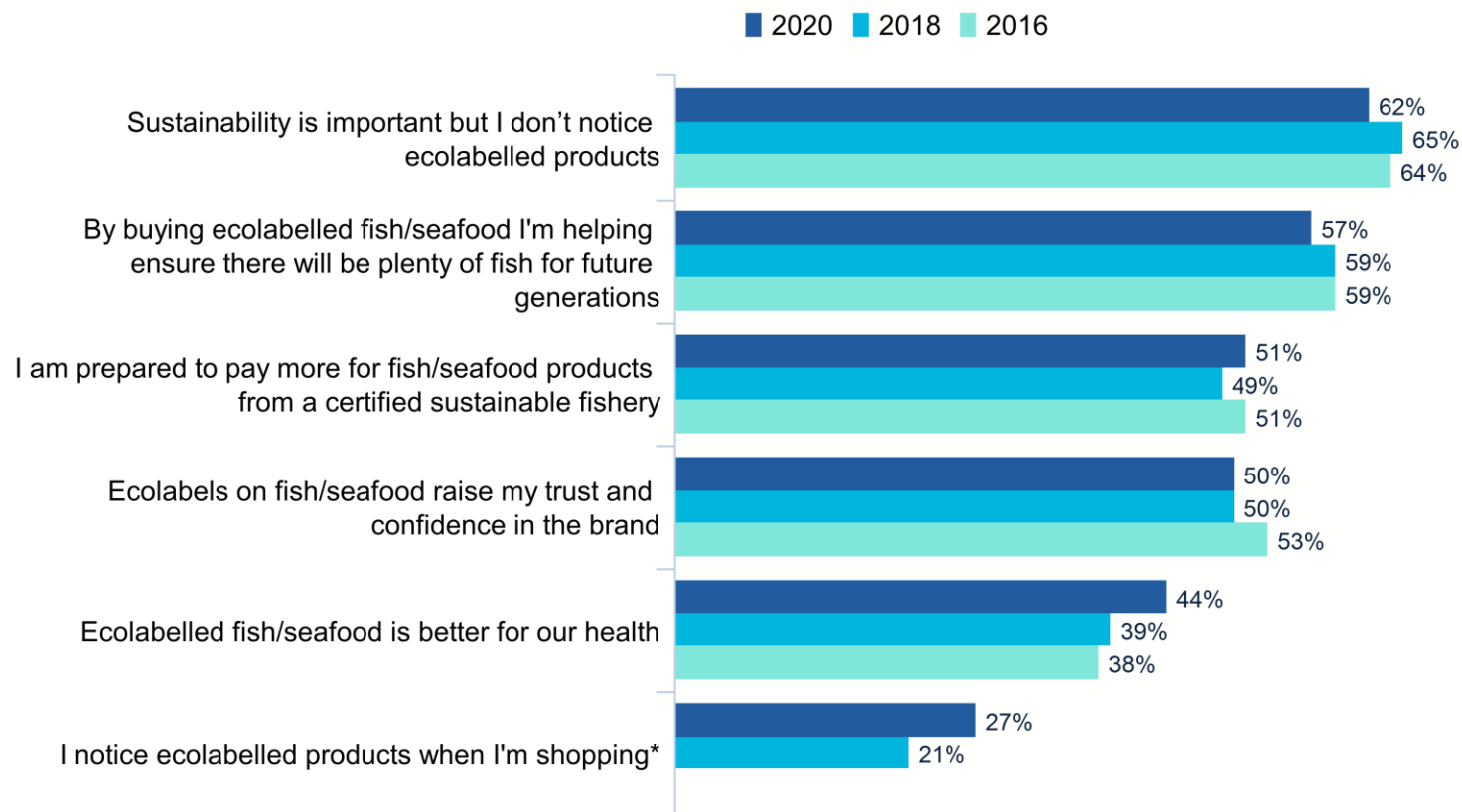
Base: Seafood consumers, Australia

Q4.2: Thinking about your recent purchase of '[type of seafood]', which of the following five considerations was the most important and which was the least important?

Attitudes Towards Ecolabels

Share
carefully

Describes opinion well, top three (5+6+7 on 7-pt scale)



Base: Seafood consumers, Australia

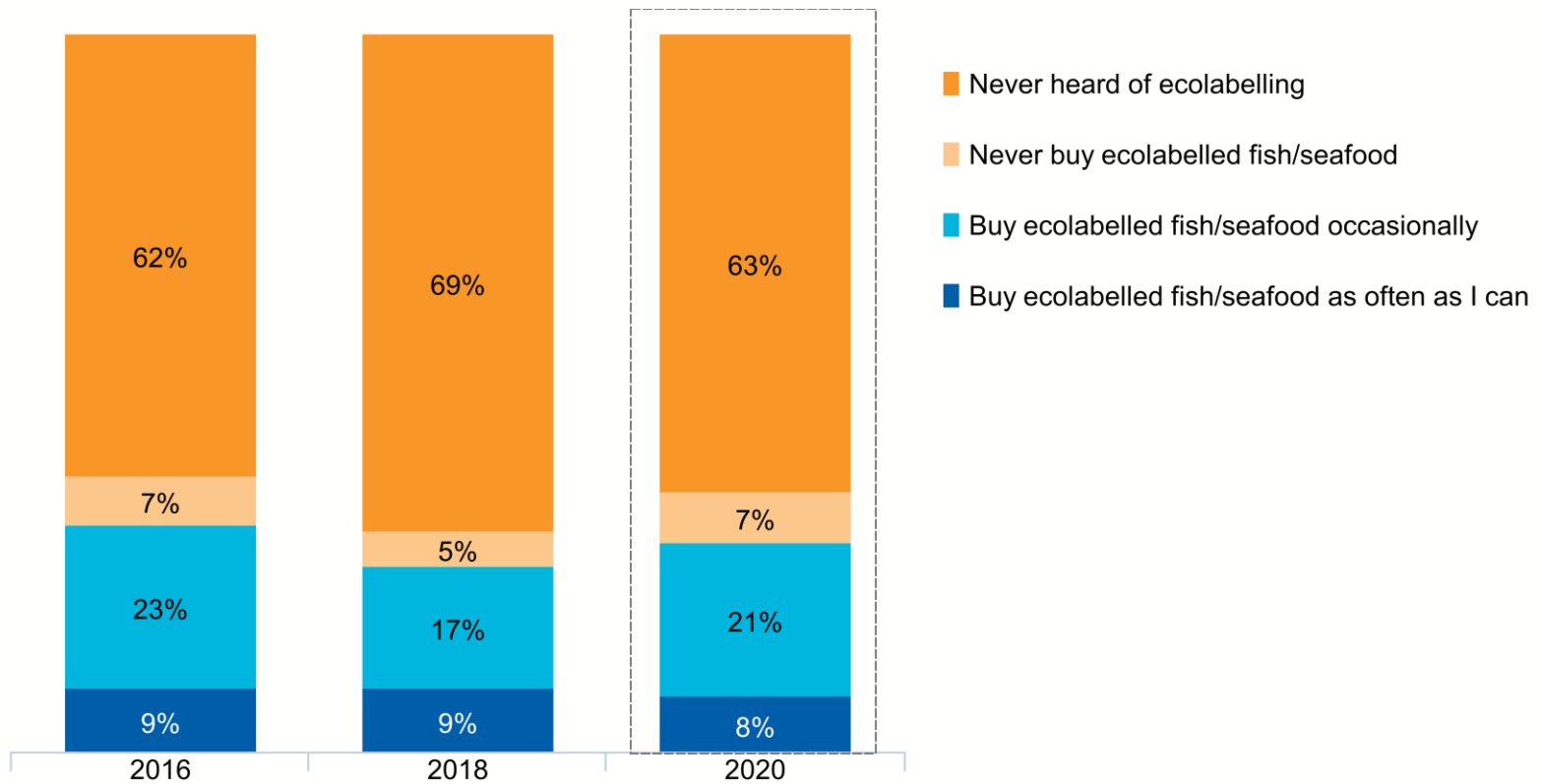
Q8.1: How well does each of the following statements describe your opinions about ecolabels? 7-pt scale: 1 = "Does not describe my opinion very well", 7 = "Describes my opinion very well"

*No 2016 data available

Purchase of Ecolabelled Fish

Share carefully

Frequency of purchase of ecolabelled fish



Base: Seafood consumers, Australia

Q7.1: How often do you buy ecolabelled fish and seafood products?

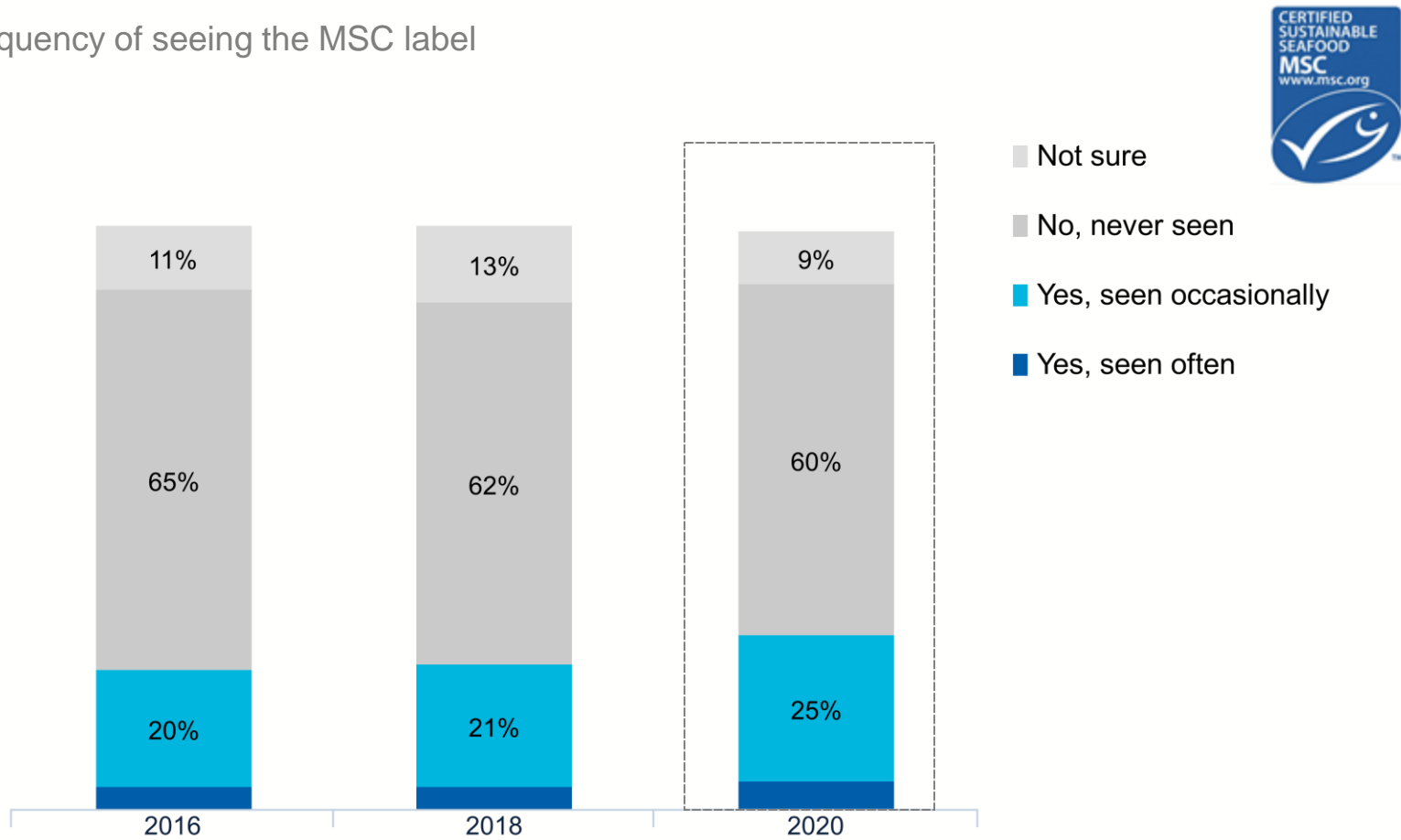


MSC Awareness and Understanding

Awareness of the MSC Label

Share widely

Frequency of seeing the MSC label



Base: General public, Australia

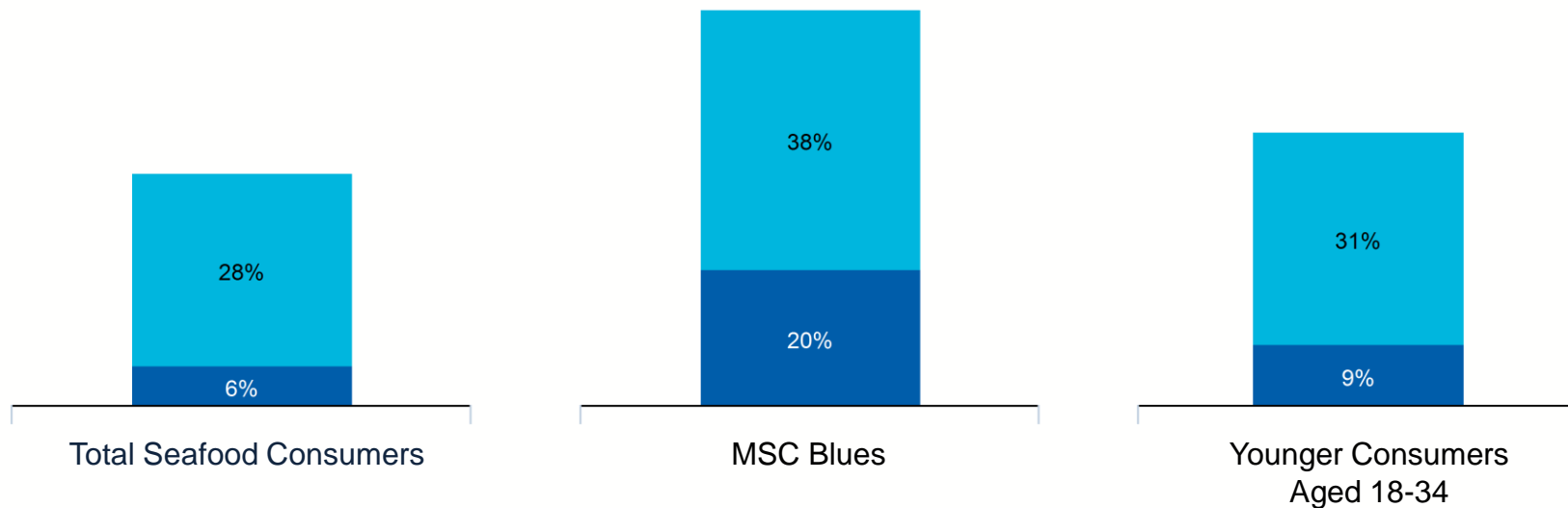
Q1.1: Have you ever seen the following logos?

Awareness of the MSC Label by Consumer Type

Share carefully

Frequency of seeing the MSC label by Consumer Type*

■ Seen often ■ Seen occasionally



Australia

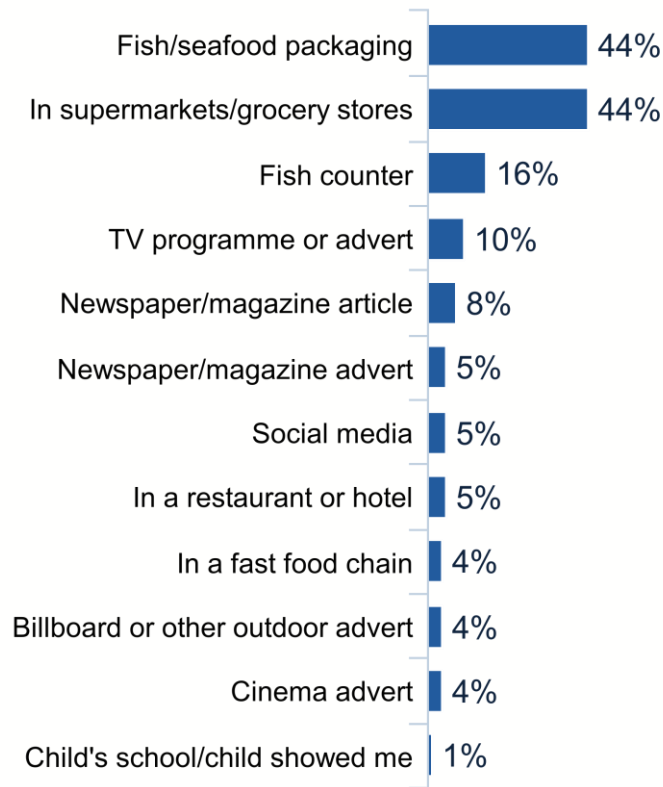
Q1.1: Have you ever seen the following logos?

*Note that previous pages are based on general public - these numbers relate to different groups of seafood consumers

Locations Where Consumers Recall Seeing MSC Label



Locations



Supermarkets (each store asked to those who have seen MSC and who shop at each store)

Please refer to data table for complete details

Other outlets (asked to all who have seen MSC)

Please refer to data table for complete details

Base: MSC aware, Australia

Q9.4: Earlier, you mentioned that you remember seeing this label. Where have you seen it?

Q9.5: Do you recall seeing this label in any of the following places?

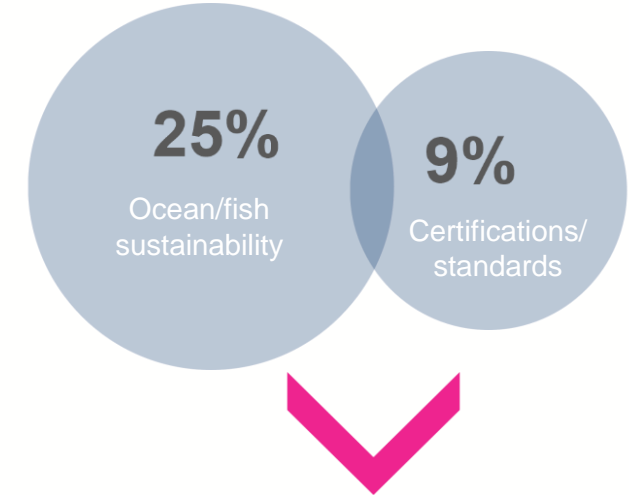
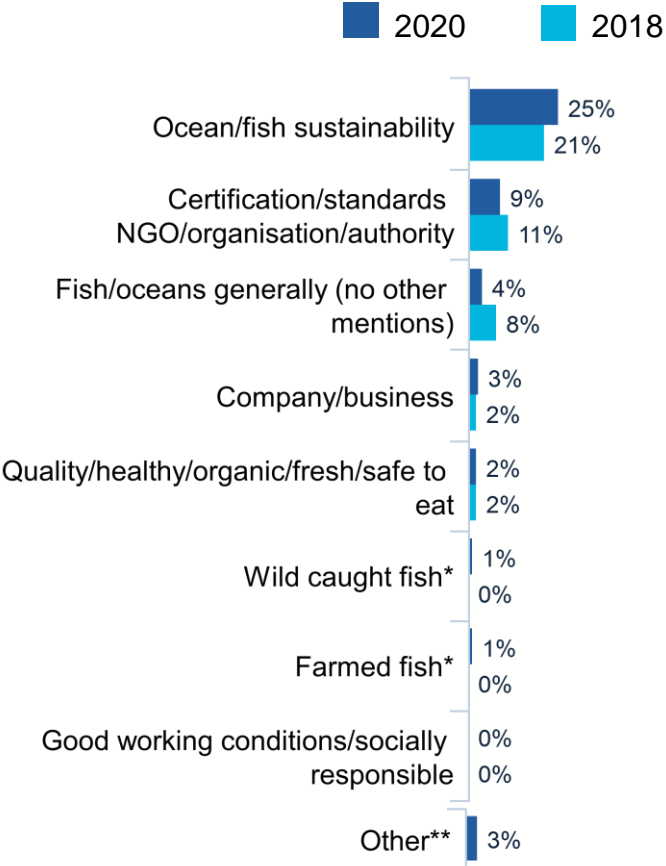


Understanding of the MSC Label

Share carefully



Unprompted associations with MSC label



28% have at least some understanding, mentioning sustainability and/or certification

26% in 2018

20% in 2016

Base: Seafood consumers, Australia

Q6.1: What does this logo mean or represent?

*There is no tracking available on farmed fish or wild fish as these are associations arising in 2020

** Other has not been tracked to account for the new associations which would have been classified as "other" in 2016 and 2018

Due to complexities in programming this question, there may be small discrepancies in the data. Please refer to the data in your country report

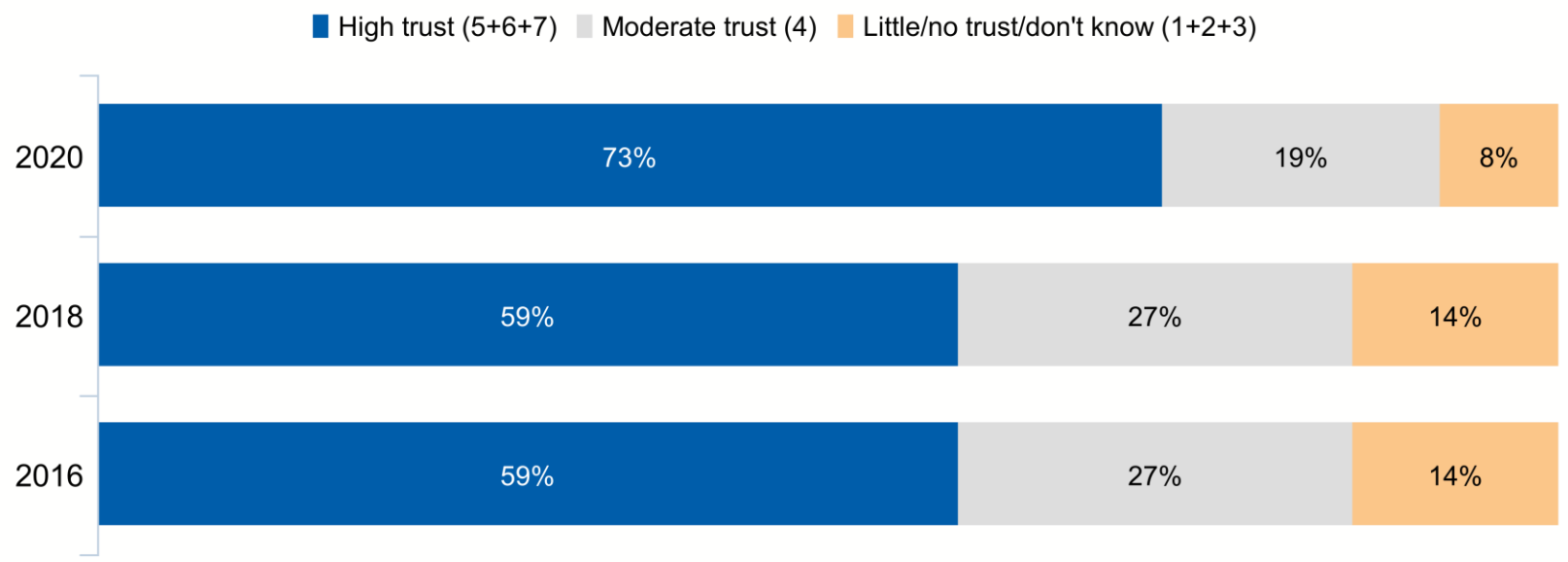


Trust in the MSC Label



KPIs on trust in the MSC label

Trust in MSC



Base: MSC aware, Australia

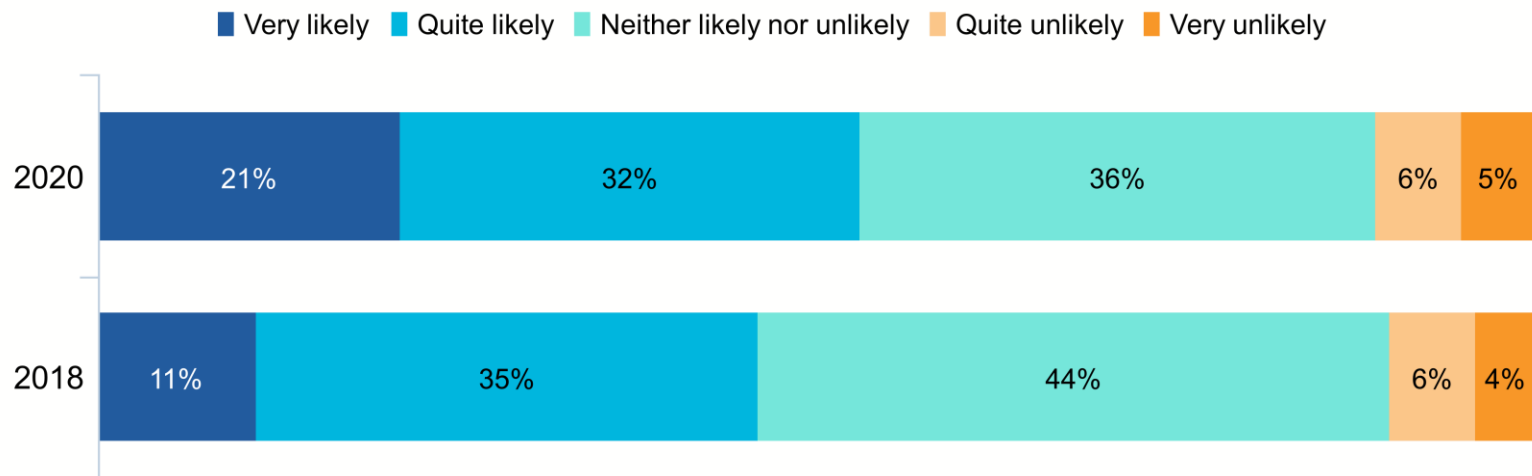
Q9.2: How much trust do you have in the claims of the following organisations? 7-pt scale: 1 = "No trust", 7 = "A lot of trust"



Recommendation of MSC



Likelihood of recommending MSC-certified products



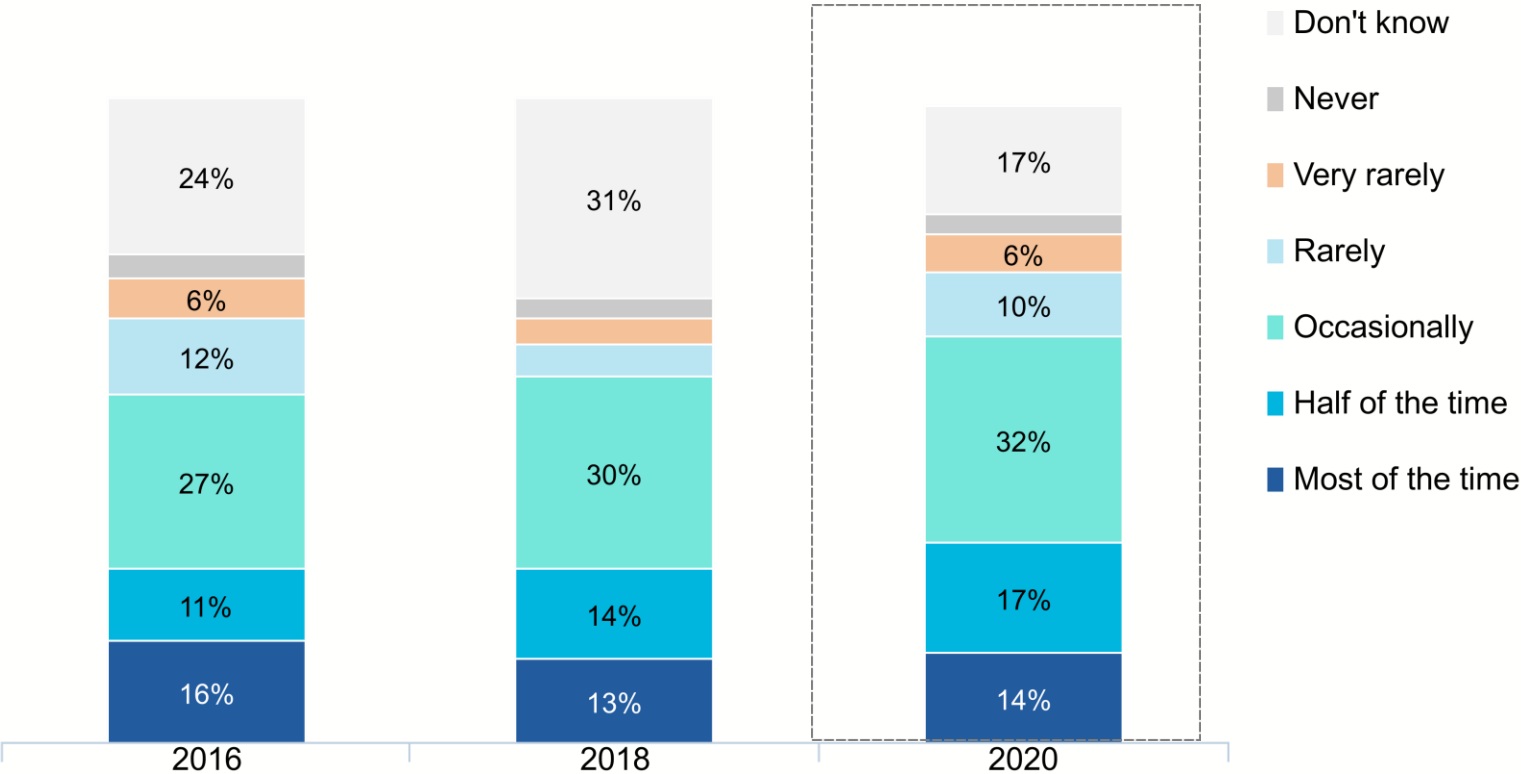
Base: MSC aware, Australia

Q12.2: How likely are you to recommend MSC certified products to the people you know?

Purchase of MSC-certified Fish



Frequency of purchase of MSC-certified fish



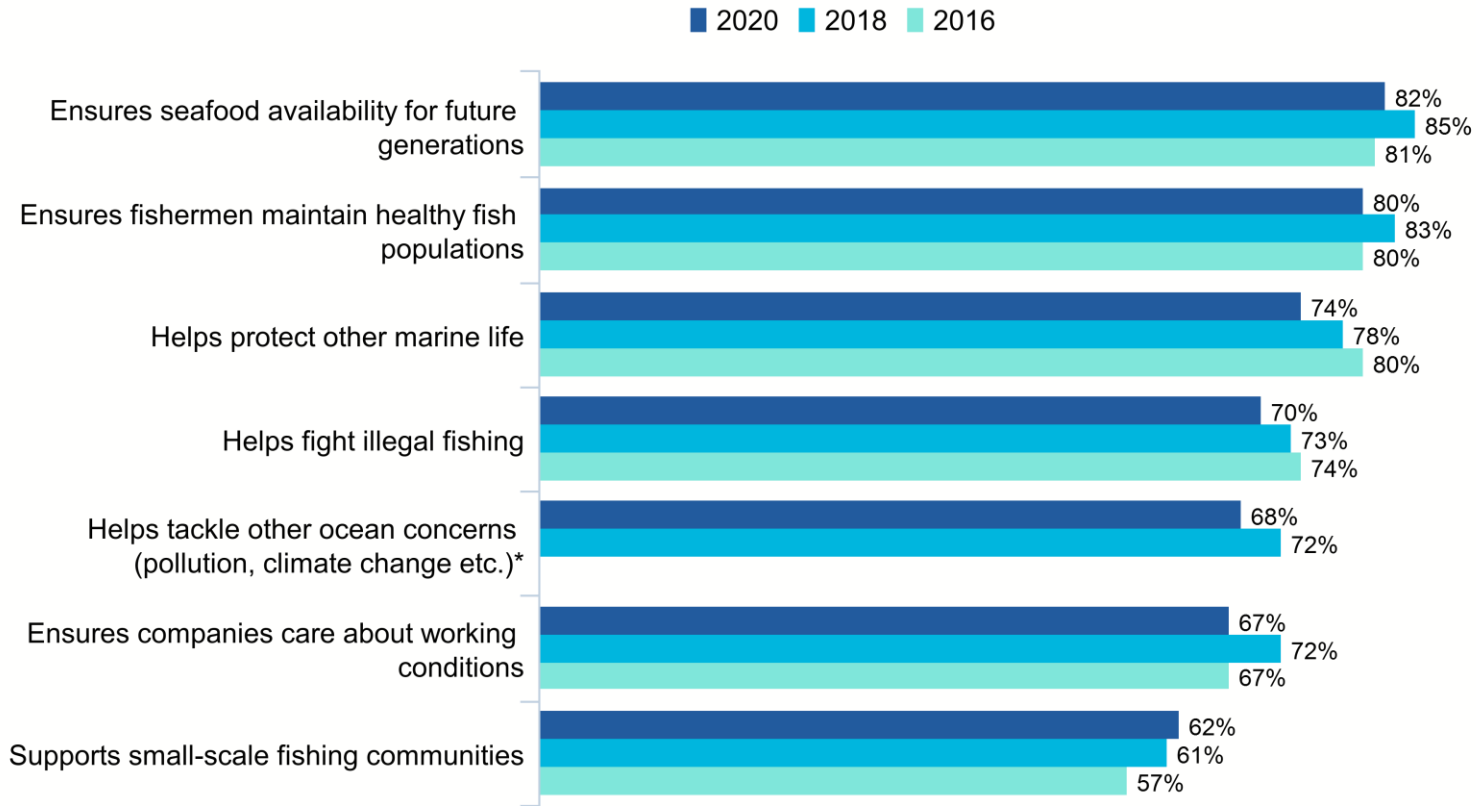
Base: MSC aware, Australia

Q9.3: How often do you purchase fish or seafood with this logo on it?

Perceptions of MSC: Sustainability Impact



Describes MSC well, top three (5+6+7 on 7-pt scale)



Base: MSC aware, Australia

Q11.1: How well do you think the following statements describe the Marine Stewardship Council (MSC) and the ecolabel?
7-pt scale: 1 = "Does not describe MSC at all", 7 = "Describes MSC completely"

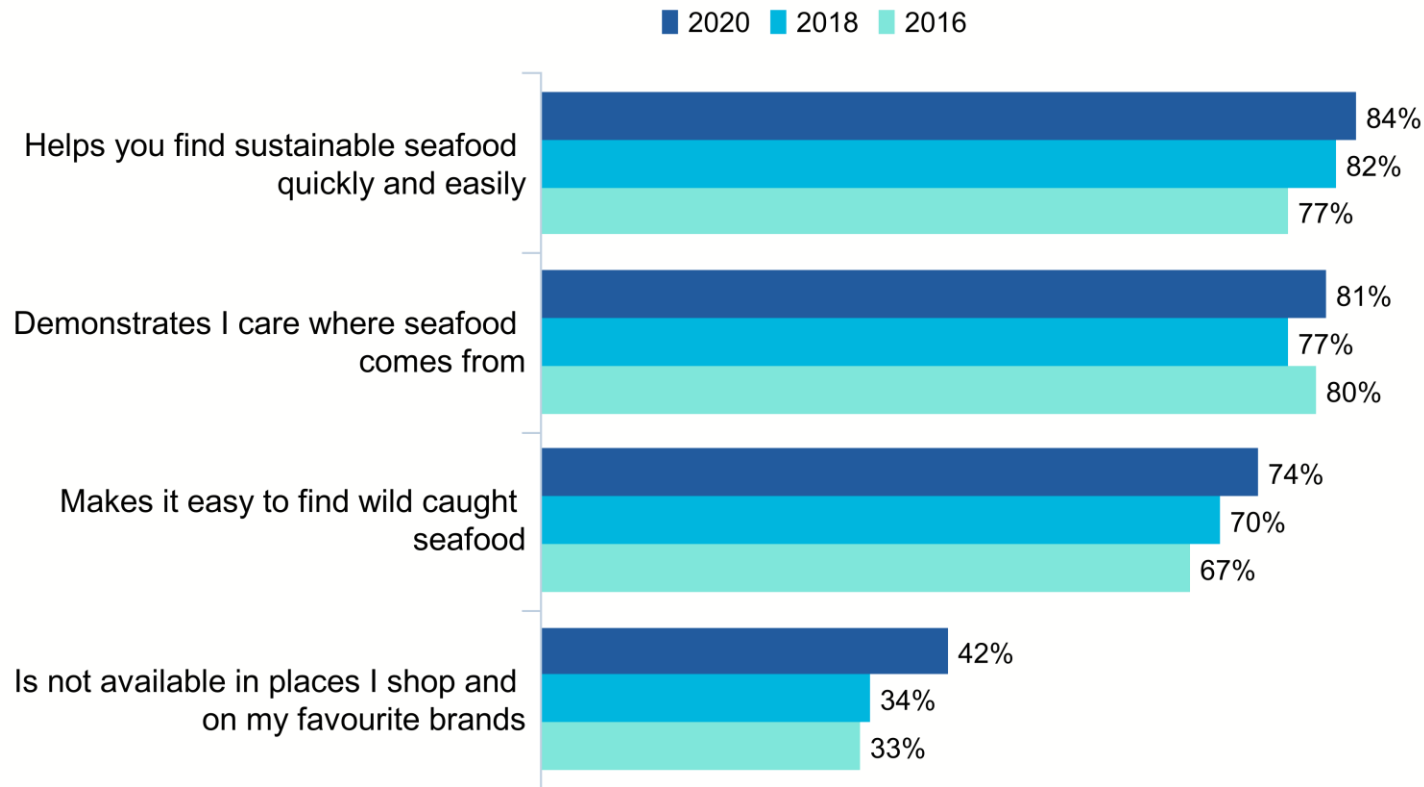
*No 2016 data available



Perceptions of MSC: Consumer Benefits



Describes MSC well, top three (5+6+7 on 7-pt scale)



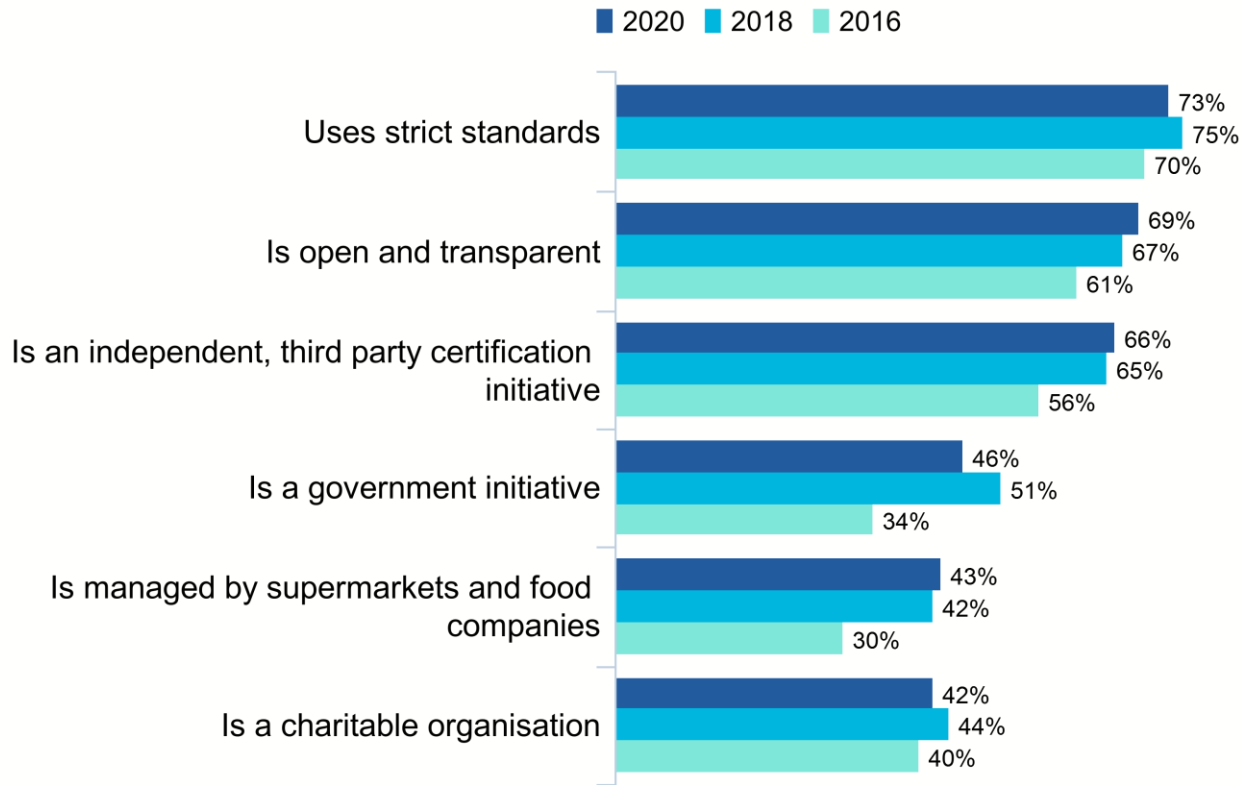
Base: MSC aware, Australia

Q11.1: How well do you think the following statements describe the Marine Stewardship Council (MSC) and the ecolabel?
7-pt scale: 1 = "Does not describe MSC at all", 7 = "Describes MSC completely"

Perceptions of MSC: Organisation



Describes MSC well, top three (5+6+7 on 7-pt scale)



Base: MSC aware, Australia

Q11.1: How well do you think the following statements describe the Marine Stewardship Council (MSC) and the ecolabel?
7-pt scale: 1 = "Does not describe MSC at all", 7 = "Describes MSC completely"



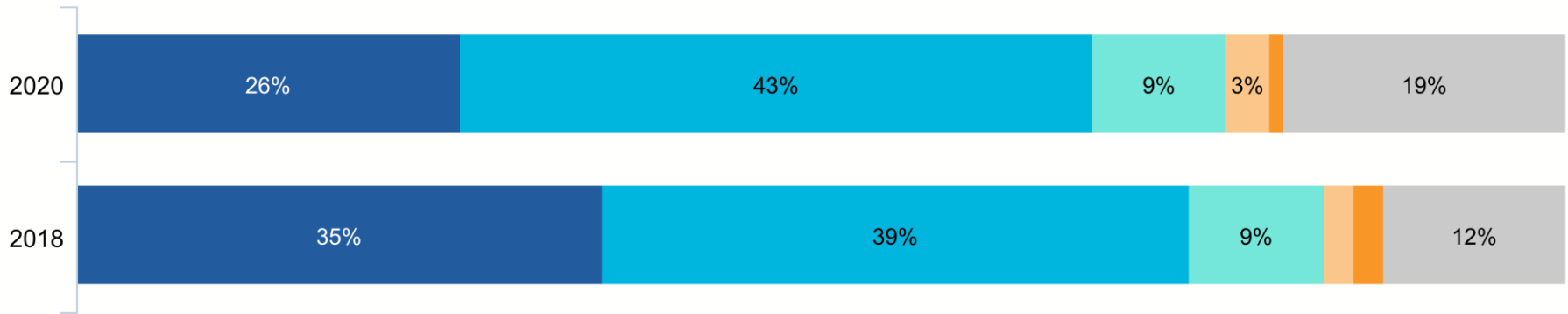
Love of Seafood

Consumer Love for Fish and Seafood

Share carefully

Personal enjoyment of eating fish/seafood

- Really like eating fish/seafood
- Like eating fish/seafood
- Neither like nor dislike
- Dislike eating fish/seafood
- Really dislike eating fish/seafood
- Not Answered



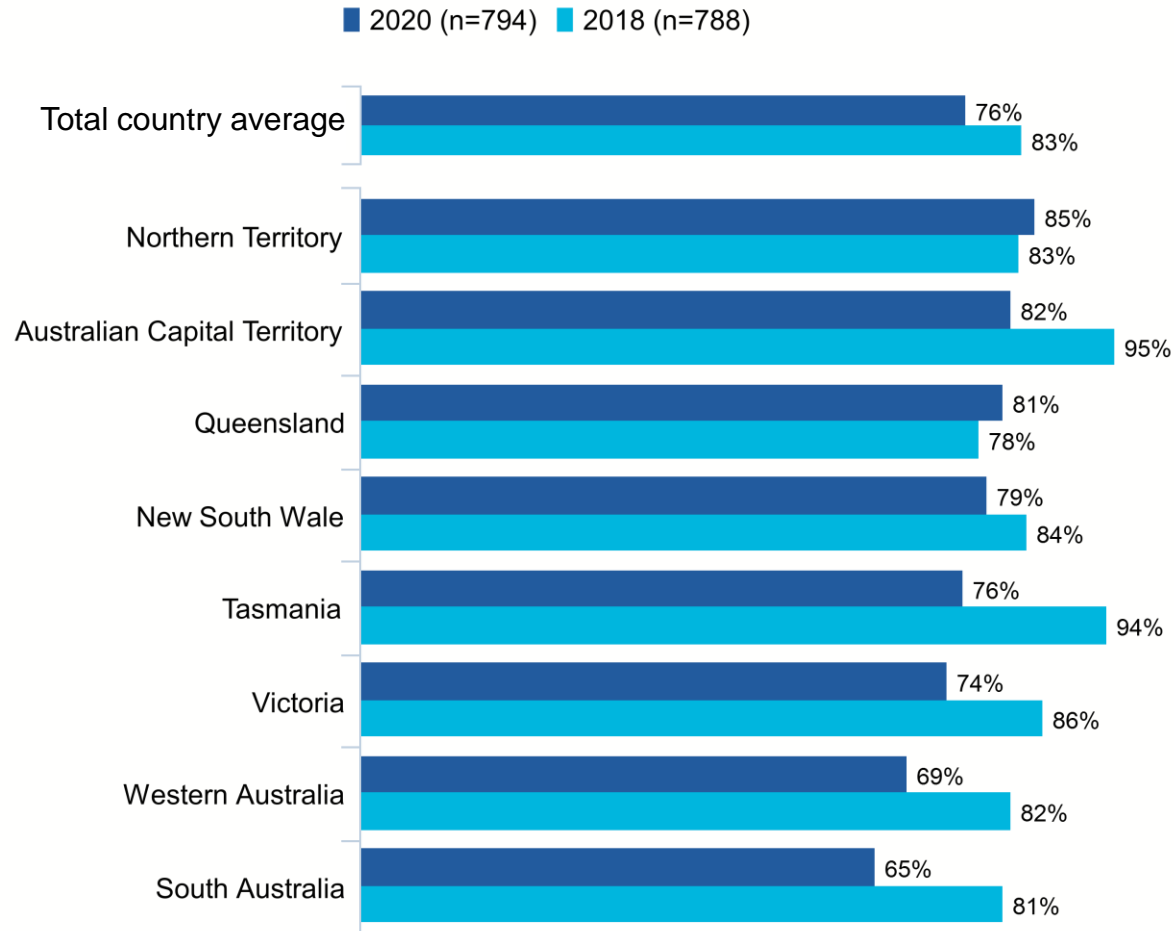
Base: General public, Australia

Q2.7: How much would you say you personally enjoy eating fish and other seafood? 5-pt scale: 1 = "Really dislike eating fish/seafood", 5 = "Really like eating fish/seafood"

Purchase of Seafood, by Region



Fish/seafood purchase, by region



Base: General public, Australia

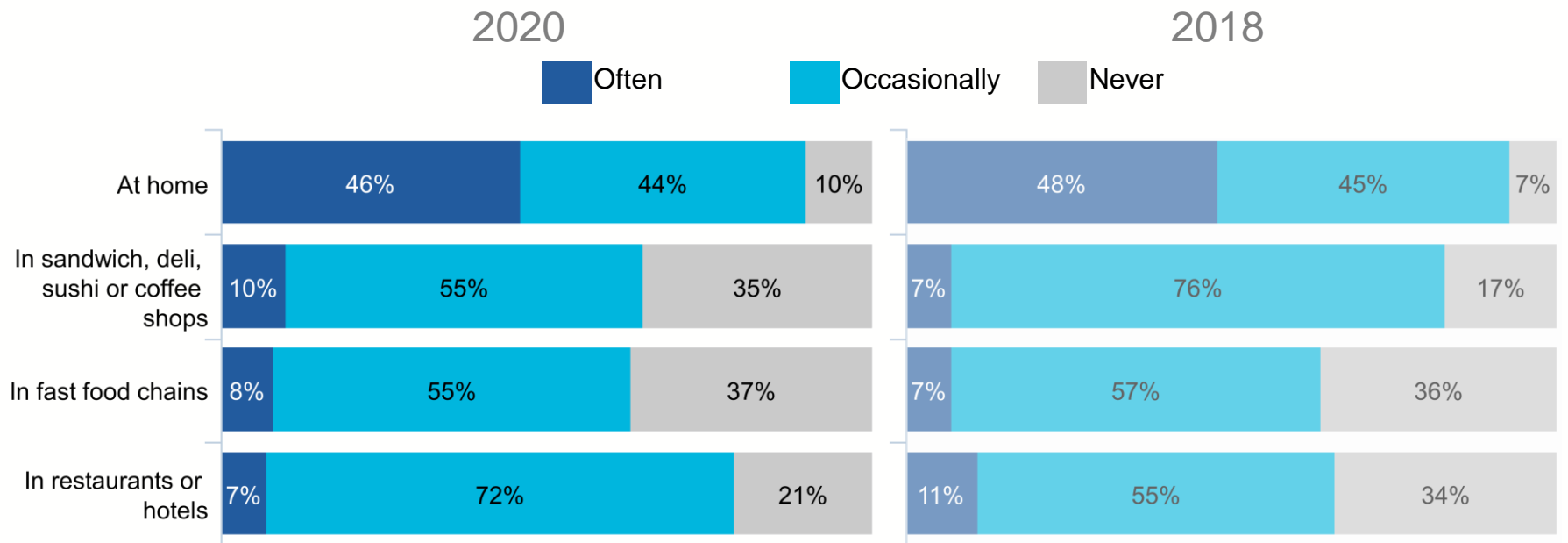
Q2.1: Have you or anybody in your household bought fish or seafood products in the past 2 months? (this includes frozen, fresh, or canned, sandwiches, salads, sushi etc.)



Frequency of Fish/Seafood Consumption



Frequency of fish/seafood consumption, by location



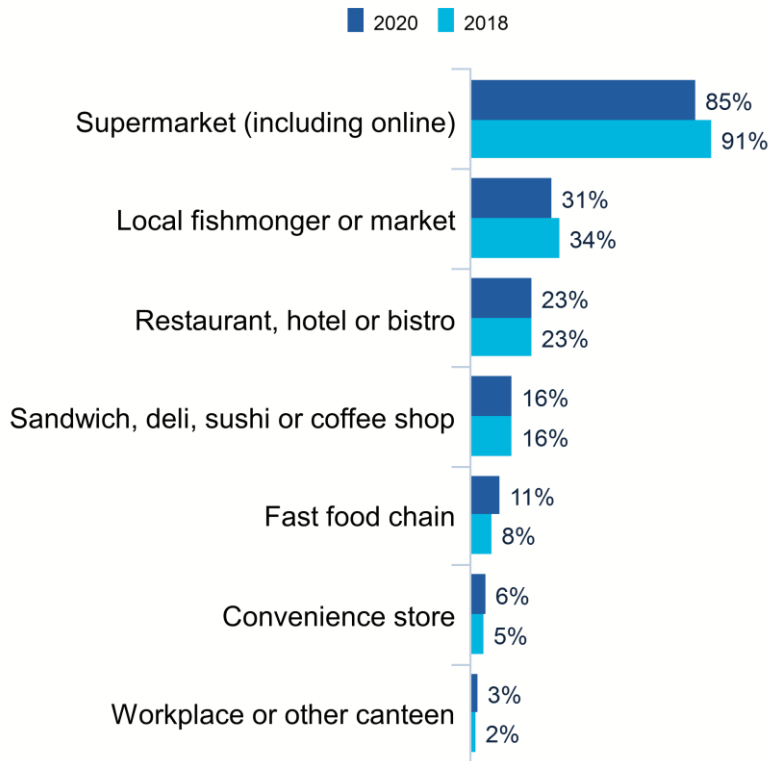
Base: General public, Australia

Q2.6: How regularly do you eat fish or seafood in the following locations?

Fish/Seafood Purchase, by Outlet and Supermarket



Fish/seafood purchase, by type of outlet



Fish/seafood purchase in each supermarket

Please refer to the data tables for complete data for this question.

Q2.3: Where do you/your family usually buy fish and seafood products from?

Base for Q2.3: Seafood consumers, Australia

Q2.4: Which supermarket do you/your family usually buy fish and seafood products from?

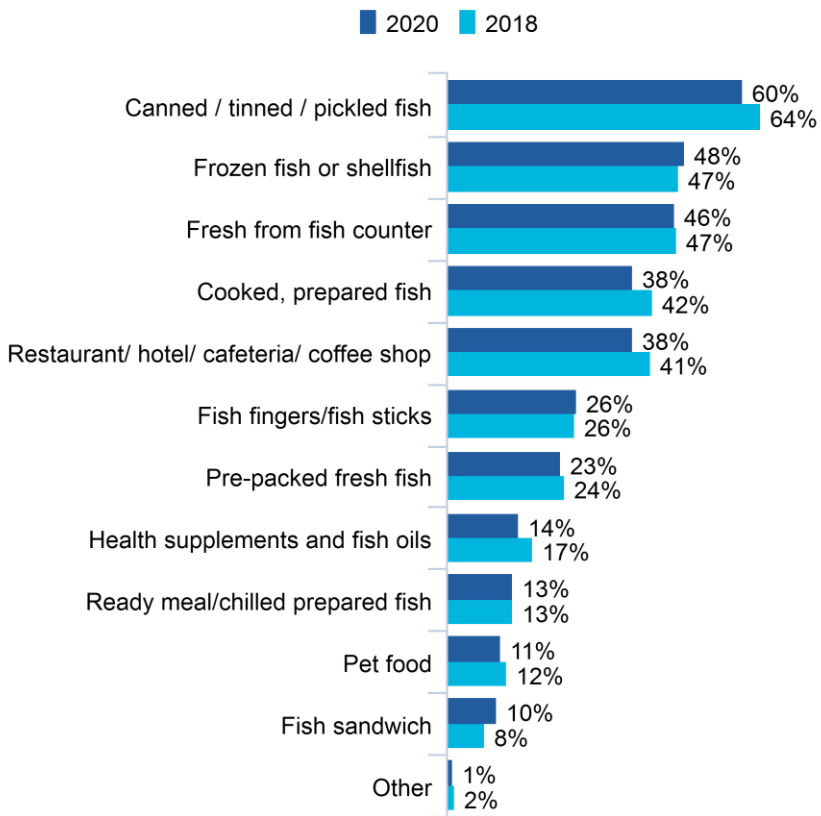
Base for Q2.4: Consumers purchasing fish in supermarkets, Australia

Types of Fish/Seafood Purchased, by Consumer Type



Types of fish/seafood purchased frequently, by consumer type

Total seafood consumers



	MSC Blues	Young consumers (Aged 18-34)
Canned / tinned / pickled fish	65%	53%
Cooked, prepared fish	51%	42%
Frozen fish or shellfish	51%	48%
Restaurant/ hotel/ cafeteria/ coffee shop	47%	30%
Fresh from fish counter	42%	39%
Health supplements and fish oils	36%	18%
Fish fingers/fish sticks	36%	33%
Ready meal/chilled prepared fish	28%	16%
Pre-packed fresh fish	26%	27%
Pet food	25%	16%
Fish sandwich	20%	16%
Other	0%	2%

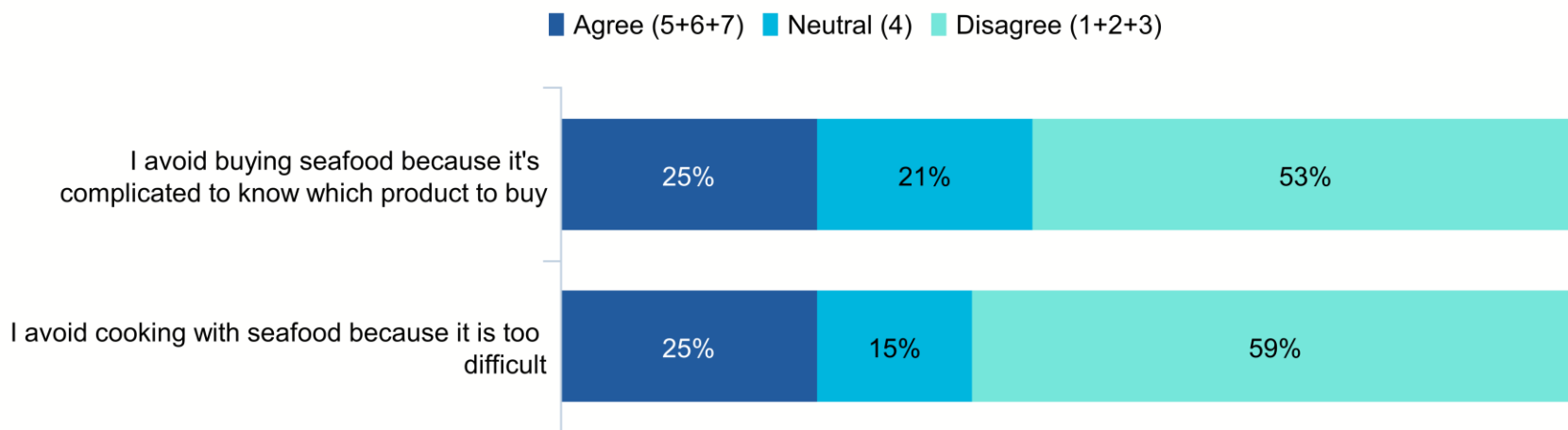
Base: Seafood consumers, Australia

Q4.1: Which types of fish or seafood do you purchase frequently?

Seafood Avoidance

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Reasons for avoiding seafood (7-pt scale)



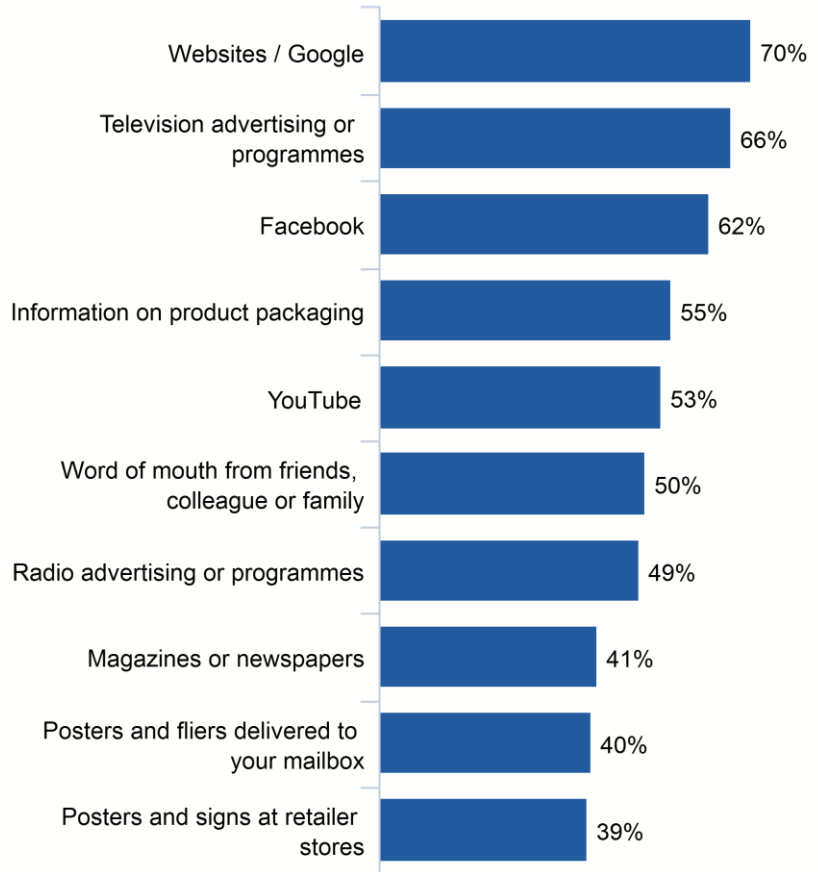
Base: Seafood consumers, Australia

Q5.1: How well does each of the following statements describe your opinions? 7-pt scale: 1 = "Does not describe my opinion very well", 7 = "Describes my opinion very well"

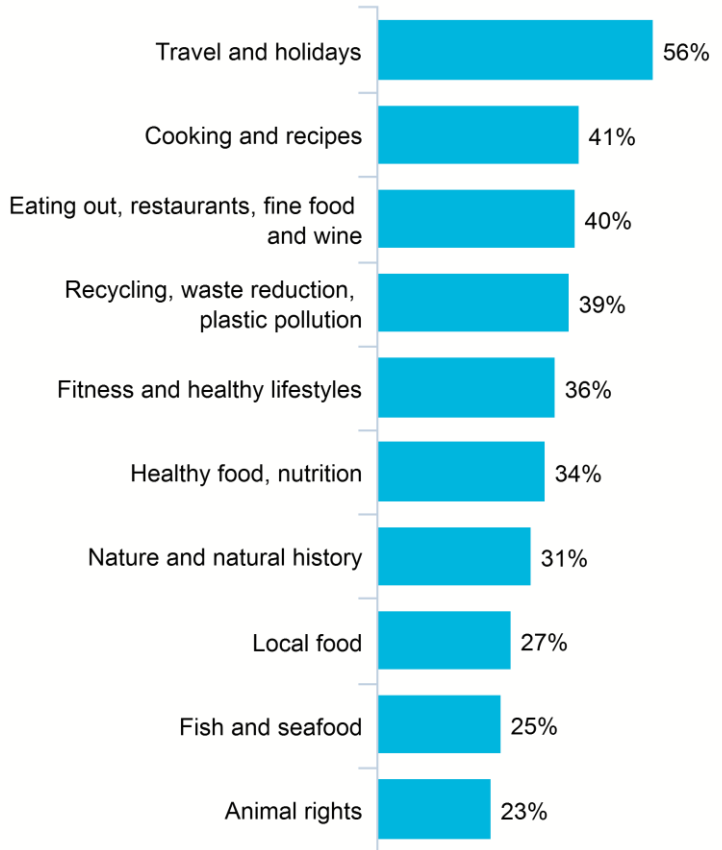
Targeting Seafood Consumers



Preferred media channels, at least weekly (top 10 shown)



Hobbies and interests (top 10 shown)



Base: Seafood consumers, Australia

Q13.2: How often do you use, read or visit the following types of media?

D10: Which of the following hobbies or interests do you have?



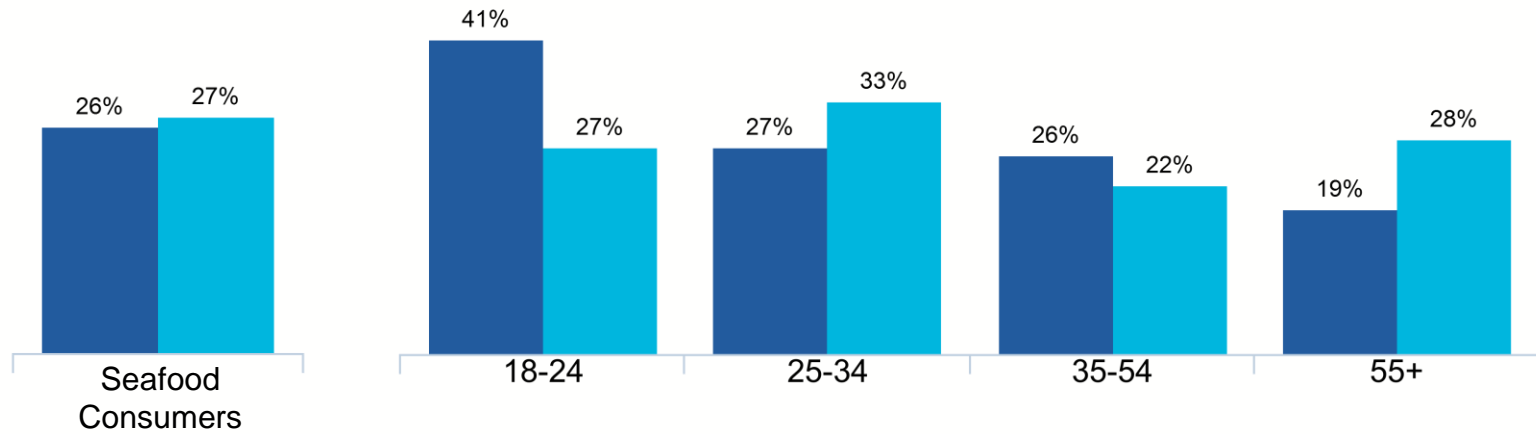
Changes to Seafood Consumption

Changes in Seafood Consumption

Share carefully

Changes in seafood consumption

■ Yes - I eat less than five years ago ■ Yes - I eat more than five years ago



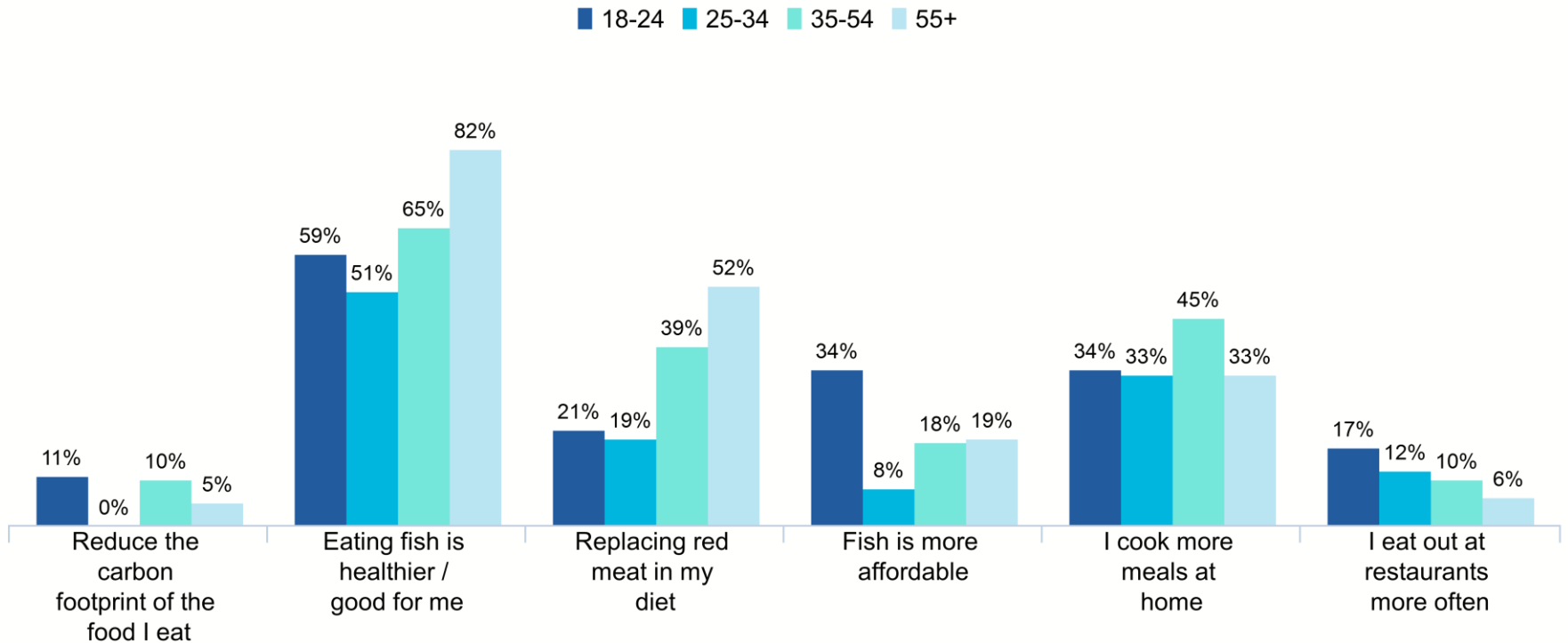
Base: Seafood consumers, Australia

Q4.6: Compared to 5 years ago, has the amount of fish and seafood you eat changed?

Reasons for Increase in Seafood Consumption



Reasons for increase in consumption of fish compared to five years ago



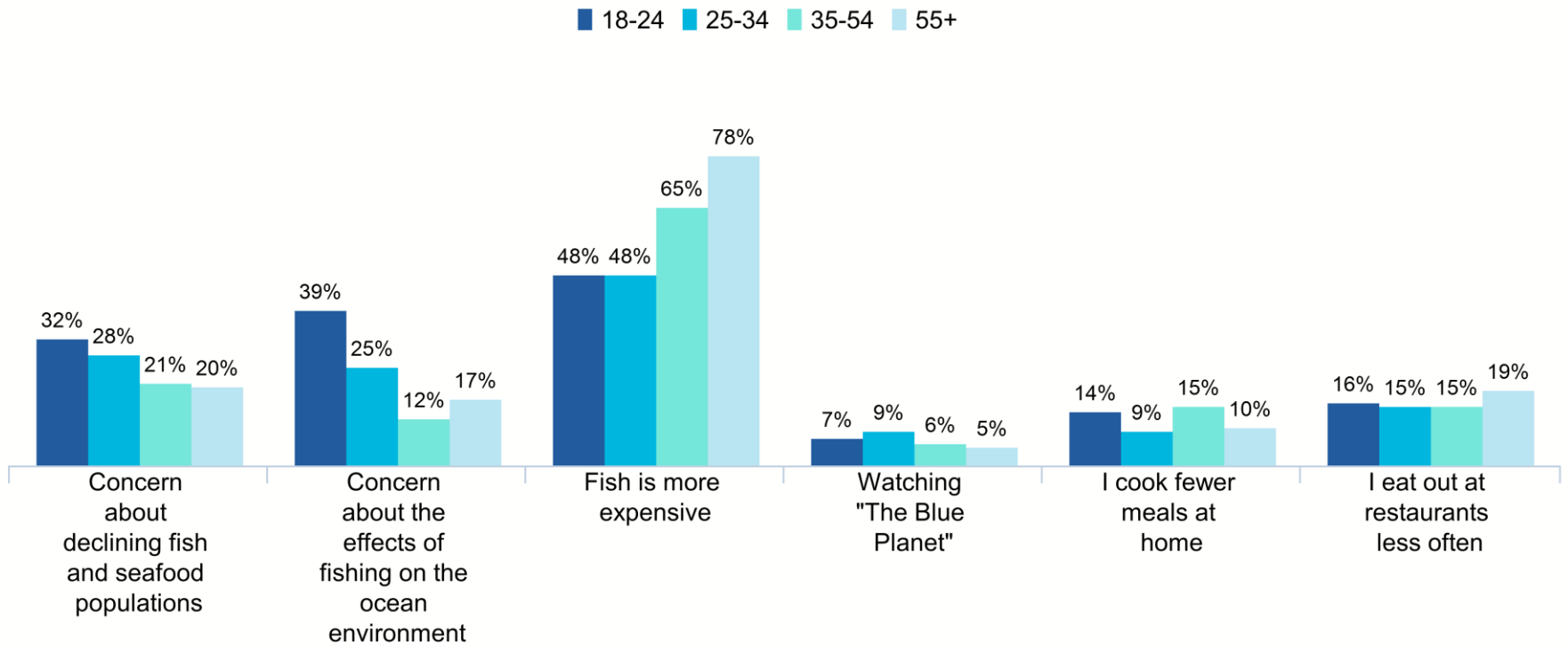
Base: Seafood consumers who have increased seafood consumption, Australia

Q4.7a: What are the reasons for this change?

Reasons for Decrease in Seafood Consumption



Reasons for decrease in consumption of fish compared to five years ago



Base: Seafood consumers who have decreased seafood consumption, Australia

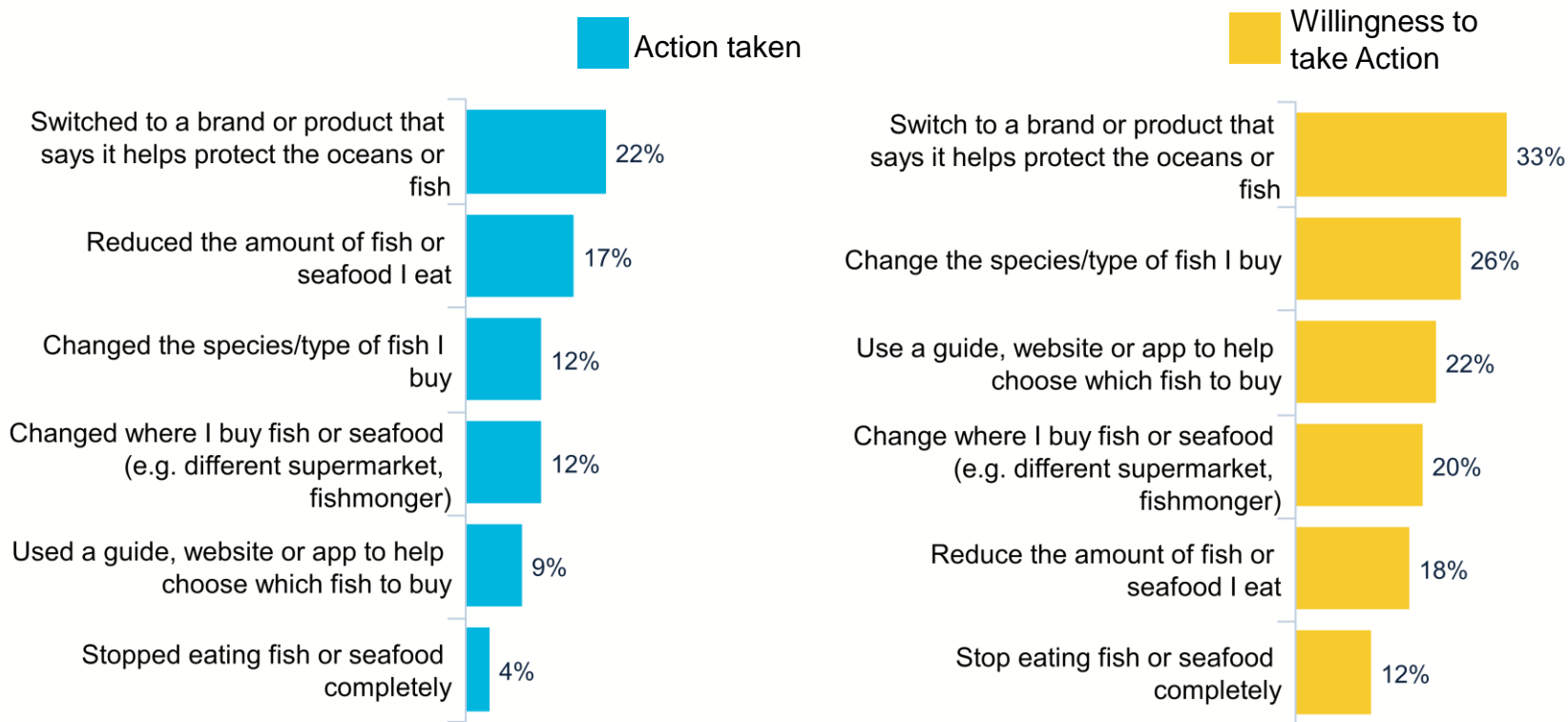
Q4.7b: What are the reasons for this change?



Current and Future Consumer Actions to Protect Seafood



Actions consumers have taken & would be willing to take to protect the fish and seafood in our oceans



Base: Seafood consumers, Australia

Q11.4a: Which, if any, if the following actions have you taken in the last year to help protect the fish and seafood in our oceans?

Q11.4b: And which other actions would you also be willing to take in the future to protect the fish and seafood in our oceans?



Actions Taken to Protect Fish and Seafood



Actions taken in the last year to protect fish and seafood

	Seafood Consumers	18-24	25-34	35-54	55+	Parents	Not parents
Switched to a brand or product that says it helps protect the oceans or fish	22%	27%	23%	21%	22%	26%	20%
Changed where I buy fish or seafood (e.g. different supermarket, fishmonger)	12%	18%	15%	12%	8%	13%	11%
Changed the species/type of fish I buy	12%	18%	14%	11%	11%	13%	12%
Reduced the amount of fish or seafood I eat	17%	22%	22%	19%	10%	20%	15%
Stopped eating fish or seafood completely	4%	12%	9%	1%	1%	7%	2%
Used a guide, website or app to help choose which fish to buy	9%	22%	9%	8%	5%	9%	9%

Base: Seafood consumers, Australia

Q11.4a: Which, if any, of the following actions have you taken in the last year to help protect the fish and seafood in our oceans?



Actions Willing to Take to Protect Fish and Seafood

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Actions willing to take in the future

	Seafood Consumers	18-24	25-34	35-54	55+	Parents	Not parents
Switch to a brand or product that says it helps protect the oceans or fish	33%	32%	30%	32%	35%	34%	32%
Change where I buy fish or seafood (e.g. different supermarket, fishmonger)	20%	16%	26%	23%	15%	25%	16%
Change the species/type of fish I buy	26%	32%	19%	24%	29%	25%	27%
Reduce the amount of fish or seafood I eat	18%	32%	19%	19%	12%	17%	19%
Stop eating fish or seafood completely	12%	24%	18%	12%	4%	8%	14%
Use a guide, website or app to help choose which fish to buy	22%	21%	27%	19%	22%	24%	21%

Base: Seafood consumers, Australia

Q11.4b: And which other actions would you also be willing to take in the future to protect the fish and seafood in our oceans?



evidence and ideas. **applied**

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RESEARCH ARTICLE

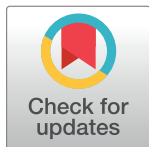
Shifting focus: The impacts of sustainable seafood certification

Ingrid van Putten^{1,2*}, Catherine Longo³, Ashleigh Arton³, Matt Watson⁴, Christopher M. Anderson⁵, Amber Himes-Cornell⁶, Clara Obregón⁷, Lucy Robinson^{8,9}, Tatiana van Steveninck¹⁰

1 CSIRO, Oceans and Atmosphere, Hobart, Tasmania, Australia, **2** Centre for Marine Socioecology, University of Tasmania, Hobart, Tasmania, Australia, **3** Marine Stewardship Council (MSC), Snow Hill, London, United Kingdom, **4** Marine Stewardship Council (MSC), Marine Terrace, Fremantle, WA, Australia, **5** University of Washington, School of Aquatic and Fishery Sciences, Seattle, WA, United States of America, **6** Food and Agriculture Organization of the United Nations, Rome, Italy, **7** College of Science, Health, Engineering and Education, Harry Butler Institute, Centre for Sustainable Aquatic Ecosystems, Murdoch University, Murdoch, Australia, **8** CSIRO, Oceans & Atmosphere, Perth, Western Australia, Australia, **9** Oceans Graduate School, University of Western Australia, Perth, Western Australia, Australia, **10** Leiden University, Science Based Business, Leiden, The Netherlands

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OPEN ACCESS

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Data Availability Statement: Due to the small sample size confidentiality issues prevent a full release of the information where the identity of the respondent could potentially be revealed. Any chance of identification through data release is in contravention of our ethics approval. The study was approved by CSIRO's Social Science Human Research Ethics Committee in accordance with the National Statement on Ethical Conduct in Human Research (2007). Interested researchers can request access to the data by getting in touch with the Manager of Social Responsibility and Ethics on +61 (07) 3833 5693 or by email at csshrec@csiro.

Abstract

Alongside government driven management initiatives to achieve sustainable fisheries management, there remains a role for market-based mechanisms to improve fisheries outcomes. Market-based mechanisms are intended to create positive economic incentives that improve the status and management of fisheries. Research to understand consumer demand for certified fish is central but needs to be mirrored by supply side understanding including why fisheries decide to gain or retain certification and the impact of certification on them and other stakeholders involved. We apply semi-structured interviews in seven different Marine Stewardship Council (MSC) certified fisheries that operate in (or from) Western Australia with the aim of better understanding fisheries sector participation in certification schemes (the supply side) and the impacts and unintended benefits and costs of certification. We find that any positive economic impacts of certification were only realised in a limited number of MSC fisheries in Western Australia, which may be explained by the fact that only a small proportion of Western Australian state-managed fisheries are sold with the MSC label and ex-vessel or consumer market price premiums are therefore mostly not obtained. Positive impacts of certification in these Western Australian fisheries are more of a social and institutional nature, for example, greater social acceptability and increased efficiency in the governance process respectively. However, opinion is divided on whether the combined non-monetary and monetary benefits outweigh the costs.

1 Introduction

Globally, fisheries make an important contribution to many national economies [1]. In many low- and medium-income countries fisheries underpin food security [1, 2] and, more broadly,

au. Ethics approval identification number is 093/19. Consent forms were signed by all participants (as noted in the paper).

Funding: IvP received funding from the Marine Stewardship Council (<https://www.msc.org/>) to undertake the research. Three co-authors who are associated with the MSC contributed to the interpretation of the results.

Competing interests: We hereby also provide a Competing Interests Statement indicating that this research that was carried out by the CSIRO (Hobart) received funding from the Marine Stewardship Council (MSC) (London). The funding was received to undertake the interviews with the relevant stakeholders in Western Australia and to analyse the results and prepare a report. The first author (Ingrid van Putten) is an employee of CSIRO and she was the Principal Investigator on this project. The first author led the writing of the manuscript and the co-authors from the MSC contributed to the manuscript equally as the other co-authors. There are no patents or any products that arise from this research. We acknowledge that the affiliation of some of the co-authors with the MSC and the fact that funding was received from the MSC to carry out this research does not alter our adherence to PLOS ONE policies on sharing data and materials.

fisheries contribute to coastal community livelihoods. Despite the cultural, social and economic importance of fisheries [3], and even though there have been improvements globally, overfishing and unsustainable fishing still remains in some places and stocks [4]. National governments and global or regional institutions (such as the Food and Agriculture Organization of the United Nations (FAO)) have been pursuing many different management approaches [5–8], such as Ecosystem-Based Fisheries Management [9, 10] to improve fisheries outcomes. Implementation of these approaches is often complex, but further improvement of fisheries management continues to be essential [11]. Alongside government driven management initiatives, there remains a role for market-based mechanisms to further improve fisheries outcomes [12].

The option of fisheries certification as a potential market-based mechanism to improve fisheries outcomes was first raised in the 1990s [13] in response to the collapse of the cod fishery on the Grand Banks [14]. Market-based mechanisms are intended to create positive economic incentives that improve the status and management of fisheries [15]. A pathbreaker in the market-driven space, the Marine Stewardship Council (MSC) was established in 1997 jointly by the World Wildlife Fund and Unilever [15, 16]. Unilever's intention as one of the world's largest seafood processors at the time was to buy all their fish from certified sustainable sources by 2005 [17]. As of 2018, 361 fisheries worldwide are MSC certified and 109 are in the process of becoming certified, accounting for 15% of global wild capture production [18]. In addition, many alternative fisheries certification schemes now exist, although the MSC remains the largest in number and geographical spread [19, 20].

Obtaining MSC certification of a fishery requires meeting all MSC's Fishery Standard requirements, as verified by an independent third party (i.e., Conformity Assessment Body (CAB)). A certificate lasts five years, with a surveillance audit undertaken each year. Certified fisheries need to undertake and pay for all assessments and surveillance audits. At the end of five years, fisheries wishing to remain certified must begin the full cycle again (i.e., get recertified) [21]. To enable a product to be sold to the public with the MSC ecolabel, each actor involved in its supply chain (i.e., processors, traders, buyers, and retailers) must hold valid MSC Chain of Custody certificates in order to assure full traceability back to the certified fishery (or fisheries) it is sourced from.

There remains much discussion in the literature about whether the environmental and sustainability goals and objectives of the many existing seafood certification schemes are being achieved [19, 22–28]. Despite the ongoing debate about the environmental outcomes, many different certification and rating schemes have entered the market [29] since the 1990s. Different certification programs take different approaches both in recruiting new fisheries into compliance with the standard, and in marketing their labels. The certification landscape has become a busy one [30], which can be confusing to potential new fishery participants and consumers of certified products [31, 32]. From a consumer perspective, studies suggest that brand recognition is not evenly distributed around the world, but in the US and Europe, the MSC is more recognized than other schemes [32–36].

Europe and North America account for 45 per cent of global certified seafood production although their contribution to global seafood production is only 15 per cent. Demand for certified fisheries products is mainly driven by manufacturers and retailers in these same developed-country markets. The demand is predominantly for high value species from high visibility fisheries with strong management capacity [37]. The demand for certified product appears adequate to support the continued existence of certification schemes, supported by reports that some retailers have been unable to meet their supply needs [38].

Understanding the demand for certified fish, including the demand by supermarkets who are important buyers of certified fish, is central to the continued existence of market-based

certification schemes [39]. However, the supply side—including fishing fleets, primary processors and distributors—also needs to be understood to ensure the availability of certified fish. Understanding the supply side can give insight into why fisheries decide to gain or retain certification, including their perceptions and experiences of the impact of certification. There is some evidence, for instance, that price premiums have drawn fishers and the fisheries sector more broadly into certification [14]. Price premiums have been captured at different levels of the supply chains [40]. For instance, a price premium for MSC certified Swedish Eastern Baltic cod was achieved for retailers but not for fishers [41]. But it is increasingly debated if these price premiums currently still exist in some markets for certified fish [42–45]. Market access seems to be a more commonly realised and identifiable economic driver for fisheries to seek MSC certification. Market access becomes key to fisheries when buyers in the supply chain commit to sourcing some or all seafood from sustainable sources [42, 46–49]. However, the economic benefit of market access can vary significantly, depending on availability and abundance of competing products on the market, and environment or trade conditions.

The ability to capture benefits can also vary throughout the supply chain, with processors potentially retaining price premium benefits, while producers might only receive the benefit of being granted access to a new market [41]. Indeed, the drivers and incentives are further complicated by the multiple pathways that harvest from certified sources may take before it arrives to consumers. For some schemes, such as the MSC, exhibiting the sustainability ecolabel depends not only on the origin from a sustainable source, but also on the supply chain committing to pay for use of the label so as to guarantee full product traceability to the final buyer (i.e., avoid mislabelling and fraud). Thus, fishers that want the benefits of the MSC ecolabel on consumer-facing products might change what markets they sell to in order to benefit from a fully certified supply chain. In some cases fishers may sell only part of their catch with an ecolabel, for instance the part of their catch that has a higher end product line. Some may not sell with the ecolabel at all if the demand for sustainable product is at the supply chain business-to-business level, not the consumer end [49].

Recently, there has also been increasing evidence that drivers for fisheries sector to become certified can also be of a social nature [12], and often the ability to remain certified can depend on cooperation from management institutions willing to facilitate necessary research or policy improvements [12]. Thus it seems that a more complex combination of social, economic and political drivers [27, 50] may influence the decision to become or remain certified [12].

In this study, we use semi-structured interviews with the aim of better understanding the fisheries sector participation in certification schemes (the supply side as well as first buyers in the supply chain, where a certified supply chain is present) and the benefits and costs of MSC certification. The perceptions of benefits and costs are likely to influence stakeholder participation and the supply of certified fish. We focus mainly on the economic, social and institutional impacts (but also cover some of the environmental impacts) from the perspective of key informants for different stakeholder groups in seven different MSC certified fisheries that operate in (or from) West Australia (WA).

2 Methods

2.1 Case study description

In 2012, the WA government provided the State's commercial fisheries with AU\$14.56m to support MSC certification costs [51] and to help fisheries with the scientific support to make improvements needed to meet certification requirements. \$6.56m of the total covered the pre-assessment and the initial full assessment process for participating fisheries and the initial surveillance audits after achieving full assessment. This seed funding provided by the State

government was driven by a range of expected benefits across both government and industry. In the project scoping phase that took place prior to the commitment of state funds, a broad set of expected outcomes were identified. One of the expected outcomes of this jurisdictional commitment to third party certification included credible and defensible sustainability claims with regard to industry practices and government stewardship. Other expected outcomes were, securing and maintaining access to new and established markets, security of access to fishing grounds, and encouragement for investment in regional fisheries. In addition, it was also hoped that by making the financial commitment to MSC, it would make sustainability data for fisheries publicly available to different organisations that make frequent requests for this data (i.e. retail, non-government organisations, and the Australian government) through the MSC certification reports. This would thus reduce the WA Department of Fisheries' costs associated with providing this data which would now be provided in a standardised and globally recognised format.

The State government's third-party certification process was carried out in partnership with the WA Fishing Industry Council (WAFIC) and Recfishwest, which are the representatives for bodies representing the commercial and recreational fishing sectors, respectively, in WA. Both representative bodies are formally recognised by the Government of WA as the main sources of industry advice for the recreational and commercial sector respectively. Therefore, these bodies have direct input into WA fisheries' management process, compliance issues, research and the MSC certification process among other priorities. The government's decision to provide funding for MSC certification meant that the (financial) barrier to certification was lowered by reducing the upfront certification cost, as well as the cost of seeking the technical and institutional support for any needed improvements. Participation by WA commercial fisheries in the full MSC assessment process remains a voluntary step, recognising that some fisheries may not choose to proceed to full assessment.

The western rock lobster fishery did not financially benefit from the government's third-party certification program as it was already MSC certified. In 2000, the western rock lobster fishery was the first in the world to attain MSC certification. The western rock lobster fishery was re-certified for the fourth time in 2017. The Exmouth Gulf and Shark Bay prawn fisheries were the first to be MSC-certified under the government's funding program. Currently certified fisheries include: the Peel-Harvey Estuary blue swimmer crab fishery (the first fishery to be certified with a recreational and commercial component); the Peel-Harvey Estuary sea mullet; the West coast deep sea crab fishery; pearl oyster (the first 'gem fishery' to be MSC certified); and West and South coast abalone (Roe's, greenlip and brownlip abalone). These fisheries are the subject of this paper (Fig 1). Since the qualitative stage of this research was completed, two further WA fisheries have achieved MSC certification: the Western Australian octopus and Western Australian sea cucumber, but these are not included in the present research. We include one MSC certified Commonwealth fishery: The Heard Island and McDonald Islands Patagonian toothfish and mackerel icefish fishery. This fishery was MSC certified in 2004 and because it is not a WA state fishery, it was not eligible for government funding.

At the time of this current study, the State government funding scheme had concluded with all 50 of the States fisheries now being MSC pre-assessed. 10 of those fisheries have gone on to achieve and currently maintain MSC certification. The portfolio of Western Australian MSC certified fisheries represent 90% by value of the state's wild catch fishery landings. For those WA fisheries yet to decide on the voluntary transition through to MSC full assessment, State government funding remains available to support the cost of the initial fishery improvements and the initial MSC audit costs in order for interested fisheries to participate in the MSC program. Unless the government makes additional funding available, those fisheries that have



#	WA Fishery
1	Western Rock Lobster
2	Exmouth Gulf Prawn
3	Shark Bay Prawn
4	WA Deep Sea Crab
5	Peel Harvey Crab
6	Peel Harvey Mullet
7	WA Abalone
8	Pearls
9	WA Octopus
10	WA Sea Cucumber
11	HIMI Toothfish & Icefish*

*Not shown – Heard Island and McDonald Islands Toothfish and Icefish fishery

Fig 1. The four Western Australian marine bioregions and the approximate fishing location of the MSC certified fisheries in Western Australia.

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benefitted from the initial funding support will now incur ongoing certification costs for annual surveillance audits and the five-yearly reassessment process.

2.2 Management of Western Australian fisheries

WA fisheries are managed through a series of legislated plans, regulations, orders and licence conditions, using a combination of input and output controls (i.e., total allowable catch (TAC), seasonal closures, and size limits). The plans are developed in conjunction with industry, Industry representative bodies, industry associations, and community groups [52].

Table 1. Details of Western Australian MSC certified fisheries.

Western Australian Fishery	Target Species	Beach Value (2017)	Primary Management System	Number of vessels in MSC certificate	Catch (2017)	MSC Certification Date
Western Rock Lobster	Western Rock Lobster (<i>Panulirus cygnus</i>)	\$386m	TACC	234	6,400t	2000
Exmouth Gulf Prawn	1. Western King Prawn (<i>Penaeus latisulcatus</i>)	\$10m	Input controls	6	713t	2015
	2. Brown Tiger Prawn (<i>Penaeus esculentus</i>)					
	3. Endeavour Prawn (<i>Metapenaeus endeavouri</i>)					
Shark Bay Prawn	1. Western King Prawn (<i>Penaeus latisulcatus</i>)	\$26.4m	Input controls	18	1,608t	2015
	2. Brown Tiger Prawn (<i>Penaeus esculentus</i>)					
Deep Sea Crab	Crystal (Snow) Crab (<i>Chaceon albus</i>)	\$6.3m	TACC	3	164t	2016
Peel Harvey Crab	Blue Swimmer Crab (<i>Portunus armatus</i>)	>\$1m	Input controls	11 (commercial)	75.2t ¹ 42.9t ²	2016
Peel Harvey Mullet	Sea Mullet (<i>Mugil cephalus</i>)	>\$1m	Input controls	11	127.1t	2016
Abalone	1. Roe's Abalone (<i>Haliotis roei</i>)	\$5.89m	TACC	30	147t	2017
	2. Greenlip Abalone (<i>H. laevigata</i>)					
	3. Brownlip Abalone (<i>H. conicopora</i>)					
Pearl Oyster	Silver Lipped Pearl Oyster (<i>Pinctada maxima</i>)	\$53m	TACC	6–10	468,573 (shell count)	2017
Octopus*	Octopus (<i>Octopus aff. tetricus</i>)	\$2.5m	Input controls	23	257t	2019
Sea Cucumber*	1. Sandfish (<i>Holothuria scabra</i>)	>\$1m	Input controls	6	135t	2019
	2. Redfish (<i>Actinopyga echinites</i>)					
Heard Island & McDonald Islands Toothfish & Icefish#	1. Patagonia Toothfish (<i>Dissostichus eleginoides</i>)	Confidential	TACC	5	3525t	2006 (icefish) 2012 (toothfish)
	2. Mackerel Icefish (<i>Champscephalus gunnari</i>)					

* MSC certified in 2019 but not included in the study.

Heard Island and McDonald Islands Toothfish and Icefish is an Australian Commonwealth fishery.

¹ Commercial catch.

² Estimated recreational catch (by boat).

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A total of seven fisheries are the subject of this research (Fig 1), six of which are managed by the WA State Government (Table 1).

The largest is the western rock lobster fishery that is also the largest WA fishery in volume and value, and one of the most valuable single-species fisheries in Australia. Eight species of rock lobster are found off the coast of WA. However, virtually all lobsters caught are the Western rock lobster, found up to 60 km off the coast between Augusta and Shark Bay (see Fig 1) [52].

WA's second most valuable fishery, WA's pearling, is a quota-based dive fishery, operating in shallow and sheltered coastal waters along the North-West Shelf [52]. More than half of Australia's blue swimmer crab fishery are caught commercially in WA, and it is a popular

recreational fishery. Recreational fishing in Western Australia is a popular activity with an estimated 700,000 of the States 2.6 million people participating. The exact number of recreational fishers that target blue swimmer crab is unknown, but recreational boat-based catches were estimated to be over 50 tonnes in 2017–2018 [53]. In 2014, the Cockburn Sound crab fishery was closed indefinitely [52], due to indices of slow recovery and seasonal closures apply to various locations in WA [54]. Since 1999, the main target species for the Deep-Sea Crab trap fishery has been the crystal crab [52]. Operating in waters deeper than 500m off the west coast of WA traps are operated in long-lines. The Exmouth Prawn fishery, located in Exmouth Gulf in WA, targets different short-lived, fast-growing prawn species that have variable environmentally driven recruitment. The fishery commenced in 1963 and currently has 15 managed fishery licences, all of which are held by a single licensee [52]. The Shark Bay prawn fishery operates within the Gascoyne Coast Bioregion of WA. Shark Bay is a World Heritage Area for its 'natural heritage values' [55]. The prawn fishery in Shark Bay works under a limited entry system and is currently the highest producing prawn fishery in WA [56]. Patagonian toothfish and mackerel icefish are targeted in areas of the Australian fishing zone adjacent to Heard Island and McDonald Islands. The fishery is managed by the Australian Fisheries Management Authority (AFMA). They are predominantly caught by demersal longline; however, trawl gear is also used to harvest mackerel icefish [52].

2.3 Survey design

The survey applied to key informants for MSC certified fisheries in WA was based on a pre-existing survey template that was implemented in the U.S. West Coast albacore tuna fishery, the South Brittany sardine fishery, and the Portuguese sardine fishery in 2017. The initial piloting of the survey in these fisheries, focussed on mainly on the processing industry, and is the topic of another paper. The study conducted in WA was intended to further assess if the survey could be implemented more broadly to MSC fisheries, and increase the number of different fisheries being compared, as part of a long-term plan to gradually build up a large-scale dataset of sites across the world.

The original survey was co-developed through a series of workshops and consultations with MSC staff and external academics [57]. The aim of the overall project was to develop a survey that, through a 'rapid assessment' approach that is systematically reproducible and standardized across different fisheries in different parts of the world, could identify differences and commonalities in observed socio-economic effects of MSC certification on benefits and costs for fisheries and supply chain (at least first buyers), changes in employment and supply chain structure and stakeholder relationships. The purpose was for both MSC impact evaluation and internal learning about the effective pathways within the MSC Theory of Change [57]. As a member of ISEAL Alliance, the MSC is required to implement best practices for Monitoring and Evaluation, including assessment of the indirect or unintended social effects of their environmental certification [58].

To gain a deeper understanding of how desired behavioural change towards sustainability is achieved, the MSC's declared Theory of Change [21] was applied to guide the design of the survey. The Theory of Change [59, 60] helps understand and describe how and why behaviour changes may arise. MSC uses its Theory of Change as a basis for the design of the program, as it maps out how MSC activities and interventions lead to achieving their sustainability goals. More specifically, the Theory of Change posits that market demand for seafood sustainability provides added benefits for those products that can demonstrate, through the MSC ecolabel, that they meet environmental sustainability best practice. As more ecolabeled products appear on the market, this increases public awareness and recognition, in turn driving demand.

Competition with ecolabeled products and the desire for other benefits of the certification eventually incentivise fisheries that are less sustainable to invest time and resources in the transformative change that is required to drive improvements, including partnerships and interactions with other players (e.g. supply chain actors, managers, environmental NGOs) [61]. Even though the pathways to change were mapped in an ‘outcomes framework,’ a survey to test of whether the assumed pathways and result chains actually occur as posited by the MSC had not been previously developed. In addition to testing the expectations based on the Theory of Change, this monitoring approach also checks for unexpected (positive or negative) consequences.

Three key themes are included in the survey: i) economic costs and benefits of certification (e.g., price premiums, new or retained market share); ii) changes in the supply chain driven by producers selling to a certified supply chain in order to use the ecolabel (e.g., narrowing of the supply chain) and/or reach new markets, and potential consequences to distribution of revenue across the supply chain (e.g., change in price bargaining power of suppliers or buyers), and/or changing product form, with consequences on employment structure or redistribution of benefits across actors in the supply chain (especially first buyers); and iii) interactions and conflict between groups of certified and uncertified harvesters and partnerships among industry groups, managers and NGOs that were developed through the certification process [57].

To accommodate context specific issues, minor changes were made to the original survey instrument before it was applied in WA. Ethics approval was obtained through CSIRO (093/19) and consent forms were signed by all participants.

2.4 Survey implementation

A total of thirty-three key informant interviews were implemented in WA in early 2019. Thirty interviews were carried out face-to-face and three interviews were by phone. Key informants were selected due to their professional engagement with MSC fisheries in WA, and therefore their ability to provide rich data on MSC and a particular fishery, not to obtain a representative sample of the State’s fisheries. A snowball sampling strategy was then employed where the initially selected key informants were asked (or they volunteered) the names of other persons to interview. Attempts to avoid sampling bias were also addressed by checking the appropriateness and comprehensiveness of selected key informants with individuals who had domain knowledge but were no longer involved with WA fisheries. Therefore, ensuring confidentiality at the beginning of each interview was key for exploring negative perceptions on MSC certification and its outputs.

Participants were initially contacted by email, and appointments were made for a time and location of their choice. The survey duration was between 30 minutes and 1 hour (with 2 survey taking more than one hour). The interviews were taped with the approval of the participants and in accordance with Ethics approval guidelines. The surveys were implemented by the first author together with one or more of the co-authors. Where none of the co-authors were available the interviews were carried out by the first author alone (i.e. the phone interviews and 3 face-to-face interviews).

Even though the aim was to engage stakeholders from different groups and across the different MSC certified fisheries, it proved difficult to gain participation from some groups (i.e. two smallest groups in Table 2) and the number of informants was also limited by the small number of individuals that were sufficiently knowledgeable of the processes we wanted to investigate. The implications of low participant numbers for some stakeholder groups are acknowledged and accounted for in the data analysis and presentation of the results. The principle of saturation [62] was used to provide an assessment of the adequacy of the number of key informants interviewed.

Table 2. Survey respondent numbers by stakeholder group and MSC certified fishery.

Row Labels	All west Australian MSC fisheries*	Abalone	HIMI toothfish and icefish	Pearl oyster (wild collection)	Peel-Harvey Estuary blue swimmer crab & Sea mullet	Shark Bay & Exmouth Prawn fishery	West coast deep sea crab	Western Rock Lobster	Total Resp
Government scientist	1	1		1	2	1	1	2	9
Government manager	3			1		2			6
Fisher		1			2			1	4
Fishing company			3			1			4
Fishing association**					1	1		1	3
Processor						1	1	1	3
Industry association (WAFIC)	2								2
Non-Government Organisation					1				1
Academic scientist								1	1
Grand Total	6	2	3	2	6[#]	6	2	6	33

* Respondents in this group indicated they worked across all the MSC certified fisheries in WA.

** A respondent belonging to a Fishing association was a key informant only focusing on one fishery whereas the industry association informants were discussing all fisheries in Western Australia.

Two respondents represented the recreational fishing sector.

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A total of 33 key informants (further referred to as respondents) were interviewed. 34% of the respondents [10] were female, with most female respondents (8 out of the 10) in management and science. The remainder were male. The largest group were government related professionals [15] including scientists [9] and government managers [6]. Industry respondents were the next largest group represented by 14 respondents: fishers [4], fishing company representatives [4], processors [3], and fishing association representatives [3] (Table 2). The remainder of the respondents represented industry associations [2], academic scientists [1], and NGOs [1]. Results for the latter three categories cannot be revealed in detail due to low numbers and confidentiality considerations. Responses for industry associations, academic scientists, and NGOs are grouped into an ‘other’ category from here onwards.

2.5 Data analysis

The quantitative survey questions were entered in a CSV file and analysed in R [63]. The rich narrative around open questions (the qualitative data) was coded and analysed thematically. The qualitative interview data were derived from question about the drivers for MSC certification (see question 10 in S1 File) and regarding the impacts of MSC certification (questions 30 to 34 in S1 File).

For the thematic analysis, the original recordings were coded and analysed; however, the recordings were not transcribed. Recordings were analysed using ‘bottom up’ (inductive) and iterative coding followed by thematic analysis, where the recordings were coded according to the ideas and meanings that were present in the respondent answers to the questions. The first author was responsible for the coding but the themes and results were shared and discussed by some of the co-authors who assisted with the interviews to ensure consistency and accuracy.

The result was a hierarchical structure of themes and sub-themes through multiple rounds of listening to the interview recordings.

Key themes on the impacts of certification in different fisheries were further explored. The themes were typified according to whether the MSC certification impact was perceived to be negative or positive. However, the interview style may have encouraged more positive than negative impacts to be volunteered which is acknowledged in the data interpretation presented in the next section.

3 Results

On average, the 33 survey respondents had 14.5 years' experience in fisheries. In particular, the individuals directly involved in the sector (i.e., fishers and fishing company representatives) had a long history of experience, and presumably a considerable amount of domain knowledge, which was captured in the survey. Fishing company representatives had been in their profession the longest (on average 22 years) followed by fishers who had been involved for around 19 years (on average). Processors had the shortest period of experience (8 years average). The other stakeholder groups had between 11.5 and 15.5 years of experience.

The catch sector in WA does encounter a lot of multi-generational engagement with many fishers undertaking a career in fishing through family ties to the industry. This tends to lead to high levels of experience (especially with those representing industry interests at the executive level) even with younger operators.

Due to the capacity limitation in not being to interview each active participant in a fishery, the research team tried to capture stakeholder views by engaging those who often represented industry interests at a fishery or sectoral level. These stakeholders are frequently in these roles due to their experience in working on fishery-specific issues which is why the catch sector respondents may have a higher than expected level of industry experience.

3.1 Drivers for obtaining MSC certification

The reasons for gaining certification (the drivers) can be illustrative of people's expectations of the impact (benefits or lack thereof) of certification. We asked respondents for the top three reasons they believed their fishery sought MSC certification (Fig 2). Some respondents chose to list only one or two drivers.

Respondents mentioned 80 different drivers. The most frequently mentioned reason for getting MSC certification was to improve sustainability credentials and to gain or maintain social licence (including being seen to be a world leader) (see S1 Table for more detailed descriptions of the labels in Fig 2). Economic incentives were the second most commonly mentioned reason for becoming certified, which included market access, marketing advantages more generally, and product differentiation. Perhaps surprisingly, obtaining a price premium was only mentioned once among the top three reasons for certification. Fisheries that did not receive funding to become certified compared to those who did found sustainability credentials and social licence (43% versus 27% respectively), and economic incentives to be more important (43% versus 16% respectively).

The availability of government funding to become certified (previously discussed in section 2.1) and to improve management outcomes (mainly environmental outcomes) were the next most frequently mentioned (11 times each). A reduction or lowering of the financial barrier to become certified through government funding was thus important for eligible fisheries. The western rock lobster fishery and the toothfish and icefish fisheries were both already certified prior to 2012 when the funding program was initiated. Moreover, the latter is a Commonwealth managed fishery and was thus not eligible in the first place.

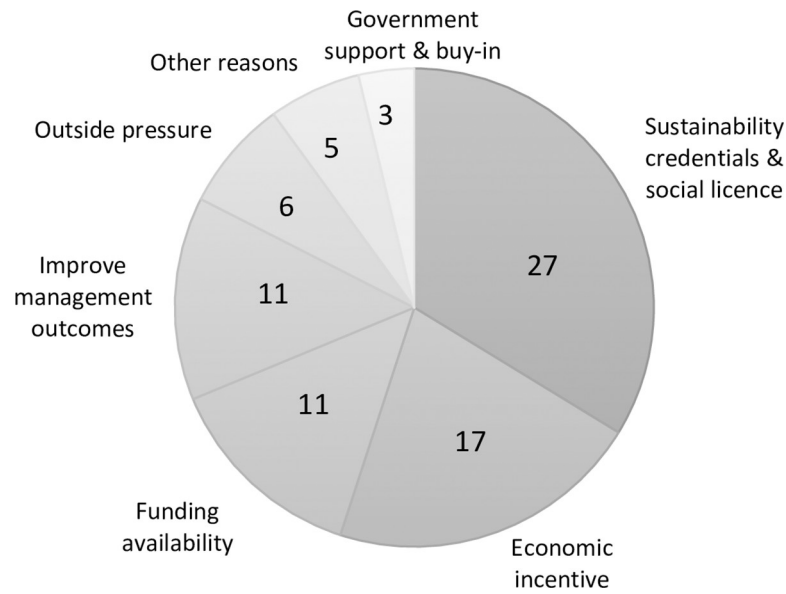


Fig 2. The number of mentions of the drivers (in the top three) leading to fishery MSC certification.

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3.2 Benefit versus costs

Respondents were asked to weigh up the benefits and costs of MSC certification, including non-monetary benefits and costs. The costs include those that are incurred prior to certification (called transition costs), like making changes to meet the MSC standard (e.g., catch methods, installing bycatch exclusion devices, or developing data streams). The costs also go beyond the direct costs associated with certification (i.e., audits) and include indirect costs (i.e., monitoring data and extra time required for reporting). Monetary benefits are generally thought of as economic benefits such as increased revenues from price premiums. However, some of these indirect costs can be non-monetary. Non-monetary benefits are often associated with social, institutional, or environmental aspects. Social benefits include, for example, improvements in social acceptability of the fishery, better relationships, and/or improved communication between the fishing sector and the managers of the fishery. Institutional benefits include, for instance, improved stakeholder consultation processes. Environmental benefits may include reduced bycatch, or improved outcomes for endangered species.

Just over half of respondents indicated the benefits of MSC certification outweighed the costs (19 out of 33). Of these 19 respondents 10 were from the fishing sector and 9 from management and science. However, 10 of the respondents (6 respondents from the fishing sector and 4 from management and science) who indicated that the benefits were greater than the costs stipulated that this was not the case if only monetary benefits (economic benefits) were considered. In the case where only economic benefits were considered, most of these respondents suggested that the costs would outweigh benefits instead. In other words, the benefits were only greater than the costs when the non-monetary benefits of certification were included (Scenario 2 in Fig 3). The benefits of MSC certification of Western Australian fisheries do not currently result in direct 'money in the pocket' of the fisher or actors in the supply chain. The benefits are of a more non-monetary nature.

Five respondents (2 respondents from the fishing sector and 3 from management and science) explicitly indicated that the benefits only outweighed the costs because the government had co-invested in getting the industry certified. As previously indicated, the third most

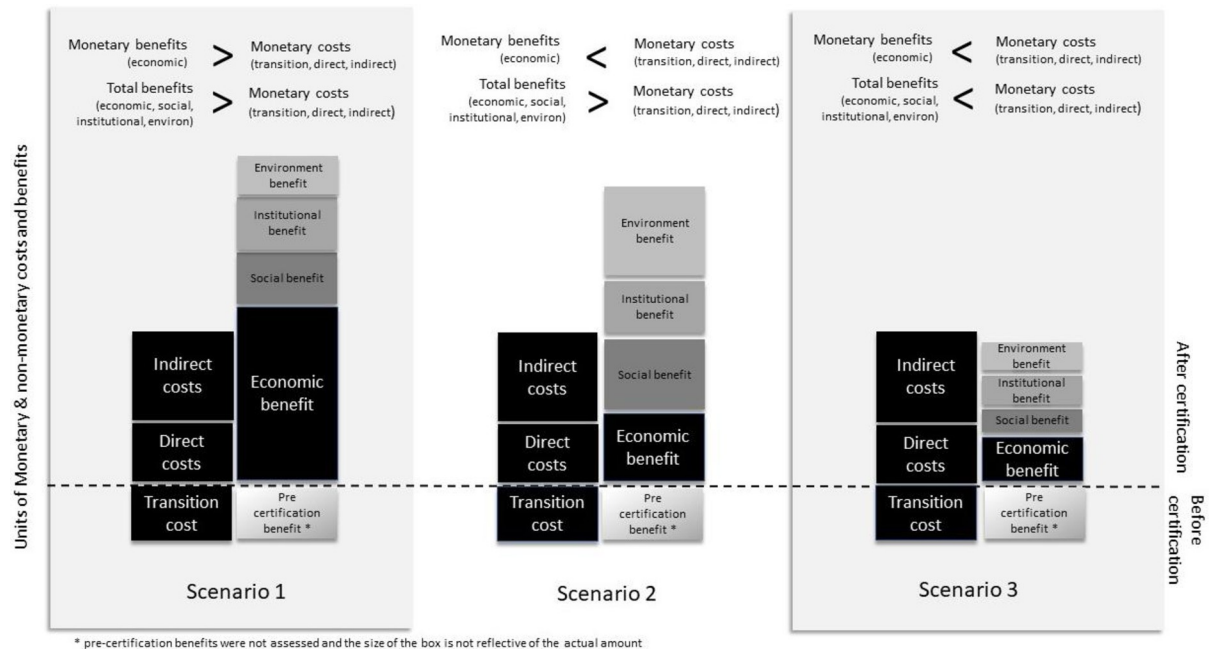


Fig 3. Three scenarios showing the hypothetical relationship between the benefits and costs of MSC certification to a certificate holder/group. The economic benefits (monetary benefits) are shown in black and the monetary costs (which includes transition, direct, and indirect costs) also shown in black. The non-monetary benefits are shown in different shades of grey and include social, institutional and environmental benefits. The transition costs are incurred before certification, shown below the dashed line. Presumably some benefits may be incurred before certification (shown in the grey dashed box below the dashed line), but this was not assessed in this research. In the first scenario the monetary (economic) benefits are greater than the monetary costs. In the second scenario the economic (monetary) benefits do not outweigh the monetary costs, but the total benefits outweigh the monetary costs. In the third scenario the hypothetical total benefits do not outweigh the monetary costs of certification.

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mentioned driver for certification in Western Australian fisheries was the fact that the government paid for the pre-assessment, the full assessment, and the first annual audit. Therefore, respondents may have only included the indirect costs of certification in their benefit:cost assessment because the direct and transition costs were not incurred by their fishery.

Nine respondents indicated that the economic benefits clearly outweighed the total costs (scenario 1 in Fig 3). The economic benefits for the fisheries represented by these respondents were largely attributed to market access and price premiums. Only two fisheries that were the subject of this study were selling (some or all of) their product with the MSC label and were able to potentially capture a price premium in the market. The supply chains of these fisheries were more vertically integrated than other fisheries. Given this, integrated supply chains appear to be an enabling factor for using the label because it is easier to have a fully certified supply chain that is thus able to use the ecolabel on consumer-facing products.

Nine respondents (3 respondents from the fishing sector—but all 3 representing different fisheries—and 6 from management and science) indicated that they were unsure about the benefit:cost ratio. Some indicated that they were unsure exactly how much value (benefit) they had received or that it was not clear yet if the benefits outweighed the costs. Respondents representing fisheries where certification was funded by the government had thus far not incurred any costs nor seen any benefits. Their benefit:cost ratio will only become truly apparent when they must pay for their first audits and re-certification.

Five respondents (3 respondents from the fishing sector and 2 from management and science—all five representing different fisheries) felt that the costs were greater than the benefits

Table 3. MSC impact domain (economic, social, environmental and institutional) and the direction of the impact (positive, negative or otherwise) for the fishing sector (processors, fishing companies, and fishers*) and management & science (government managers and scientists and academics*).

Impact domain of MSC certification	positive impact	negative impact	no impact	Grand Total**
Economic	22	6	36	64
Social	43		12	55
Environment	22	1	4	27
Institutional	34	1	5	40
Fishing sector (total)	121	8	57	186
Economic	13		29	42
Social	53	4	13	70
Environment	13	2	2	17
Institutional	32	7	6	45
Management & science (total)	111	13	50	174

* individual categories cannot be revealed for confidentiality reasons.

** there were 5 mentions of limited impacts with no mention of direction, or where it was unclear what the direction of the impact was (15 mentions). These have been left out of the table.

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and that this was particularly the case because there was still no evidence of a thriving marine environment (i.e., there was a perceived absence of environmental benefits).

There was no information collected in the survey to directly assess if respondents indeed consider the non-monetary side of the ledger in their assessment of the benefit:cost ratio (it is only known for those who volunteered this information). To aid in that understanding key informants identified the types of impacts that MSC certification had on the different fisheries.

3.3 MSC impacts

Respondent perceptions of the economic, social, environmental and institutional impact of MSC certification were either positive, negative or undefined where there had been no impact. On average each survey respondent indicated 12 different impacts ($n = 380$). The qualitative responses regarding impacts were coded with a high-level impacts theme that separated the impacts into social (133, 59 plus 74 in Table 3), economic (112), institutional (91), or environmental (44) (a more detailed breakdown is shown in S2 Table).

The respondents from the fishing sector (processors, fishing companies, and fishers) mainly focussed on the economic impacts of MSC certification (68%, 38%, and 36% of these group's impact comments respectively). Government scientists largely focused on the social impacts of MSC certification (43% of this group's impact comments). Government managers mainly identified institutional (39% of impacts comments) and social impacts (35% of impact comments). The impact comments of the fishing associations were mainly institutional (38%) and social (44%). There were no significant differences in the answers between the respondents from fisheries that received funding and those that did not.

3.3.1 Direction of MSC impact. Respondents tended to focus on the positive impacts of certification. Perhaps, the focus on the positive side of the impacts may be an artefact of responder expectations because the research was funded by the MSC although implemented by an independent researcher. Every attempt was made to ensure the respondents were aware that the interviewer sought to find out about both negative and positive impacts. A total of 232 comments were indicative of a positive impact of MSC certification (61% of the total number of comments), 28% of comments indicated the MSC certification had no impact (107), and 6% of comments (21) indicated a negative impact from MSC certification (Table 3 and Fig 4). Just

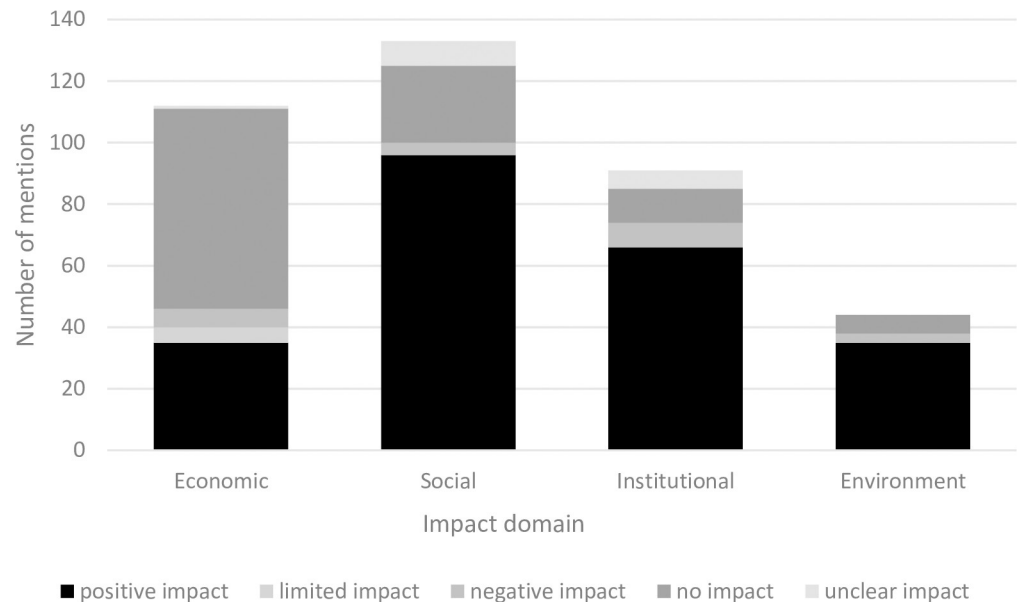


Fig 4. Economic, social, institutional, and environmental impact of MSC certification and the types of impact effect.

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over 5% of comments (20) indicated that the positive or negative impact had either been limited, or the impact was not clear.

The economic impacts were largely perceived not to have eventuated (no impact). The social, institutional, and environmental impacts were largely perceived to have been positive.

3.3.2 Economic impact. Economic aspects were the second most important driver for pursuing certification (Section 3.2). In evaluating the impacts (as opposed to the drivers), it became evident that many comments indicated that the expected economic impacts had in fact not materialized (i.e., 58% of comments indicated there was no perceived economic benefit of MSC certification). In other words, there was a clear economic driver for initially pursuing certification, but the (expected) economic impacts are currently not apparent in many of the certified WA fisheries. The lack of economic benefits was predominantly attributed to a lack of brand recognition (related to a lack of market demand) in both domestic and export markets (20 comments, 31%), the absence of price premiums for certified product (10 comments, 9%), and the absence of the need for certification to access current (mainly Asian) sale markets (9 comments, 8%).

QUOTE: “I was quite surprised that the fishers wanted to go through MSC given they mainly sell to China . . . definitely no financial benefit.” (Respondent #6, government scientist)

QUOTE: “Pricing has gone up quite materially but not as a consequence of MSC.” (Respondent #2, processor)

The perceived negative economic impacts of MSC certification were related to increased costs. These increased costs included expenses related to chain of custody certification [12] and higher business costs more generally. As illustrated in the comment below, the additional paperwork and (re)certification requirements are increasing the complexity of the traditional business model where the sale of product was more straightforward and required less record keeping.

QUOTE: “It has become harder and more expensive [for fisheries] to do business [*because of MSC requirements*]” (Respondent #24, processor)

Even though a large proportion of comments were centred around the lack of, or negative economic, impact of MSC certification, 35 comments (31%) indicated there had been some positive economic impact (22 of these positive comments were made by the fishing sector). Ironically, the positive economic impacts that were mentioned were the direct opposite of the negative impacts. For instance, respondents indicated there had been a positive effect in terms of market access and price premiums, as well as marketing advantages. These positive impact on market access and price impacts were particular to certain fisheries (i.e., HIMI toothfish and icefish and Australian prawn fishery’s).

QUOTE: “Branding—ecolabel helps, looks good, and gives access to different markets.” (Respondent #27, fishing company)

Only those few fisheries in WA that pay logo-licencing have been able to capture a price premium from the MSC label. The relationship between selling product with the MSC label, vertically integrated production systems, and control over the supply chain, may explain these positive economic impacts (price premiums and market access) for these few fisheries.

3.3.3 Social impact. The social impacts of MSC certification were mainly positive (Table 3). Around a quarter of the positive social impacts were related to obtaining or retaining social licence, followed by increasing knowledge levels (predominantly about the environmental impact of the fishery) (17%) and improvements in communication (16%) between stakeholders generally, and between the government and fishery participants more specifically. Stakeholder collaboration on solving issues arising in their fishery (13%) had also improved.

QUOTE: “Things have recovered and MSC has been used as social licence tool.” (Respondent #33, fisher)

However, on the issue of social licence and collaboration, some strong alternative or opposite views were expressed by both the fishing sector and managers and scientists. The opposite view was particularly strong in one fishery, but due to the small number of observations we cannot reveal the name of the fishery in question for reasons of confidentiality. Regarding social licence there was a perception that there was little evidence (or it was unclear or not yet determined) that social licence was either obtained or retained.

QUOTE: “Small fishery along a long piece of coast—fishing in small towns—but there was not a lot to gain in these small towns where social licence is concerned.” (Respondent #7, government scientist)

QUOTE: “Still working on the social license, but people will always think that the commercial fishers do not belong there.” (Respondent #29, fisher)

In relation to stakeholder collaboration, respondents in one particular fishery indicated that it had in fact deteriorated because of MSC certification rather than improved. These respondents indicated that the opportunities for collaboration in research projects had worsened.

QUOTE: “[*certification*] has created anxiety—exacerbated difference between academic and gov/department scientists” (Respondent #32, other)

Only 19% (Table 3) of comments indicated that there had been no social impact.

3.3.4 Environment. The environmental impact of MSC certification were predominantly perceived to have been positive (80% of environmental comments). The positive impact was mainly around the overall fishery impact on the environment, as well as environmental management by these fisheries.

QUOTE: “Habitat work done in Shark Bay (this would not have happened without the MSC).” (Respondent #15, other)

QUOTE: “industry has implemented sea snake bycatch and handling.” (Respondent #21, government manager)

Some of the negative comments questioned the MSC environmental rules, which overall led to worsened environmental outcomes in their opinion.

QUOTE: “Expected more scrutiny from the MSC. The biomass is clearly under threat and the MSC is too conservative.” (Respondent #24, processor)

Many mentions were made of environmental improvement that were due to MSC requirements including benthic mapping, snake handling knowledge, and selectivity through the use of bycatch exclusion devices. Snake handling was categorised as environmental because it concerns protected species, but this also has a health and safety aspect, and could also be categorised as a social impact.

3.3.5 Institutional. The institutional impacts of MSC certification were mainly perceived as positive (73% of the comments—Table 2). There were positive impacts on transparency (of management and fisheries process) [17], gains in political influence [13], and increased funding (resource) availability [11,12, 64].

QUOTE: “Information was there if the fishers wanted it—and they could have contributed if they wanted it (they are satisfied).” (Respondent #1, fisher)

QUOTE: “They could get greater services from the department—during the pre-assessment phase they became aware of that.” (Respondent #6, government scientist)

12% of comments indicated no institutional impact and 9% indicated a negative impact (Table 2). Again, some respondents perceived negative impacts on the same issues that others had perceived there to be a positive impact. For instance, they perceived there to be a negative influence on transparency and on the management process more generally. In particular, that the communication and transparency of fishery information from the government department (currently called Department of Primary Industries and Regional Development, or DPIRD) that is submitted for MSC purposes should be more readily available to the industry.

QUOTE: “Risk when industry takes over the assessment audit—they have to communicate better.” (Respondent #12, government scientist)

QUOTE: “[following the rules] caused us a lot of work—didn’t have the resources for it sometimes.” (Respondent #20, government manager)

QUOTE: “Can’t kick the sustainability issue back to government because they should already be doing it. So the data needs to be accessible and transparent -at the moment it is not.” (Respondent #32, other)

3.4 Sources of conflict and confusion

The MSC pre-assessment and certification follows several stages and processes. Stakeholders involved in the certification process may be familiar with at least some, if not all, of the requirements that are part of the process. In the beginning respondents did, however, find some parts of the process confusing, mainly around some specific definitions such as 'units of certification'. For example, each 'unit of certification' in a MSC certificate is awarded for a very specific group of vessels operating with a particular gear on a specified species, but the effects of other vessels fishing on the same species also need to be considered, even if they aren't involved in the certification, as part of the same 'unit of assessment' so as to ensure a full evaluation of the exploitation pressures that the certified fishery is subject to. This leads to confusion about what needs to be assessed, but also provides an incentive for all operators fishing in the same area to partner up and share the costs of the certificate. Even though most confusion was resolved without further consequences, confusion that arose later in the process around, for instance, changes in bait requirements due to a new version of the Standard led to some tensions between MSC, the Department of Fisheries (DPIRD), and between fishers.

The confusion above is related to the MSC system being complex and it being a technical burden. There was also a different type of confusion around the benefits of MSC for each sector. More precisely, the recreational sector of the fishery might have been confused about the need for them to be included in certification. Despite Recfishwest being directly involved in the designing the blueprint for the WA commitment to third party certification, along with WAFIC, many respondents from the recreational sector did not understand what the benefits of certification might be to them (and this confusion apparently remains). Some say, tensions arose between the commercial and recreational sectors because recreational fisheries representatives were not always happy to get involved. However, the opposite was also mentioned; prior tensions between the sectors resolved because they agreed on the environmental standpoint (also due to the shared 'unit of assessment' described above). One respondent (#8, fishing association) summarised this: "certification has moved the conversation [between recreational and commercial fishers]." People started talking to each other and the process was giving them the same language and "we didn't end up in the bun-fights that we used to" (Respondent #5, government scientist).

Within the commercial fisheries sector there were some tensions around payment for certification with some respondents indicating there were no (obvious) benefits. Nervousness around the amount of work involved in gaining certification and the fishery's ability to afford the process without government funding added to the tensions. Some tension was due to concerns about fishery data being released to the public. In addition, tensions were reported about the perceived unsuitability of implementing the MSC standard in local WA fisheries, and that it was unlikely to lead to a positive outcome.

4 Discussion

Fisheries management in many countries around the world has improved [1]; however, sustainability issues remain important concerns in many stocks and countries [65]. Globally, market-based incentives such as third-party certification schemes are continuing to recruit fisheries into their schemes. Fisheries that enter certification schemes are required to address any sustainability issues before becoming certified and maintain environmental performance after certification has been achieved. The number of certified fisheries is growing [18] and many different types of certification schemes are now available [29]. Even though debate remains over the effectiveness of market-based mechanisms to enhance environmental

management [66–68], there is some empirical evidence of environmental improvements and sustainability outcomes due to certification [28, 61].

The focus and remit of different fisheries certification and rating schemes is increasingly broad. Consideration of other sustainability dimensions such as animal welfare, slavery, and safe and ethical employment have also gained a higher profile [69, 70]. Many of these latter issues are particularly relevant in small-scale fisheries in low income countries [71, 72]. This has led to constantly evolving certification schemes and more specialised schemes focussed around certain issues being developed in parallel. For example, certification schemes such as Fair-Trade USA's (FTUSA) Capture Fisheries Program are aiming to fill some of the gaps in supporting small scale fishery improvements and redistributing ecolabeling benefits [72]. But more broadly, there is a need to frame and analyse these ethical issues and to systematically test and hypothesise solutions for broadening the focus of certification schemes.

Foremost, to continue to verify sustainability outcomes through third party certification, there is a need to understand the impact of certification, beyond the direct, intended outcomes. Gaining insight into the types of impacts that drive (or provide incentives to) stakeholders to become certified and understanding the social, economic, and institutional impacts of certification are key. Our research indicates that in seven Australian MSC certified fisheries captured in this study the most often mentioned driver to become certified is to improve the fisheries sustainability credentials and gain or maintain social licence (or social acceptability) within the fishing community. The economic incentive was the second most important driver, but price premium was not key [73]. These two drivers were relatively more important to the fisheries that had not received government funding to get certified than those who had benefited from the funding. Because the WA government made funding available for fisheries to become certified the results of our study are very much context specific. However, some general observations can be made especially given there were no significant differences in the responses from individuals from fisheries that received funding to become certified and those that didn't.

In Western Australia, most fisheries included in this study do not sell their product with the MSC label. The only other way of benefiting of a price premium for being sustainable, without an ecolabel on the product, is if there is widespread awareness in the consumers about the fishery being certified, as well as clear ability to recognise products from that fishery. So, even if there was a premium to be had, it is unlikely that they would receive this without the label, especially on foreign markets, and access to new markets tied to certification is unlikely to occur without a label. Instead, market access and product differentiation were the main economic incentives to participate in certification.

When certification schemes were first implemented globally (in the 1990's), economic incentives and sustainability outcomes were expected to be the predominant drivers for becoming certified [74] hypothesizing that participant fisheries could capture attractive price premiums. The costs of certification (including ongoing, direct, and indirect costs) were expected to be at least balanced, if not exceeded, by the benefits obtained through price premiums [40]. Early mover fisheries, i.e., the first to sell a particular species on a particular market, indeed have been shown to benefit from retail price premiums [45]. It can be expected that, as more fisheries become certified around the world, it is less likely for a new fishery to capture the first mover advantage, unless it is for a species that is new to the MSC program. Instead, market access and market retention can be expected to become more predominant incentives. Such price premiums can be more easily identified in standard market data streams than other economic benefits, such as improved market access or expanded market share [45]. This may explain why there is high retention of certified fisheries within the MSC program, i.e., fisheries choose to remain certified at the end of the 5 year cycle and undergo re-assessment, including

the need for new improvements if the Standard is revised to include new requirements the fishery doesn't meet.

In WA, the western rock lobster fishery was the global first mover in MSC certification (and one of the case study fisheries in this research). However, the price premium advantage is currently not realised in this fishery. The price for western rock lobster has risen dramatically but this increase is not attributable to MSC certification, even though the fishery did previously capture a price premium when the western rock lobster fishery was selling in Europe. The lack of a certification-related price premium for western rock lobster is largely because the main export market for Australian lobsters does not demand certification [36, 45]. However, some survey respondents in this research alluded to the possibility that Chinese consumers may develop a stronger preference for sustainability. Even though the fishery does not currently sell their product with the MSC label, they have recently recertified for the 4th time at an estimated certification cost of less than 1 cent (AUD) per kilo [75]. The recertification of the western rock lobster fishery suggests that the non-economic benefits (i.e., non-monetary social, institutional, and environmental benefit) of certification outweigh the costs for this fishery. Maintaining sustainability credentials (i.e. retaining the perception of environmental sustainability of the fishery as distinct from social licence) were perceived to be of benefit in this fishery. A corollary to this that some respondents indicated is that the risk posed by the loss of certification (if they decided not to invest in re-certification) would be large. The risk is high because a choice not to recertify might be misinterpreted by the public as a reduction in the sustainability of the fishery—even if this were not the case.

For the WA fisheries that had their certification funded by the WA government, the reason for the lack of price premium is partly the same as that for the western rock lobster—in that they sell to (domestic and export) markets that do not demand certified product. Prices have historically been high or increasing. However, a lack of price premium for this group of government funded MSC fisheries may also be partly attributable to relative appeal of local and global supply chains that do not demand certification. Direct certification costs were not incurred by this group of fisheries, which may perhaps have reduced the drive to seek premium markets. Lastly, these are mostly small-scale fisheries that may have other constraints on their capability to seek premium markets, such as marketing expertise and human resource availability.

As mentioned above, only a small proportion of fish products from WA is sold with the MSC label for several possible reasons. An important reason already alluded to, is that certification of the supply chain can be complicated if there are many points where product changes hands. Even though Chain of Custody certification (as part of the MSC certification process) is less expensive to obtain than the fishery certificate, the most challenging stage of the process seems to be for harvesters to switch to buyers with a certificate or convincing existing buyers to obtain a certificate. Fisheries with vertically integrated supply chains appear to be an enabling factor for using the consumer-facing label because there is more control over the supply chain, and it is easier (and perhaps cheaper) to fully certify a shorter supply chain. Also, in these vertically integrated fisheries, any premiums (or costs) are enjoyed by the consolidated company without using the market to distribute them across multiple supply chain actors. Recognition and appropriate punishment for breaches in the labelling laws [76] or improper use of a certification logo are important risks [77] and legal and scientific investment may help identify options for non-vertically integrated supply chains. However, the only such example in this study is for a fishery that has a strong incentive for ecolabelling as it was notoriously subjected to consumer boycott campaigns due to illegal fishing. Moreover, several fisheries in the MSC program that are not vertically integrated use the ecolabel as well, so it is likely an enabling factor but not the only reason for the difference in economic benefits with the other fisheries in the study.

In contrast to the economic impact (which have largely not eventuated for WA fisheries), social, institutional, and environmental impacts of MSC certification were observed and largely perceived to have been positive. Social acceptability and social licence, both of which were realised in WA, seem to be important drivers to become certified. However, there was also a view that neither the fishery nor the government's management will really know if they have social licence until it comes under threat or they lose it, and that the 'jury is still out' on the issue of social acceptability and social licence.

Nevertheless, the importance of the non-monetary impacts of certification are evident in our research from the perceived relationship between the costs and the benefits of certification. The monetary (economic) benefits of certification only outweigh the costs in certain types of fisheries. Moreover, opinion is divided almost 50:50 on whether the combined non-monetary and monetary benefits outweigh the costs. However, it is important to note that only a small minority indicated that the costs simply outweigh any benefits obtained from certification. These results may be partly attributable to the role of government support in the implementation of MSC certification [78].

This indeterminate result on the costs and benefit ratio for MSC certification may pose a dilemma in attracting new and particularly small fisheries to MSC certification. The barrier of upfront financing to become certified may be lowered (as it was through government funding in WA), but it may not mean that the economic (monetary) benefits will outweigh the ongoing costs after certification is first obtained. This is especially true if a proactive initiative to seek out opportunities of using the ecolabel is lacking or missing. Nevertheless, the non-monetary benefits are perceived to be present and to have been facilitated by the government enabling businesses to join the scheme. Communicating the importance of these potential non-monetary benefits (perhaps by estimation of their monetary value) and potential consideration of other ethical issues may ensure an enduring role for voluntary fisheries certification in creating value for fishery participants.

Supporting information

S1 File. Survey questions.

(DOCX)

S1 Table. Descriptions of the different drivers for certification.

(DOCX)

S2 Table. The number of mentions of different themes and whether the impact of MSC certification was perceived as positive, no impact, or negative (n = 33).

(DOCX)

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References

1. FAO. The State of World Fisheries and Aquaculture 2018—Meeting the sustainable development goals. Rome: FAO; 2018.
2. IUCN. International Union for Conservation of Nature—Annual Report 2018. Geneva: IUCN; 2018.
3. Urquhart J, Acott T, Zhao M. Introduction: Social and cultural impacts of marine fisheries. *Marine Policy*. 2013; 37:1–2.
4. Link JS, Watson RA. Global ecosystem overfishing: Clear delineation within real limits to production. *Science Advances*. 2019; 5(6):1–12.
5. Olsen E, Gjosaeter H, Rottingen I, Dommasnes A, Fossum P, Sandberg P. The Norwegian ecosystem-based management plan for the Barents Sea. *Ices Journal of Marine Science*. 2007; 64(4):599–602.
6. Samhuri JF, Andrews KS, Fay G, Harvey CJ, Hazen EL, Hennessey SM, et al. Defining ecosystem thresholds for human activities and environmental pressures in the California Current. *Ecosphere*. 2017; 8(6). <https://doi.org/10.1002/ecs2.1854>
7. Levin PS, Kelble CR, Shuford RL, Ainsworth C, deReynier Y, Dunsmore R, et al. Guidance for implementation of integrated ecosystem assessments: a US perspective. *Ices Journal of Marine Science*. 2014; 71(5):1198–204.
8. Ottersen G, Olsen E, van der Meeren GI, Dommasnes A, Loeng H. The Norwegian plan for integrated ecosystem-based management of the marine environment in the Norwegian Sea. *Marine Policy*. 2011; 35(3):389–98.
9. Pikitch EK, Santora C, Babcock EA, Bakun A, Bonfil R, Conover DO, et al. Ecosystem-Based Fishery Management. *Science*. 2004; 305(5682):346–7. <https://doi.org/10.1126/science.1098222> PMID: 15256658
10. Fletcher WJ, Bianchi G. The FAO–EAF toolbox: Making the ecosystem approach accessible to all fisheries. *Ocean & Coastal Management*. 2014; 90(Supplement C):20–6.
11. Selden RL, Valencia SR, Larsen AE, Cornejo-Donoso J, Wasserman AA. Evaluating seafood eco-labeling as a mechanism to reduce collateral impacts of fisheries in an ecosystem-based fisheries management context. *Marine Policy*. 2016; 64:102–15.
12. Bellchambers LM, Gaughan DJ, Wise BS, Jackson G, Fletcher WJ. Adopting Marine Stewardship Council certification of Western Australian fisheries at a jurisdictional level: The benefits and challenges. *Fisheries Research*. 2016; 183:609–16.
13. Gray TS, Gray MJ, Hague RA. Sandeels, sailors, sandals and suits: The strategy of the environmental movement in relation to the fishing industry. *Environmental Politics*. 1999; 8(3):119–39.
14. Agnew DJ, Gutiérrez NL, Stern-Pirlot A, Hoggarth DD. The MSC experience: developing an operational certification standard and a market incentive to improve fishery sustainability. *ICES Journal of Marine Science*. 2014; 71(2):216–25.
15. Christian C, Ainley D, Bailey M, Dayton P, Hocevar J, LeVine M, et al. A review of formal objections to Marine Stewardship Council fisheries certifications. *Biological Conservation*. 2013; 161:10–7.
16. Sutton M. The Marine Stewardship Council: new hope for marine fisheries. International Center for Living Aquatic Resources Management; 1996.
17. Unilever. Fishing for the future II: Unilever’s fish sustainability initiative (FSI)2003. Available from: https://www.unilever.com/Images/2003-fishing-for-the-future-ii-unilever-s-fish-sustainability-initiative_tcm244-409706_en.pdf.
18. MSC. Working together for thriving oceans: The MSC Annual Report 2018–19. London, England: MSC; 2019.
19. Gulbrandsen LH. The emergence and effectiveness of the Marine Stewardship Council. *Marine Policy*. 2009; 33(4):654–60.

20. Gutierrez NL, Defeo O, Bush SR, Butterworth DS, Roheim CA, Punt AE. The current situation and prospects of fisheries certification and ecolabelling. *Fisheries Research*. 2016; 182:1–6.
21. MSC. Get certified: Your guide to the MSC fishery assessment process. London: MSC; 2019.
22. Konefal J. Environmental Movements, Market-Based Approaches, and Neoliberalization: A Case Study of the Sustainable Seafood Movement. *Organization & Environment*. 2013; 26(3):336–52.
23. Rotherham T. Labelling for Environmental Purposes: A review of the state of the debate in the World Trade Organization. International Institute for Sustainable Development; 2003.
24. Rotherham T. The Trade and Environmental Effects of Ecolabels: Assessment and Response. Geneva: UNEP; 2004.
25. Cooper T, Ludlow M, Clift T. Examining the Role of Eco-Labels in Changing the Approach to Sustainability in the Commercial Fisheries. *Greener Management International*. 2007(57):27–42.
26. Komives K, Arton A, Baker E, Kennedy E, Longo C, Newsom D, et al. How has our understanding of the conservation impacts of voluntary sustainability standards changed since the 2012 publication of “Toward sustainability: The roles and limitations of certification?”. Washington, DC: Meridian Institute; 2018.
27. Bush SR, Toonen H, Oosterveer P, Mol APJ. The ‘devils triangle’ of MSC certification: Balancing credibility, accessibility and continuous improvement. *Marine Policy*. 2013; 37:288–93.
28. Martin SM, Cambridge TA, Grieve C, Nimmo FM, Agnew DJ. An Evaluation of Environmental Changes Within Fisheries Involved in the Marine Stewardship Council Certification Scheme. *Rev Fish Sci*. 2012; 20(2):61–9.
29. Kuminoff NV, Bosch DJ, Kauffman D, Pope JC, Stephenson K. The Growing Supply of Ecolabeled Seafood: An Economic Perspective. *Sustainable Development Law & Policy Studies Journal*. 2008; 9(1):70–1.
30. Parkes G, Young JA, Walmsley SF, Abel R, Harman J, Horvat P, et al. Behind the Signs—A Global Review of Fish Sustainability Information Schemes. *Rev Fish Sci*. 2010; 18(4):344–56.
31. Lim KH, Grebitus C, Hu W, Nayga RMJ. More than Meets the Eye: Consumers’ Willingness to Pay for Marine Stewardship Council’s Certified Seafood. 2015 AAEA & WAEA Joint Annual Meeting July 26–28; San Francisco, California: Agricultural and Applied Economics Association; 2015.
32. Gutierrez AP, Thornton TF. Can Consumers Understand Sustainability through Seafood Eco-Labels? A U.S. and UK Case Study Sustainability. 2014; 6:8195–217.
33. Jacquet JL, Pauly D. The rise of seafood awareness campaigns in an era of collapsing fisheries. *Marine Policy*. 2007; 31(3):308–13.
34. Fabinyi M, Liu N, Song Q, Li R. Aquatic product consumption patterns and perceptions among the Chinese middle class. *Regional Studies in Marine Science*. 2016; 7:1–9.
35. Hanson A, Cui H, Zou L, Clarke S, Muldoon G, Potts J, et al. Greening China’s Fish and Fish Products Market Supply Chains. Winnipeg, Manitoba, Canada: International Institute for Sustainable Development; 2011.
36. Xu P, Zeng Y, Fong Q, Lone T, Liu Y. Chinese consumers’ willingness to pay for green- and eco-labeled seafood. *Food Control*. 2012; 28:74–8.
37. Potts J, Wilkings A, Lynch M, McFatrige S. The State of Sustainability Initiatives: Standards and the Blue Economy. Winnipeg: International Institute for Sustainable Development; 2016.
38. news U. Chaos for UK processors as supply of MSC mackerel runs out 2003 [Available from: <https://www.undercurrentnews.com/2019/12/03/chaos-for-uk-processors-as-supply-of-msc-mackerel-runs-out/>].
39. Sun CH, Chiang FS, Owens M, Squires D. Will American consumers pay more for eco-friendly labeled canned tuna? Estimating US consumer demand for canned tuna varieties using scanner data. *Marine Policy*. 2017; 79:62–9.
40. Stemle A, Uchida H, Roheim CA. Have dockside prices improved after MSC certification? analysis of multiple fisheries. *Fisheries Research*. 2016; 182:116–23.
41. Blomquist J, Bartolino V, Waldo S. Price Premiums for Providing Eco-labelled Seafood: Evidence from MSC-certified Cod in Sweden. *Journal of Agricultural Economics*. 2015; 66(3):690–704.
42. Goyert W, Sagarin R, Annala J. The promise and pitfalls of Marine Stewardship Council certification: Maine lobster as a case study. *Marine Policy*. 2010; 34(5):1103–9.
43. Bronnmann J, Asche F. Sustainable Seafood From Aquaculture and Wild Fisheries: Insights From a Discrete Choice Experiment in Germany. *Ecological Economics*. 2017; 142:113–9.
44. Sogn-Grundvåg G, Larsen TA, Young JA. The value of line-caught and other attributes: An exploration of price premiums for chilled fish in UK supermarkets. *Marine Policy*. 2013; 38:41–4.

45. Roheim CA, Asche F, Santos JI. The Elusive Price Premium for Ecolabelled Products: Evidence from Seafood in the UK Market. *Journal of Agricultural Economics*. 2011; 62(3):655–68.
46. Goshulak L. Balancing Market Access with Local Practice: Understanding harvester group motivations and experiences with Marine Stewardship Council certification. Guelph, Canada: The University of Guelph; 2017.
47. Foley P. The Political Economy of Marine Stewardship Council Certification: Processors and Access in Newfoundland and Labrador's Inshore Shrimp Industry. *Journal of Agrarian Change*. 2012; 12(2-3):436–57.
48. Roheim CA. Early Indications of Market Impacts from the Marine Stewardship Council's Ecolabeling of Seafood. *Marine Resource Economics*. 2003; 18(1):95–104.
49. Lallemand P, Bergh M, Hansen M, Purves M. Estimating the economic benefits of MSC certification for the South African hake trawl fishery. *Fisheries Research*. 2016; 182:98–115.
50. Ward TJ, Phillips BF. Lobster Ecolabelling. In: Phillips BF, editor. *Lobsters: Biology, Management, Aquaculture and Fisheries* 2013. p. 139–85.
51. Government of Western Australia. 2014 [Available from: <http://www.wamsc.com.au>].
52. Government of Western Australia. 2019 [Available from: <https://www.fish.wa.gov.au>].
53. Johnston D, Marks R, Marsh C. West Coast Blue Swimmer Crab Resource Status Report 2018. In: Gaughan DJ, Molony B. and Santoro K., editor. *Status Reports of the Fisheries and Aquatic Resources of Western Australia 2017/18*. Western Australia: The State of the Fisheries. Department of Primary Industries and Regional Development; 2018.
54. Johnston D, Harris D, Caputi N, Thomson A. Decline of a blue swimmer crab (*Portunus pelagicus*) fishery in Western Australia—History, contributing factors and future management strategy. *Fisheries Research*. 2011; 109(1):119–30.
55. McCluskey P. Shark Bay World Heritage Property Strategic Plan 2008–2020. Perth, WA: WA Department of Environment and Conservation; 2008.
56. Sporer E, Kangas M, Koefoed I, Oliver R. Shark Bay Prawn Managed Fishery Status Report. Perth, WA: Department of Fisheries; 2014.
57. Longo C, et al. Overview paper—social effects of MSC certification. TBD. in prep.
58. Alliance I. Assessing the Impacts of Social and Environmental Standards Systems ISEAL Code of Good Practice Version 2.0 2014 Available from: https://www.isealliance.org/sites/default/files/resource/2019-06/ISEAL_Impacts_Code_Version_2.0.pdf
59. Weiss C. Nothing as Practical as Good Theory: Exploring Theory-Based Evaluation for Comprehensive Community Initiatives for Children and Families. In: Connell J, Kubisch A, Schorr L, and Weiss C., editor. *New Approaches to Evaluating Community Initiatives*. Washington, DC: Aspen Institute; 1995.
60. Weiss CH. Have we learned anything new about the use of evaluation? *The American Journal of Evaluation*. 1998; 19(1):21–33.
61. Travaille TKL, Lindley J, Kendrick GA, Crowder LB, Clifton J. The market for sustainable seafood drives transformative change in fishery social-ecological systems. *Global Environmental Change*. 2019; 57:101919.
62. Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, et al. Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*. 2018; 52(4):1893–907.
63. R Core Team. R: A language and environment for statistical computing. Vienna, Austria.: Foundation for Statistical Computing; 2013.
64. Bellchambers LM, Phillips BF, Pérez-Ramírez M, Lozano-Álvarez E, Ley-Cooper K, Vega-Velazquez A. Addressing environmental considerations for Marine Stewardship Council certification: A case study using lobsters. *Marine Policy*. 2014; 50:249–60.
65. Worm B, Hilborn R, Baum JK, Branch TA, Collie JS, Costello C, et al. Rebuilding Global Fisheries. *Science*. 2009; 325(5940):578–85. <https://doi.org/10.1126/science.1173146> PMID: 19644114
66. Tlusty MF. Environmental improvement of seafood through certification and ecolabelling: theory and analysis. *Fish and Fisheries*. 2012; 13(1):1–13.
67. Lopuch M. Benefits of Certification for Small-Scale Fisheries. In: Phillips TWaB, editor. *SEAFOOD Ecolabelling* 2009. p. 307–21.
68. Tlusty MF, Thorsen Ø. Claiming seafood is 'sustainable' risks limiting improvements. *Fish and Fisheries*. 2017; 18:340–6.
69. Marschke M, Vandergeest P. Slavery scandals: Unpacking labour challenges and policy responses within the off-shore fisheries sector. *Marine Policy*. 2016; 68:39–46.

70. Nakamura K, Bishop L, Ward T, Pramod G, Thomson DC, Tungpuchayakul P, et al. Seeing slavery in seafood supply chains. *Science Advances*. 2018; 4(7):e1701833. <https://doi.org/10.1126/sciadv.1701833> PMID: 30050983
71. Stratoudakis Y, McConney P, Duncan J, Ghofar A, Gitonga N, Mohamed KS, et al. Fisheries certification in the developing world: Locks and keys or square pegs in round holes? *Fisheries Research*. 2016; 182:39–49.
72. Borland ME, Bailey M. A tale of two standards: A case study of the Fair Trade USA certified Maluku handline yellowfin tuna (*Thunnus albacares*) fishery. *Marine Policy*. 2019; 100:353–60.
73. Tolentino-Zondervan F, Berentsen P, Bush SR, Digal L, Oude Lansink A. Fisher-Level Decision Making to Participate in Fisheries Improvement Projects (FIPs) for Yellowfin Tuna in the Philippines. *PLOS ONE*. 2016; 11(10):e0163537. <https://doi.org/10.1371/journal.pone.0163537> PMID: 27732607
74. Blomquist J, Bartolino V, Waldo S. Price premiums for providing ecolabelled seafood—a case study of the Swedish MSC-certified cod fishery in the Eastern Baltic Sea. *Agrifood economics centre*; 2014.
75. Agknowledge. An independent cost and benefit analysis of the Marine Stewardship Council (MSC) certification for the WA rock lobster industry. Perth: Western Rock Lobster Council; 2015.
76. Helyar SJ, Lloyd HaD, de Bruyn M, Leake J, Bennett N, Carvalho GR. Fish Product Mislabelling: Failings of Traceability in the Production Chain and Implications for Illegal, Unreported and Unregulated (IUU) Fishing. *PLOS ONE*. 2014; 9(6):e98691. <https://doi.org/10.1371/journal.pone.0098691> PMID: 24921655
77. Bleakley P. Big Fish, Small Pond: NGO–Corporate Partnerships and Corruption of the Environmental Certification Process in Tasmanian Aquaculture. *Critical Criminology*. 2019.
78. Foley P. National Government Responses to Marine Stewardship Council (MSC) Fisheries Certification: Insights from Atlantic Canada. *New Political Economy*. 2013; 18(2):284–307.



An independent cost and benefit analysis of the Marine Stewardship Council (MSC) certification for the WA rock lobster industry

FINAL REPORT – MAY 2015

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'The MSC has made us more environmentally aware and what it means to how we operate.

It is keeping us up with how the modern world is thinking and what it's expecting of us.

As the US chains go down the road of accreditation, others will follow.'

TERMS OF REFERENCE

The Western Rock Lobster Fishery was first certified in March 2000, recertified in December 2006 and again in March 2012 against the Marine Stewardship Council (MSC) standard for well-managed fisheries. The fishery is subject to reassessment for recertification for a further five years in 2017.

The Fisheries R&D Corporation has provided a grant over four years to WAFIC to assist in the extension of MSC certification to other WA fisheries.

The Western Rock Lobster Council (WRLC) will be responsible for the audit and recertification costs to maintain MSC certification for its fishery.

Agknowledge® has provided an independent cost and benefit analysis and assessment of the MSC certification as the primary step for engaging the rock lobster industry and delivers this report as the basis for future engagement and discussion with the Western Rock Lobster Fishery (WRLF).

The objectives for the project included:

- consulting widely with the harvest and post-harvest sectors of the WRLF to determine gaps in understanding that remain despite the fishery twice being re-certified.
- identifying the key principles that ensure strong stakeholder support and long-term commitment, by incorporating the outcomes to ensure there is a bottom-up approach to engagement with industry.

This review of the Benefit Analysis of the MSC certification for the WRL industry was conducted in three phases:

1. A series of interviews with a range of industry participants from Harvesters, Processors, Traders, Certifying Bodies, Researchers, Fisheries management, Chefs, Bankers, non-Government Organisations including MSC, WWF and Conservation Councils, Public Policy personnel and Scientists.
2. A desktop study of the history, the papers, strategic plans, consumer market research and general media which constitute opinion and fact on the WRLF MSC certification and its relationship with MSC.
3. A telephone interview series with a further range of industry participants.

These elements have been drawn together to compile this report which will provide a resource for all fisheries entering MSC full assessment and forms an important element for future engagement.

This report meets the following terms of reference:

1. Inquire into and report on the benefits of MSC certification of the WRLF taking particular account of:
 - Market benefits including market penetration and access
 - Economic benefits
 - Social benefits
 - Political benefits
 - Scientific benefits
 - Management system benefits
 - WRL Research, Development and Extension Plan
 - Supply Chain Assurance (for health and traceability).

It is expected that in carrying out the above analysis a principle means of ascertaining information will be through direct interviews with individuals that have experience and expertise in these matters.

In examining these matters provide a commentary on the costs had the WRL fishery not been MSC certified, and a quantitative assessment on selected matters as determined by WAFIC.

2. Inquire into and report on the direct costs of MSC certification since, and including, the initial assessment in March 2000 in annual amounts, and as a percentage of the annual Gross Value of Production of the fishery by fishing unit and the source of funding. Provide a commentary on the indirect costs of certification, including identifying who has carried these costs.
3. Inquire into and report on the anticipated and desirable outcomes that might be achieved in the event that the fishery is recertified in 2017 for a further five years.
4. Provide advice on ways in which the WRLC and other client fisheries can better engage with both WAFIC and the MSC in order to improve or capitalise on the benefits that MSC certification could provide.
5. Review and identify mechanisms by which client fisheries can source funds to maintain MSC certification.

BACKGROUND

The Western Australian Rock Lobster Fishery (WRLF) has undergone a significant change since the fishery moved from an input system to a regulated output system in 2009. While this change has driven a strong rationalisation of the industry, the future has never been as bright with record breeding stocks highlighting the long-term sustainability of the sector while insatiable demand from China has re-shaped the trade.

Western Australia is viewed as a world leader in fisheries management. Western Rock Lobster is the most valuable wild harvest single-species fishery in Australia at an estimated value of \$350m in 2014-15 in export income.

In 2000 the Western Rock Lobster (WRL) industry became the first in the world to attain Marine Stewardship Council (MSC) certification and the fishery was also the first to be re-certified for a third time. With 15 years and three re-certifications, the industry has had time to assimilate the cost and benefits.

Operating as an input fishery (Total Allowable Effort) since 1963 the commercial harvest averaged ~11,000 tonnes per annum. Market supply was governed by catchability of lobster, sometimes resulting in over-supply and depressing prices.

In 2008 the industry was in a dire position with a historically low puerulus (post-larval lobster) count, which acted as a catalyst for change. The environmental event of warm water hitting the west coast brought the breeding season forward, larvae were released earlier and spawning into an area with poor feed meant fewer stocks survived to return to the fishery.

The implementation of the quota system was controversial for some but overall it transformed the industry from an effort fishery with complicated interventional effort control rules limiting the catch. It then transitioned into a quota fishery over three seasons. Previously known as an 'Olympic' fishery', it was about having the biggest boat and engine to beat the others to the catch. Now it is about working to a quota, minimising costs and managing your deliveries against the current beach price to be profitable.

Prior to the fishery going to quota, those with a licence could fish as hard as they liked. The fishery efficiency increased with technology, which combined with the warm water event and low puerulus count threatened to crash the fishery.

However the changing circumstances resulted in a restructure of the management of the WRLF to a full tradable output fishery. Based on the interim harvest strategy guidelines the WRLC has a 2015 season Total

Allowable Commercial Catch (TACC) of 6,000 tonnes. The fishing season has been extended from 7.5 months to 12 months.

In the past the emphasis was on regulation to restrict fishing efficiency, and as there was no other way to control the fishery there was no other lever to manage the stocks. The number of pots was limited, but efficient fishers were catching ever more. Exploitation rate was 86% until the first of the quotas in 2009, and now it is around 40%.

Maximum economic yield has shown it will enable fishing to a level that stops prior to the limit. It depends what the market demand is for a size, and it pushes the population structure around that demand, which has shifted with China taking a range of sizes, where Japan previously took the smaller sizes.

While the most significant impact on change is the much stronger average unit (beach) price increasing from around \$30/kg in 2010 to \$60/kg in 2015, silently underpinning the development of the industry has been the MSC Certification acting as a management planner and insurance policy.

The major developments under the current management system include:

- The catch per unit effort as the key management measure is greatly improved.
- Reduction in operating costs because of better planning cycles.
- Quality control specifications are now around 99% of the total catch.
- Improved breeding stocks.
- The extended fishing season allows for better planning rotations and fishing to meet the market.
- Better social benefits with reduced time at sea.

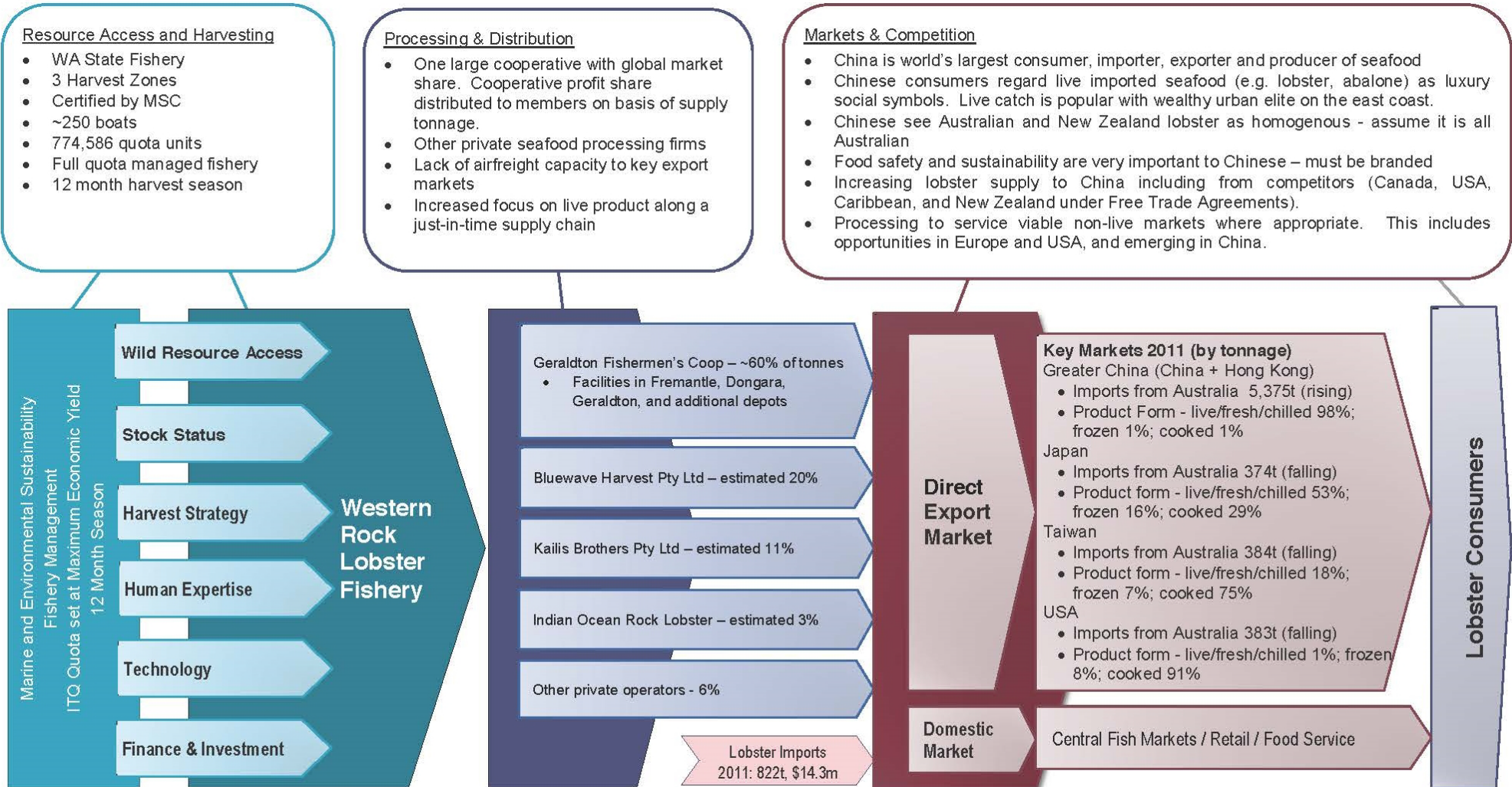
An attitudinal issue with some operators is the failure to recognise that the fishery is a common property resource, and as the industry is in the public eye any false move will be found out. There has been change over time, the industry generates a good return, however it is an imperative obligation to the wider community to continue to manage the fishery well.

The emergence of China as the key market has had a profound impact. The premium market now is the live lobster and with the recently signed Free Trade Agreement there will be a reduction in tariffs which should foster better relationships, minimise technical barriers, and improve marketing, promotion and brand awareness.

An unintended consequence of the successful export market is that the local consumer is without affordable access to a highly prized, iconic WA product.

THE WESTERN ROCK LOBSTER INDUSTRY

This diagram represents the value chain and identifies the risks:



Source: Western Rock Lobster Research, Development and Extension Plan 2014-23

EXECUTIVE SUMMARY AND RECOMMENDATIONS

Seafood is big business: it is the most commonly traded food commodity globally and is worth over US\$100 billion annually, traded between developing countries into developed markets.

In China and Asia more generally, growth in per capita consumption of seafood over the past 20 years has increased from 11kg per person per annum to about 30 kg/person/annum. So growth in consumption alone is creating great opportunity for the seafood industry.

In 2011-12 Australia's seafood exports to China and Hong Kong were valued at about \$500 million and lobster and abalone accounted for around 90% of that. As a well-established trade operating for over 20 years, our exporters have very strong relationships with the importers in these countries.

What people in China understand about quality and safety of food from Australia is led by direct communications and by providing high quality abalone and rock lobster. Australia produces more than 30% of the global spiny rock lobster and is an industry assessed as being sustainably managed, and harvesting from a pristine environment. Traditional cuisine in China has abalone and rock lobster as treasures of the sea, meaning Australia is endowed with some highly prized products and significant opportunities.

The WRL Fishery being quota-managed leaves little room for growth in volume but significant opportunity in brand value. In 2014 Western Rock Lobster reached record prices and with an excellent reputation in China for quality it is imperative to preserve, enhance and protect that status.

To achieve this requires ongoing investment in quality standards, interaction with the public and government, really good efficiency and assurance in our supply chains which are competing with global supply chains, and clear demonstration that the industry is sustainable under the scrutiny of a very watchful public eye.

A first to market 15 year investment by WRLF in Marine Stewardship Council Certification was designed to assist the industry to manage and monitor these issues. The next re-certification is due in 2017 and in preparation for this process, this report provides information and discussion on the costs and benefits of MSC Certification to the industry to guide decision making.

MSC background

The Marine Stewardship Council was established as an organisation designed to improve worldwide fisheries management systems through market influences and not as an organisation designed to promote individual fisheries. As an MSC-certified fishery, the WRLF has implicitly committed to these broader objectives. The benefits for the fishery are entwined in the success of both the MSC and the Western Rock Lobster Fishery.



MSC is significantly influencing worldwide fisheries management systems. Recognition is a pre-requisite to the theory behind MSC of using market forces to drive behavioural change in fisheries management. The overall effort of MSC and its constant renovation of processes in response to consumer understanding has driven a well-respected body at the top of the totem in like organisations. However the efforts to develop consumer understanding and therefore purchaser 'pull' through its brand image may have developed well in Europe and parts of North America, but is still in its infancy in Asia and Australia.

It is clear that benefits have accrued as a result of MSC certification to various industry stakeholders. Many of these benefits are intangible and therefore it is difficult to ascribe a dollar value to them. In interviews with stakeholders the various benefits (as well as absence of anticipated benefits) were identified across the following areas:

- Market benefits including market penetration and access
- Economic benefits
- Social benefits
- Political benefits
- Scientific benefits
- Management system benefits
- WRL Research, Development and Extension Plan
- Supply Chain Assurance (for health and traceability).

MSC REPORT CARD	Benefit	Trend	Comments
Government confidence	A	➡	Invest in new fisheries
Credibility through a third party	A	↻	Global independence
Environmental responsibility	A	➡	Marine parks
R&D direction and planning	A	➡	2014 R&D plan
Improved management practices	A	➡	Harvest plan
Social licence to operate	A	↻	Gaining ground
Supply Chain Assurance	B	↻	Greater importance
Future proof the industry	B	↻	Underpins alternate markets
Improved industry governance	B	➡	Collegiate industry
Sustainable industry	B	↻	MEY/TACC/quotas
Animal welfare	B	↻	Seals/whales
Economics - the ChAFTA	C	↻	Momentum gaining
Supermarket compliance	C	⬇	Not relevant - yet
Marketing the message	C	⬇	Very poor
Interaction with industry	C	➡	Needs work
Reward for investment - consumer	C	⬇	Not delivered
Price premiums	D	➡	Zero

During the industry consultation the 40 participants were asked to evaluate their views regarding the benefits of MSC Certification, and in accumulating the results a qualitative rating has been developed to allow the industry to track the return as a 'Report Card'. Whereas the MSC re-certification process is very measurable against the key functional activities, this report card is about measuring against the expectations from industry.

At one end of the scale all participants were unequivocal in their opinion that the MSC did not add any measurable benefit to the market price, resulting in a D or well below the anticipated outcome. However the same can be said about the vast majority of similar programs across industry, including the supermarket's 'quality schemes' which are mandatory but provide the accredited supplier with nothing but a 'ticket to the game'.

Contrast this rating with the positive A ratings in 'credibility', 'confidence', 'management', 'R&D planning', and the rapidly emerging topic of 'social licence to operate'. Any parent reading an end of term report would be mightily pleased with the number of As scored, which on this report card will contribute to the future security of the WRL industry.

Overall the investment in MSC Certification from 2000-2014 has been in the order of \$1.3m and in that time the industry has delivered nearly 125mkg of rock lobster to market. **MSC Certification represented a cost of less than one (1c) cent per kilo per year over the 15 years. A proposed budget for the next five years amounts to a cost of 0.9c/kg or around \$55,000/year for a TACC of 6mkg per annum.**

In seeking to provide evidence of the less visible financial benefits for MSC investment, the finance sector outlined that industry is seen to be on the front foot to monitor the sustainability of their industry. One bank specifically identified that the MSC Certification provided them confidence to maintain appropriate lending margins over licence units, and that other fishing industries that are perceived to have greater risks have higher lending margins.

If the industry is capitalised to around \$3 billion, then a 20% borrowing inside the industry at a margin difference of 0.1% delivers the industry a net benefit of \$60,000pa.

Note: Arrows indicate an improving, holding or declining position.

The WRLF and its members are clearly in a state of change and change keeps members on edge, looking for issues, concerned about other members and overall taking a defensive position.

The current state is because of the recent rationalisation of the industry, the clear picture of a crisis with a low puerulus count in 2008, a change to how the fishery is segmented and a move to the need for more professional management and governance – all in an environment of a far more frugal government but a burgeoning single market.

MSC Certification has provided a catalyst for the industry to focus on matters other than price which do and will make up a significant part of a sustainable industry, and importantly an opportunity to improve unity in the industry.

The key recommendation is to proceed with MSC certification in 2017

Recommendation 1

The WRLC invests in the MSC Re-certification for 2017-21.

Recommendation 2

WRLC to make its members aware of the potential discount on lending margins applied by some financial institutions due to MSC certification.

WRLC, WAFIC and the Department of Fisheries to provide seminars to financial institutions on the investment benefits of a MSC certified fishery which will build on the WRLF and include other WA fisheries.

Communicating with industry

The interaction between MSC and the industry is seen as particularly poor and if MSC had a more consultative and interactive relationship with its Number 1 ticket holder - the Western Rock Lobster Fishery, and specifically with harvesters and processors, the need for justification of the MSC certification expense would be a non-event.

The number of people the consultancy spoke to who had had no contact, little interaction, occasional snippets in newsletters was quite remarkable, and a major factor requiring a defined strategic position and plan for the future.

It was an issue that some see MSC being created as 'indispensable' to the industry and the potential of having control over future activities meaning reliance on accreditation for future market access.

There is an expectation from the supply chain that there is consultation and integration of planning, changes and contribution to activities. The need to 'be seen' should not be underestimated.

While it is not an individual audit, rather one of the industry, there is ample opportunity for MSC staff, members to be engaged during the 5 year program.

It must be noted that a MSC Officer is now based in WA.

In renegotiating with the Re-certification, WRLC needs to ensure that MSC includes a far more integral communications plan with all parts of the supply chain.

Recommendation 3

WAFIC and WRLC negotiates with MSC to include a communications strategy in the renewal of the MSC Re-certification for 2017-21, and for other Western Fisheries in the MSC program.

Engagement with Harvesters and Processors is paramount.



Interaction with MSC

The WRLC could investigate with industry those issues which MSC does not cover that concern them, and identify with the organisation just how to manage these points of concern. As the initial certified fishery, it would be expected that some credibility would be attached to such opinions.

Recommendation 4

In renewing a contract to re-certify, WRLC undertakes an internal consultation to determine gaps in the Performance Indicators the fishery has to meet and seek to integrate where appropriate.

MSC Stakeholder Council



The WA Fishing Industry Council (WAFIC) has had a presence on the international MSC Stakeholder Council and is a foundation member of the Association of Sustainable Fisheries (ASF) which represents the interests of MSC certified fisheries from around the world.

Both of these institutions are highly influential in the evolution of the MSC policies and standards. Given the investment of State Government and industry, it remains an imperative that representation on the Council and the ASF is maintained, not only for the WRLF activities but also the additional WA fisheries undergoing Certification.

Recommendation 5

WAFIC invests in continuity of personal representation at the MSC Stakeholder Council, and membership of the ASF.

China Free Trade Agreement



Partnerships between Australian and Chinese enterprises will become more common as food trade between the countries grows. At the moment public attention is very much focussed on individuals buying land or farms, but the real growth and expansion of agribusiness will come from joint operation of processing facilities and from integrating value chains. These will build supply chains that run from Australian land and sea, through cool transport, to the Chinese retail sector or even into global value chains.

The Western Rock Lobster industry is at the forefront of current trade, however there are significant opportunities to consolidate the position and formalise supply chains over the coming years. The industry will undergo some changes to the system of entry to China and this will need to be done with sound planning and relationship development.

Building on the current personal networks and government agencies is a functional way to find the right Chinese business partners.

The main barriers to doing business with China will be a significant change to the Chinese administrative procedures, development of brand recognition and Chinese domestic market access.

The MSC Chain of Custody provides integrity in the supply chain, shoring up the provenance of the WRL. This will become increasingly important once the China-Australia FTA becomes bedded down.

Building on the opportunities to create value for the WRLF and developing the rewards for being a MSC client will need to be in concert with other sectors of Australian industry.

Recommendation 6

WRLC, Department of Fisheries, MSC, and Department of Commerce and WRLF Processors work collaboratively to optimise a long term market in China and monitor the return for MSC brand management, and potential development of 'Australian Lobster' branding to differentiate the premium offer.

Research and Development

The Department of Fisheries has been an integral part of the long term development of the WRLF and will continue to be so. The role is complicated as on the one hand Fisheries participates in and contributes to research, development and improved practices as well as reporting and science matters. On the other hand it has the role of 'compliance officer' and the dichotomy between the two roles could hamper collaboration. While it remains important for monitoring, tracking and control over both professional and recreational harvesters, there needs to be a clear delineation of roles.

Importantly, the ongoing development of direction and planning by Fisheries must be in concert with the WRLC and industry to achieve a common outcome. It is here that industry will find ready partners to constantly address confronting issues of production, environmental sustainability, product standards and linkage with other parts of government.

For example, MSC wanted to know if the lobster size and sex structure within the fishery varied comparing unfished with fished areas. The case to apply for funding for the research was designed because MSC raised the question. In response, a project was created as Fisheries was able to leverage FRDC funds. At the time some fishermen thought the project was a waste of time, but it has established the carrying capacity of the reefs, which will feed into the rate of harvest of those reefs.

Fisheries have managed the MSC processes, and will continue to partner with WRLC in making sure the MSC activation is on track. Benefits will accrue to other fisheries from the experience derived from 15 years of MSC implementation in the WRLF.

Recommendation 7

WAFIC and the WRLC work with Department of Fisheries to invest in and optimise the research and development investment in all parts of the industry.

Department of Fisheries remain as lead coordinator of the MSC Re-certification and annual Audit process on behalf of the WRLC.

Animal Welfare

An issue which has been raised by the industry in discussion is increasing public awareness and concern for animal welfare: it is not such a long path from humane live export and slaughter of cattle to rock lobsters.

This is an issue for the industry to address as examples of pushing the threat of animal welfare issues to one side can be found in poultry sheds, cattle yards, livestock carriers and on the Fremantle wharf: the Western Rock Lobster industry does not need to be made an example of at Perth airport, or in China.

Sydney Morning Herald – October 2014

'Gourmet Farmer' Matthew Evans looks at the problems with the seafood Australians consume.

Eco warrior, Matthew Evans wants to see labelling that reflects where seafood comes from and how it was produced, so the public can make decisions about sustainability and choose not to export destruction.

An example is a short article in the Sydney Morning Herald October 2014 where a well renowned chef and TV Presenter makes a statement which carries weight and credence.

Positions like this cannot be merely rebutted once they hit the headlines, they need to have been pre-empted and managed well ahead of the media and interest groups becoming involved.

Recommendation 8

WRLC to undertake an internal discussion on animal welfare to understand the issues and implications.

Develop and implement protocols to manage the issues. This may or may not be in conjunction with MSC Certification.

Raise public awareness of MSC



There was strong sentiment at the lack of public awareness of MSC within Western Australia and therefore it is necessary to raise its public profile and increase public confidence in the MSC brand. The campaign should target the broader community, the local market, fishermen and the hospitality industry.

The industry needs to grow the ongoing endorsement of the community to permit harvest from the public resource. This 'social licence to operate' is increasingly tested under a triple bottom line and related legislation. Agencies, NGOs and the media increasingly focus on qualitative and quantitative measures of fishery performance.

The message should focus on what MSC means, the benefits, a cost benefit analysis, and data showing that the fishery is well managed and what it means. This will in turn benefit the fishery and increase its value, increase potential markets and increase the understanding of environmental impacts.

The messages need to be clearly targeted in terms of the form of communication used to address each sector. Fishermen would appreciate more face to face contact and the community would like to see articles in a variety of publications including good news stories.

MSC has a well-established platform to integrate joint marketing campaigns: MSC needs to implement improved communications in Western Australia and include industry and consumers to promote the value and benefits of MSC accreditation.

MSC joint-marketing campaigns - from MSC web site:

The MSC works closely with commercial partners to build awareness in the industry and with consumers, and to increase the value of the MSC ecolabel to our partners.

Since February 2008, MSC have worked with internationally-renowned agency Saatchi & Saatchi who have generously offered pro bono support to improve consumer awareness and recognition of the MSC ecolabel. To achieve this we regularly run joint-marketing initiatives that are designed to increase awareness of the MSC program at the same time as enhancing the sustainability credentials of seafood brands and retailers.

Our aims are to

- Generate **fresh ideas** and new materials for marketing
- Improve **understanding** of the MSC program
- Enhance the **sustainability credentials** of our partners
- Make MSC-labelled products **important** to shoppers
- Improve our partners' **sales** and the demand for MSC-labelled seafood.

Recommendation 9

In undertaking Re-certification, WRLC set some clear agreements with MSC regarding the marketing program to bring MSC to the forefront. Develop joint marketing and communications strategies.

Develop performance measures and reporting networks that promote WRLF's social licence to operate.

Community support

One of the clear gaps in the discussion on marketing and future development, aligned with the need to have a local population who understand and support the industry, is the poor consumer access to Western Rock Lobster in WA at an affordable price.

The community does not understand or accept the notion that lobsters are priced in excess of \$60/kg on the open market and are even more despondent that the best quality product is destined for overseas – even at the premium.

This issue is a dilemma for while it is imperative the industry reaps the returns from its investment, there is a need to invest in a domestic presence in the tourism and hospitality industries, generating pride in a successful State primary industry, and having a supportive community should an environmental or animal health issue arise.

Agknowledge recommends, not as an issue to do with MSC but as an opportunity, that the WRLC create a local focus on Western Rock Lobster.

This could be a festival to coincide with the Fremantle Seafood Festival or the opening of the season on 16 January and run for a month. In the same way the cherry and truffle festivals promote their WA seasons, this would provide a month long opportunity to re-acquaint Western Australia with one of its most popular food products.

The festival would follow after the main seafood marketing push over Christmas, would link into the coastal holiday season and give retailers their next seasonal market campaign.

The rub of course is to make sure the product is affordable and available – and to do so the industry will need to take a whole of industry benefit view to contribute product at an affordable market price during the promotion, and at a price which is more compelling than the imported lobster price.

Recommendation 10
WRLC to develop a month long Western Rock Lobster Festival with affordable product across WA to create awareness and build domestic community support and recognition for the industry.

Funding

The WRLC is the peak body representing the rock lobster industry’s interests including 230 boats from Kalbarri to Augusta. The WRLC currently has no secure independent funding model to sustain its industry role or manage the fishery’s RD&E Investment Plan.

WRLF licence holders currently contribute to funding streams to support fishery management, industry administration, advocacy, and to invest in RD&E

Current (2014/15) Funding Source and Distribution

Based on GVP ~\$350m	% of GVP	Approx \$/pa	Use of funds
WA Fisheries	5.000%	\$14,600,000	Fishery monitoring and assessment with RD&E focussed on stock and environmental issues
WAFIC	0.375%	\$1,047,000	Community investment to support fisheries industry
WAFIC/WRLC	0.125%	\$247,300	Returned to WRLC to run the organisation
RD&E	0.250%	\$730,000	Allocated to RD&E and leveraged via FRDC, SCRC
Total	5.750%	\$16.624,333	

Note: The contribution is based on a 3 year rolling average of GVP

The WRLC considers these cash streams are insufficient in size and inappropriate in form to enable it to discharge its charter on behalf of members and licence holders. The topic of the perilous state of funding was raised on a regular basis and the additional contribution of even \$30,000 for the re-certification appeared to be a tipping point for the bank balance.

Future funding of certification could be covered by the beneficiaries that are directly reaping the rewards, which is fishermen / harvesters first and

foremost, through an industry levy scaled on the number of pots, or per kilogram caught, and linked to the return: i.e. both volume and price.

Government will share in the costs through the input of Fisheries, as the Department also benefits in that MSC enhances the reputation of the management of WA fisheries.

In late 2014 a proposition was identified that additional funding specifically for the rock lobster industry could be raised via a further 15,000kg of quota added to the TACC, with financial benefit to be returned to the industry for marketing, research and industry development and enhanced financial and operational stability. The implementation of this proposition could generate up to \$1m per annum but is subject to significant review and will remain a statutory arrangement.

Alternate funding option

A strong theme in the consultancy was recognition of the need and timing to establish a self-generating fund to ensure longevity of the industry:

- *‘The industry should put a \$/kilo towards a peak body, with guiding principles. They need transparent and professional representation.’*
- *On unity and having a really strong voice to take a position on issues: ‘It is a sad indictment that a \$3bn investment industry refuses to fund proper representation.’*
- *‘I am bewildered why we aren’t funding our own council. We could fund our own research.’*
- *‘Now the industry is in a far better position to fund it, but there is housekeeping to get sorted like the funding model, constitution and voting model. Once that is done we should start promoting our value to the state, and the sustainability of our fishery.’*
- *‘We are in a better position to do our own research and manage our industry position, we should be funding it while we can.’*
- *‘The Commonwealth will become much more interested in what is happening in the fishery, scrutiny will be increased, so far they have relied on the MSC process and reporting.’*

Should the WRLF through its range of bodies and statutory tools choose to create a short term (suggested three year) fund then a sliding scale of contribution or levy could be implemented to raise a fund in the order of \$15m.

An 85c/kg contribution from 6,000,000kg for three years would be a substantial game-changing initiative to consolidate the industry, achieve self-sufficiency and be in a position to be totally independent from external funding.

This could be a fixed amount per kilo or a sliding scale related to the beach price commencing from \$40 to an upper limit of \$60. This means at \$40-49.99/kg a contribution of 50c/kg, at \$50-59.99/kg the contribution could be 75c/kg, and above \$60/kg the contribution could be \$1.00/kg contribution.

WRLC Future Funding Model - example				
TACC	6,000,000kg			
Beach Price	\$/kg	<50	50-60	>60
Price achieved	%	15	75	10
Contribution	c/kg	50	75	100
Total	\$4,425,000	\$450,000	\$3,375,000	\$600,000
Av contribution	c/kg	0.7375		

Recommendation 11

WRLC to look at an alternate industry funding model by creating a short term (three years) collection from harvesters, to create a long term and sustainable reserve for the industry’s future.

RECOMMENDATIONS

1. Recommendation 1
The WRLC invests in the MSC Re-certification for 2017-21.
2. Recommendation 2
WRLC to make its members aware of the potential discount on lending margins applied by some financial institutions due to MSC certification.
WRLC, WAFIC and the Department of Fisheries to provide seminars to financial institutions on the investment benefits of a MSC certified fishery which will build on the WRLF and include other WA fisheries.
3. Recommendation 3
WAFIC and WRLC negotiates with MSC to include a communications strategy in the renewal of the MSC Re-certification for 2017-21, and for other Western Fisheries in the MSC program.
Engagement with Harvesters and Processors is paramount.
4. Recommendation 4
In renewing a contract to re-certify, WRLC undertakes an internal consultation to determine gaps in the Performance Indicators the fishery has to meet and seek to integrate where appropriate.
5. Recommendation 5
WAFIC invests in continuity of personal representation at the MSC Stakeholder Council, and membership of the Association of Sustainable Fisheries (ASF).
6. Recommendation 6
WRLC, Department of Fisheries, MSC, and Department of Commerce and WRLF Processors work collaboratively to optimise a long term market in China and monitor the return for MSC brand management, and potential development of an 'Australian Lobster' brand to differentiate a premium offer.
7. Recommendation 7
WAFIC and the WRLC work with Department of Fisheries to invest and optimise the research and development investment in all parts of the industry.
Fisheries remain as lead coordinator of the MSC Re-certification and annual Audit process on behalf of the WRLC.
8. Recommendation 8
WRLC to undertake an internal discussion on animal welfare to understand the issues and implications.
Develop and implement protocols to manage the issues. This may or may not be in conjunction with MSC Certification.
9. Recommendation 9
In undertaking Re-certification, WRLC set some clear agreements with MSC regarding the marketing program to bring MSC to the forefront. Develop joint marketing and communications strategies.
Develop performance measures and reporting networks that promote WRLF's social licence to operate.
10. Recommendation 10
WRLC to develop a month long Western Rock Lobster Festival with affordable product across WA to create awareness and domestic support and recognition for the industry.
11. Recommendation 11
WRLC to look at alternate industry funding by creating a short term (three years) collection from harvesters, to create a long term and sustainable reserve for the industry's future.

SUMMARY OF BENEFITS FROM MSC CERTIFICATION

Across 40 interviews the WRL industry convincingly agreed that they should renew the MSC certification in 2017. This view was based on the community acceptability of MSC, the third party certification status, the need to stay with MSC, market access and that it provides economic confidence and an insurance for the industry. These key benefits are outlined below and are supported by direct quotes from industry.

1. Market benefits including market penetration and access:

- ✓ An insurance or 'future proofing' for the industry: should there be a glitch in the lucrative Chinese market, MSC certification provides a sound back-up as most other markets recognise and value certification as a 'ticket to the game'.
- ✓ MSC will become more important in the longer term as the Chinese population becomes more affluent and westernised and seeks more environmentally certified credentials on products it consumes.
 - *It provides certification that the industry is sustainable and helps how I market the product to my customers. MSC is a marketing tool.*
 - *Potential tool for the fishery to look at new markets for their product and secure supply in existing markets.*
 - *I am not a marketing expert but understand that markets are looking for independently reviewed supply and responsible stockists and MSC provides that opportunity with the growing trend of looking for authority that the product is from sustainable sources.*

2. Economic benefits:

- ✓ Industry certification provides economic confidence and puts the finance sector's mind at ease that industry are seen to be on the front foot to monitor the sustainability of their industry, thus reducing the risk of a supply failure. One bank identified that MSC Certification provided confidence to maintain appropriate lending margins over other fishing industries that are perceived to have greater risks. This translates to a direct industry financial benefit, for example a margin difference of 0.1% would deliver the WRL industry a net benefit of \$60,000pa.

- ✓ There are potential savings through equivalence work undertaken by the industry and Fisheries which will see benefits accrue to other fisheries by reduction of certification costs, reduced duplication of EPBC review and access to international research.
- ✓ MSC Certification in the WRLF has been a strong contributor for allowing access to the growing areas of marine parks off the WA coastline.
 - *MSC is of a reputational value and offers a proxy for environmental standards. It is a requirement for all Australia seafood exports to meet ESD standards and MSC is an easy path way to get through without going through the hoops.*
 - *MSC has given the fishery credit on issues with NGO's (e.g. impacts on sea lions and whales) and it has led to public credibility and social licence to operate. There is always a level of mistrust of commercial fishermen and government that they are out to pillage and plunder but MSC is an independent assessment that they are looking after a public amenity.*

3. Social benefits:

- ✓ Greater public confidence in the western rock lobster fishing industry, as fishermen in the WRLF are viewed as sustainable because of their MSC certification. The controls and balances set by Fisheries WA are aligned with MSC protocols, which also ensures the fishery is well managed.
- ✓ Manage sustainability and risk into the future through managing the quota and conducting further research to address industry concerns such as warming oceans and forecasting lobster population.
- ✓ Taking into consideration environmental and animal welfare issues, seals trapped in pots and whale entanglements can obviously attract the wrong publicity to the industry and we have seen how quickly an export market can collapse from bad footage. Having an independent body that is identifying and managing risks is highly valuable.
 - *It provides credibility and an understanding it is a sustainable industry. It shows the industry is doing the right thing by the planet.*
 - *It helps build community support and demonstrates sustainability credentials in the broader community.*
 - *MSC provides an industry and community return which is more difficult to measure compared to price return.*

4. Political benefits:

- ✓ Government confidence in the western rock lobster industry, as it is independently certified and provides a sustainability tick, MSC is accepted by third parties and therefore it shields the industry from political debate.
- ✓ Industry feedback identifies that MSC has helped improve sustainability measures and has 'raised the bar'. It gives the public and the government confidence that the fishery is being managed responsibly and protects it from attack from extreme environmental lobbyists.
- ✓ The industry has reaped rewards through advantages in the political arena and through maintaining access to fishing grounds subsequently reserved as marine reserves.
- *Government are clear on how the fishery is tracking and don't need MSC internally to show that the fishery is sustainable, but they do need it to demonstrate its credentials to the broader community and NGO's.*

5. Scientific benefits including RD&E Plan:

- ✓ Provides direction and priority for research in the fishery.
- ✓ An ability to identify and proactively manage issues in the fishery.
- ✓ The value of having a rigorous stock assessment and harvest strategy (e.g. the levels of breeding stock and fishing effort / exploitation), provides a check that the scientific research and advice is as accurate as possible, because it has been independently reviewed and is world's best practice.
- ✓ A much improved understanding of the impact of the fishery on the wider ecology, e.g. impact of pots on the seabed (including corals), impact on by-catch species (e.g. octopus, finfish) and endangered species (e.g. sea lions, turtles, whales).
- ✓ The Department of Fisheries believes that independent, third party MSC certification of local fisheries will build on their strong record in fisheries management and provide a range of benefits to the Western Australian community and the seafood industry that supplies and sells local seafood.
- ✓ Improved management and consultation arrangements with all stakeholders during the development and implementation of management arrangements means better relationships with partners such as the Department of Fisheries, the recreational fishing sector and conservationists.

- ✓ A more environmentally responsible fishing industry.
- *MSC makes the government do the research which is good as they need to show they are managing the fishery properly.*
- *I was amazed the number of people in Fisheries and what they need to do to show MSC as part of the assessment. All these things I'd never thought about, from seagrass research and impacts etc. it means we are getting a lot of research work put into the industry. Most don't know it is happening.*
- *It helps to give verification on research and management of the fishery which provides justification for the industry to fish. It was valuable when the industry faced difficult times in 2009 and sections of the greens movement would like to have to shut down the industry but MSC endorsed the industry's right to fish.*
- *MSC certification makes it easier to get funding to do research within the fishery.*
- *The fishery has international recognition as it was the first fishery to be certified and is a shining example of a fishery that got it right: it is well recognised and well respected and this gives the fishery access to high level scientists.*

6. Management system benefits:

- ✓ Improved governance of the industry.
- ✓ Delivered improved practices through the rigorous review of each stage of production and harvest.
- ✓ Assurance to a wide range of stakeholders and other fisheries resource users that WA's commercial fisheries are sustainably managed to international standards.
- ✓ Better understanding of the relationships between rock lobsters and their inter-dependencies for shelter and food provides insight into the carrying capacity of a particular reef system. This can lead to management arrangements that keep lobster numbers in abundance so that fishers' catch rates and profit margins are maintained at very good levels.
- ✓ By showing that the fishery has a low impact on the ecology generally and that it is prepared to take measures to protect vulnerable species (e.g. sea lions, whales, turtles) and areas (e.g. coral), industry has demonstrated to the community that it is acting responsibly and has a strong argument that it can operate sustainably when it comes to maintaining access to Marine Parks and reserves.
- *MSC stops NGO's from attacking the industry to shut it down, it is a good back stop but how do you put a value on that?*
- *If stocks collapse, there is no knee jerk reaction because the fishery has MSC backing which takes the pressure off because it is being tracked independently.*

7. Supply Chain Assurance (for health and traceability):

- ✓ MSC plays a valuable role in environmental stewardship as it gives the rock lobster industry credibility in terms of environmental management and community confidence in its sustainability.
- ✓ Greater confidence among fish buyers that the seafood they are purchasing is sustainably fished.
- ✓ Providing a basis to develop stronger partnerships with regional tourism.
- ✓ Increasingly the major supermarkets and overseas retailers are requiring an assurance system. At the moment it is not a front of mind issue as the market is very strong in China and the sense of need for compliance is not high, however if the world continues to demand a level of compliance then it's essential to demonstrate the tick of approval: MSC provides this.



✓ The MSC chain of custody program provides assurance and integrity through the supply chain that the customer is getting what they are paying for. This is very important particularly given the various substitutions that have occurred in China on milk and other products. The MSC certification provides that traceability and assurance, which will be a big advantage once the ChAFTA is bedded down and trade is normalised.

- ✓ In 2012 the WA Fishing Industry Council contracted ACR Research to conduct a survey of a thousand consumers in Perth to look at the importance of WA Commercial Fisheries being independently verified as sustainable and the impact on support for local fisheries: 68% of respondents say that they would be more likely to support the local fishing industry if it were verified as sustainable by an international body such as the Marine Stewardship Council.
- *MSC has value in the social licence to operate and demonstrates the fishery is gold standard and sustainable in the eyes of the wider community.*
- *MSC has had some bearing on resource access i.e. Marine Parks and Abrohos Islands.*
- *It provides a social licence in terms of the WA environment which is very important and shows the fishery is sustainable and they know the community knows that.*

MSC REPORT CARD	Benefit	Trend	Comments
Government confidence	A	➡	Invest in new fisheries
Credibility through a third party	A	↻	Global independence
Environmental responsibility	A	➡	Marine parks
R&D direction and planning	A	➡	2014 R&D plan
Improved management practices	A	➡	Harvest plan
Social licence to operate	A	↻	Gaining ground
Supply Chain Assurance	B	↻	Greater importance
Future proof the industry	B	↻	Underpins alternate markets
Improved industry governance	B	➡	Collegiate industry
Sustainable industry	B	↻	MEY/TACC/quotas
Animal welfare	B	↻	Seals/whales
Economics - the ChAFTA	C	↻	Momentum gaining
Supermarket compliance	C	⬇	Not relevant - yet
Marketing the message	C	⬇	Very poor
Interaction with industry	C	➡	Needs work
Reward for investment - consumer	C	⬇	Not delivered
Price premiums	D	➡	Zero

Note: Arrows indicate an improving, holding or declining position.

MSC BENEFIT AND RETURN TO INDUSTRY

The global community is exerting more and more influence on the production of safe, environmentally friendly, sustainable and ethically managed food, which is demonstrated in consumer's buying habits and reflected in the purchasing policies of retailers.

Yale and Columbia Universities have prepared an Environmental Sustainability Index since 2000 which shows environmental concerns are linked to income: as incomes increase concern grows. As consumers get richer there is more demand for luxury goods and greater concern for the environment. Concern for health and quality of life grows with age and wealth.

In contrasting research, WAFIC showed neither industry nor government are viewed as credible sources for independent evaluations of sustainability: an independent third party is an imperative link in the sustainability equation.

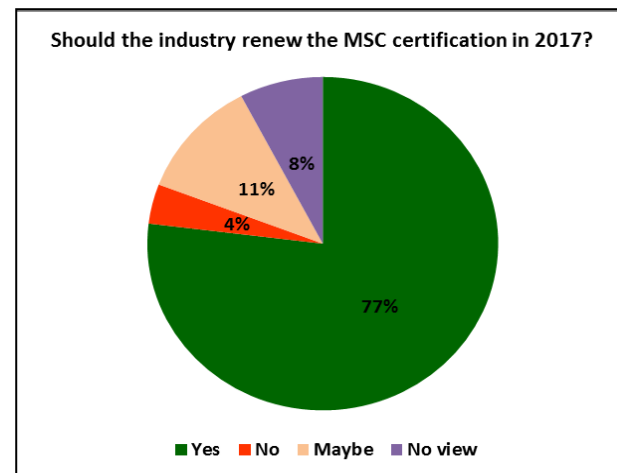
MSC Re-certification

MSC certification provides independent third party accreditation for addressing the demand by the community for a high standard of environmental management. MSC is recognised globally as the gold standard.

The wider industry has a reasonable understanding of the basics of MSC certification across the Western Rock Lobster fishery (WRLF), that it was the first fishery to receive MSC certification in the world, and that MSC is an independent or third party assessment of sustainability.

Despite some concerns about MSC, industry is overwhelmingly supportive of moves by the fishery to re-certify for a further five years in 2017.

This is based on their view that MSC provides the industry with public and government confidence, credibility through third party certification of sustainability, market access and it future-proofs the industry.



Global Standards

Currently MSC certification is viewed as the appropriate standard to measure the industry as there are no other third party certified programs available that compare. However, there is the belief that industry always needs to keep on the lookout for other systems that are robust in order to keep MSC on their toes and to ensure that it has the best certification offering.

Comparisons of MSC with the current alternate certifications clearly demonstrate a superior offering for a more whole of industry approach.

With limited certification options available and concern that MSC is not seen to provide financial benefits, some fishermen are keen to create a WA sustainability brand that is more applicable to WA standards but still has international credibility. While there is work underway to investigate the options, the cost to achieve independence of the global standard will provide a barrier. It will remain a very hard sell for the industry to make its own rules.

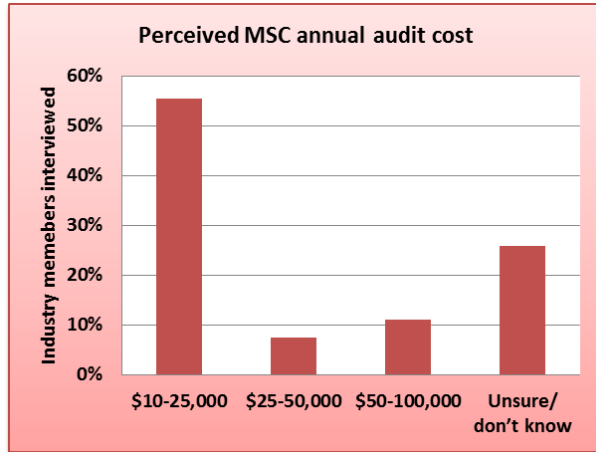
A caution to the long term use of MSC is despite being the first client for MSC, the WRLF has borne the brunt or additional cost for the product development, and the industry must be mindful that the MSC bar is not continuously raised for the sake of process rather than the best in governance. There is an expectation that under current guidelines the WRLF should have little upgrade to its re-certification in 2017 and thereby should keep costs at current levels.

The WRLF could investigate with industry those issues which MSC does not cover or concern them, and identify with the organisation just how to manage these points of concern. As the initial certified fishery, it would be expected that some credibility would be attached to such opinions.

The WA Fishing Industry Council (WAFIC) has had a presence on the international MSC Stakeholder Council and the Association of Sustainable Fisheries (ASF). Given the influence of these institutions on MSC, it remains an imperative that presence and representation at the annual meeting is maintained, not only for the WRLF activities but also the additional Western Australian fisheries undergoing Certification.

Cost of Certification

The costs associated with maintaining MSC certification are generally understood by the fishermen and management within the industry, but less so by those a little more removed from the industry.



The actual cost of the current certification period 2012-2016 to the WRLF is US\$67,000 for certification and 4 years of annual audit of US\$10,200 for a total of US\$107,800. At an average US\$:A\$ of .80 cents this equals A\$135,000.

This equates to \$27,000 per annum or \$4.50/t of TACC for 6000 tonnes.

A hidden but absorbed cost by Fisheries is the expense

of officers to oversee and manage the certification process which is estimated at an additional \$40,000. The amount of time spent on MSC business has reduced significantly since the recertification in 2012 and is likely to continue to decline because the systems to support the process are now well developed and understood. Fisheries has used these systems as templates for the other WA fisheries considering MSC certification.

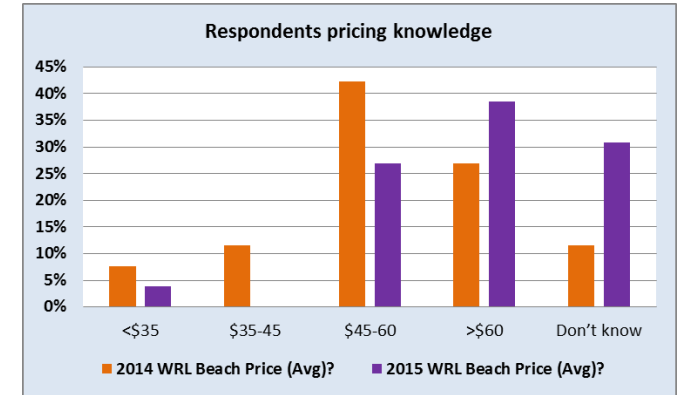
Future funding of accreditation/certification could be covered by the beneficiaries who are reaping the rewards which is fishermen / harvesters first and foremost, through an industry levy scaled on the number of pots, or per kilogram caught, and linked to the return: i.e. volume and value.

Government will also carry a share of the costs through the input of Fisheries, as they also benefit in that MSC enhances the reputation of the management of Western Australian fisheries.

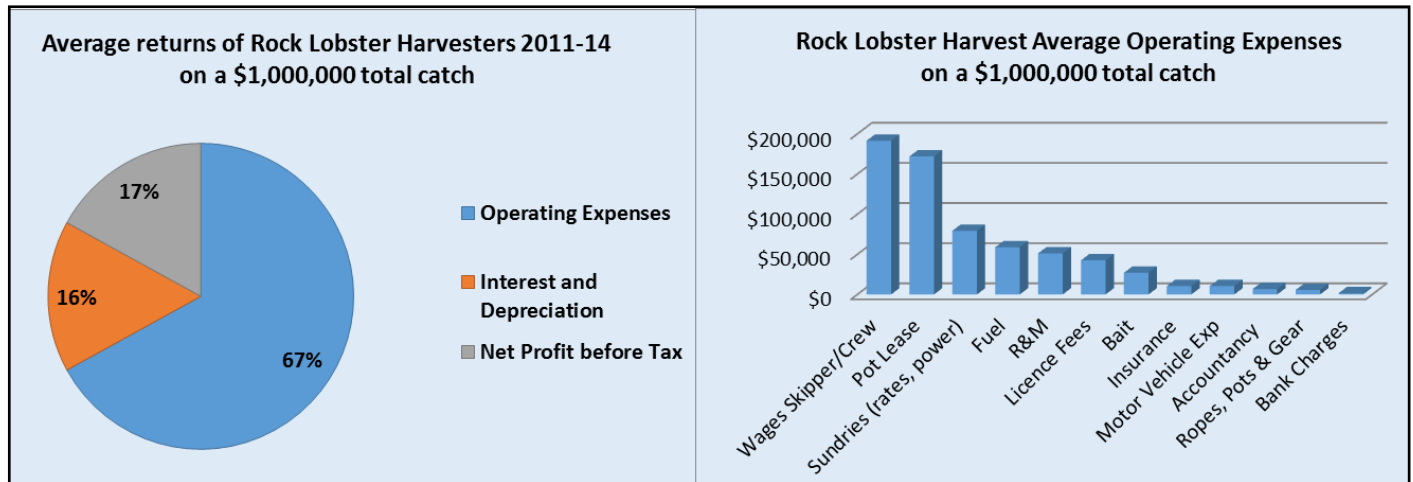
Cost of harvesting operations

To put the industry funding options into perspective it is important to understand the income and expenses of lobster harvesting in WA.

While the price received for WRL has changed markedly in the past four years, it was interesting to note the variance of price knowledge around the industry. As the graph shows there is a wide range in perceptions of pricing. The harvesters and processors were absolutely accurate, but the remainder of the industry has an unclear picture. Given there are many decisions made based on the expectation of value, it is incumbent on the whole industry to keep itself up to speed on key data.



An analysis of five sample businesses shown in the graphs below indicates financially healthy businesses with a spread of expenses, with licence fees representing a little under 5% of total costs. The average returns for a \$1m catch would have increased significantly with the current season's prices.



Source: Bankwest Average Profit and Loss over 3 years across 5 businesses – a variable pot lease cost will have significant impact.

Returns to industry

The starting point to putting a value on MSC is a cost benefit analysis which will assist industry to understand the benefits of the scheme and if it is worth the cost.

Market impacts

In canvassing the views of over 40 industry participants, it is clear the perceived value return for MSC is not demonstrated in either improved market access or price premiums (see table opposite).

There is an opinion that MSC has not added value to the industry in terms of increased price or new markets. In the current market MSC adds no dollar return to any component of the value, and the current lobster premium comes from the unique *live* market offering. ***“In China we are trading on scarcity – they would pay more for the last lobster, not less.”***

Although MSC does not currently have a bearing on the market place in China, according to the respondents it will become more important in the longer term as the Chinese population becomes more affluent and westernised and seeks more environmentally certified credentials on the products it consumes.

The recent China Free Trade Agreement (FTA) is predicted to have a positive impact on the WRL industry in that it will open up the market and clear the pathways for a freer trade. Currently the product is marketed through alternate routes and fishermen have struggled to fulfill orders because of air freight limitations.

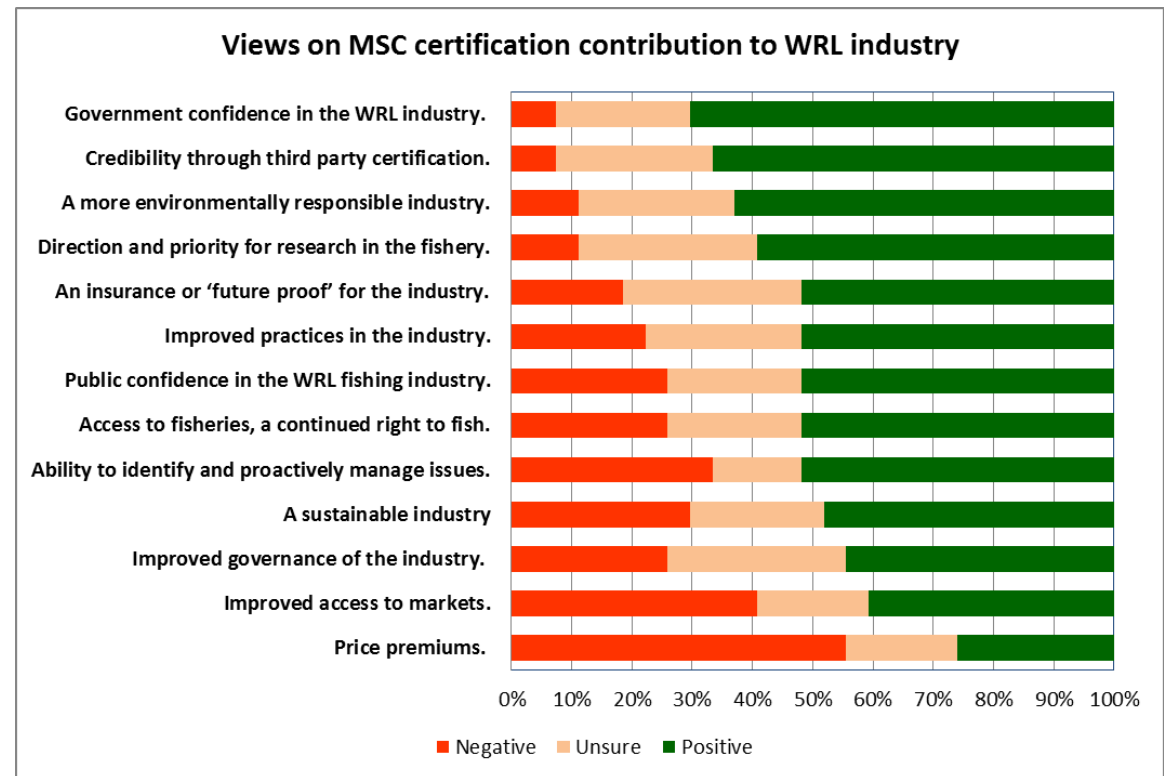
There is a belief that the FTA will enable industry to increase their allowable air freight and reduce the time it takes to get the product to market. In terms of the WRL industry, the FTA is seen as likely to result in more administrative work but not an increase in prices.

FTA is seen as a longer term risk reduction and investment is well underway with on ground sales and logistics partners and holding facilities to ensure better control of the value chain that will enable branding and marketing to grow the business. The return is seen as at least three years away for FTA to have an impact.

Other markets (countries) which purchased Western Rock Lobster pre-2014 when there was a \$30/kg beach price are now not able to access product as China is paying more than double and taking just about all the stock. China is high risk and the FTA highlights that with a majority of lobsters going through one door, but there is little alternative at the moment.

China in reality behaves like it is multiple countries, with each province having different preferences. ***“There are a lot of Australian train wrecks that have attempted to tackle the Chinese market.”***

Should there be a glitch in this lucrative market, then the MSC certification will provide a sound back-up as most other markets recognise and value certification as a ‘ticket to the game’.



Finance savings

Certification puts the finance sector's mind at ease in that industry are seen to be on the front foot to monitor the sustainability of their industry, thus reducing the risk of a supply failure.

One bank specifically identified that the MSC Certification provided them confidence to maintain appropriate lending margins over licence units, and that other fishing industries that are perceived to have greater risks have much higher lending margins.

This provides evidence of the less visible financial benefits of MSC certification. If the industry is capitalised to around \$3 billion, then a 20% borrowing inside the industry at a margin difference of 0.1% would deliver the industry a net benefit of \$60,000pa.

Insurance

Nearly two thirds of industry consulted cited MSC as providing an insurance policy and a capacity to future-proof the industry. This aspect was mentioned and discussed by practically every person interviewed and described as an extremely cheap environmental and access insurance, offering security against resource access issues, or back-up should the Chinese market falter.

There were comparisons made with boat or house insurance and the longer you go without tragedy, the more you question the premium - until it happens.

Some believe the industry has already reaped the rewards through the advantages in the political arena or through allowing access to marine parks.

A \$60,000pa whole of industry insurance premium against a \$350m return cannot be considered expensive. The question remains if it the right insurance policy?

Polystyrene boxes filled with live rock lobsters are driven onto the tarmac to be loaded into the cargo hold of a Cathay Pacific aircraft bound for Hong Kong



Confidence

MSC is recognised as a high profile brand so industry is accepting that certification will be expensive and it shouldn't move away from it due to the cost, as political and community gains outweigh the cost.

The industry believes that Government won't allow industry to carry on without some sort of certification and therefore the long term benefits will far outweigh the short term costs.

MSC plays a valuable role in environmental stewardship as it gives the rock lobster industry credibility in terms of environmental management and community confidence in its sustainability.

Industry feedback identifies the western rock lobster industry as sustainable and MSC has helped improve sustainability measures and 'raise the bar'. It gives the public and the government confidence that the fishery is being managed responsibly and protects it from attack from environmental lobbyists.

"Sustainability is a given if the fishery is still in business they are sustainably managed. The challenge is for the product to be traceable and industry to be aware of food safety and biosecurity which requires a different set of standards. MSC is too focused on the catching sector."

Taking into consideration environmental and animal welfare issues, seals trapped in pots and whale entanglements can obviously attract the wrong publicity to the industry and we have seen how quickly an export market can collapse from bad TV footage. Having an independent body that is identifying and managing risks is highly valuable.

As it is independently certified and provides a sustainability tick, MSC is accepted by third parties and therefore it shields the industry from political debate.

"MSC stops NGO's from attacking the industry to shut it down, it is a good back stop but how do you put a value on that?"

Improved Management

The industry recognises the MSC process has delivered improved practices through the rigorous review of each stage of production and harvest.

Many of the harvesters and scientists interviewed highlighted the value of having a rigorous stock assessment and harvest strategy (e.g. the levels of breeding stock and fishing effort / exploitation). This process provides a check that the scientific research and advice is as accurate as possible, because it has been independently reviewed and is world's best practice, and should industry have concerns regarding any aspect of the science or the assessments it can bring it to the attention of the MSC's auditors.

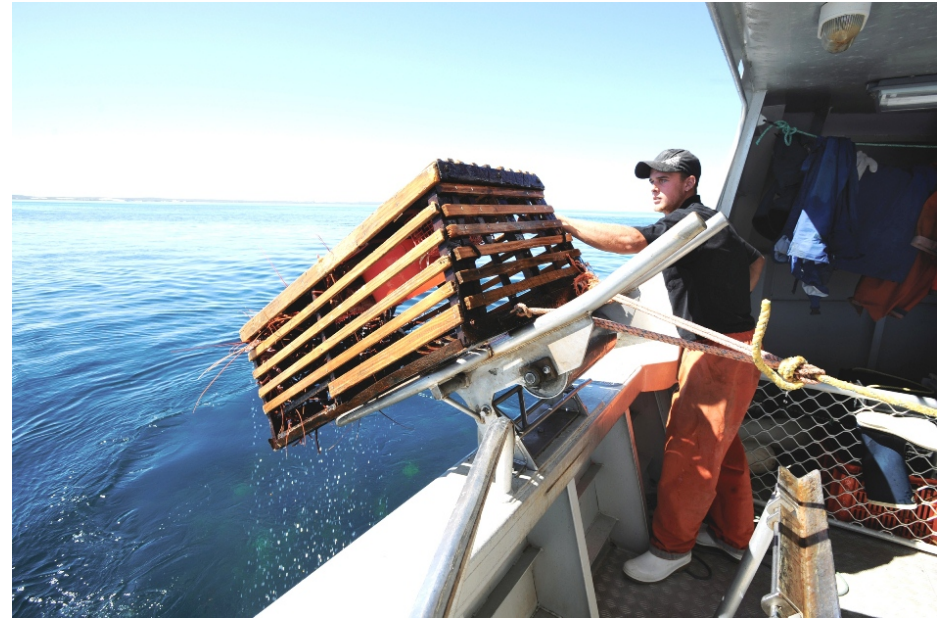
It should be noted that the 2008 decline in puerulus stock resulting in a near industry wipe-out was not as effectively identified as the system would expect, however industry now recognises the need to incorporate the science, monitoring and harvesting capacity inside the MSC process for whole of industry planning.

The WRLF has a much improved understanding of the impact of the fishery on the wider ecology, e.g. the impact of pots on the seabed (including corals), any impact on by-catch species (e.g. octopus, finfish) and endangered species (e.g. sea lions, turtles, whales).

An understanding of the relationships between rock lobsters and their inter-dependencies for shelter and food provides insight into the carrying capacity of a particular reef system. This can lead to management arrangements that keep lobster numbers in abundance so that fishers' catch rates and profit margins are maintained at very good levels.

“There is a benefit in saying the resource will be here for the next generation and the one after because of this work that we do as fisheries research, fisheries management and third party oversight. I like to see the industry having a future.”

By showing that the fishery has a low impact on the ecology generally and that it is prepared to take measures to protect vulnerable species (e.g. sea lions, whales, turtles) and areas (e.g. coral), industry has demonstrated to the community that it is acting responsibly and has a strong argument that it can operate sustainably when it comes to access to Marine Parks and reserves.



Improved management and consultation arrangements with all stakeholders during the development and implementation of management arrangements means better relationships with partners such as the Department of Fisheries, the recreational fishing sector and conservationists.

Third Party Certification

Across the industry 70% of interviewees indicated a positive view that third party independent certification provided a high degree of confidence in industry monitoring and management.

While there were some misconceptions about the MSC structure, it is clear that MSC is an independent body established to oversee the accreditation process (set the rules) and is funded by charities and donations, and revenue is generated from supply chain royalties.

The work of certification is conducted by independent organisations who are accredited by MSC as authoritative organisations capable of undertaking certification. So the cost of certification is not contributed to MSC but to the independently selected certification body who for this period is SCS.

Government confidence

The consultation with industry indicated a clear understanding that the WA government was a very strong supporter of the fisheries in WA being certified to MSC. In the early days of the certification, government funding and Fisheries support was enthusiastic as the State took a role in the first certification with MSC and proudly stands on this innovative leadership.

Based on its support of MSC through the Western Rock Lobster Industry, the WA Government is providing funding of \$14.5m over four years to other WA fisheries who wish to participate in the MSC program.

Extract from *Hansard* 22 March 2012

COMMERCIAL FISHERIES — THIRD PARTY CERTIFICATION PROGRAM

HON NORMAN MOORE (Mining and Pastoral — Minister for Fisheries)

This government fully understands how important third party certification has been to our western rock lobster fishery. This was the first fishery in the world to receive such accreditation from the Marine Stewardship Council in 2000. Only very recently the western rock lobster fishery became the first to receive a third consecutive five-year accreditation. I am confident that the process of independent evaluation of the state's commercial fisheries will confirm that they rate among the world's best managed and are worthy of the tick of approval that certification bodies such as MSC and Global Trust can provide. It is important to note that major Australian retailers such as Coles and Woolworths have both recently announced that third party certification will be required for all wild-caught and aquaculture-produced fish products that they sell. We need to embrace this opportunity to secure the future of our commercial fisheries. European and North American fisheries are already well down this path and we must ensure that the state continually reviews how WA's fisheries are managed and critiqued.

I am pleased to say that the state's peak body representing commercial fishing, the Western Australian Fishing Industry Council, fully supports this project. I am confident that the outcome of this process will prove what we have known all along: Western Australian fisheries are indeed sustainable.

If the WRL industry was to opt out when other fisheries are opting in, the public perception would be that the industry is no longer sustainable rather than they had made a choice not to pursue the third party certification.

Politically if MSC certification wasn't to continue it would open the industry up to criticism around their fishing operations, and a major environmental issue or a change in government could impact on the industry. On that basis industry agrees that there is a risk associated with not having MSC certification.

The Department of Fisheries believes that independent, third party MSC certification of local fisheries will build on their strong record in fisheries management and provide a range of benefits to the Western Australian community and the seafood industry that supplies and sells local seafood.

The Department of Fisheries sees the key benefits as:

- Enhanced public confidence in the sustainability of WA's fisheries;
- Greater confidence among fish buyers that the seafood they are purchasing is sustainably fished;
- Assurance to a wide range of stakeholders and other fisheries resource users that WA's commercial fisheries are sustainably managed to international standards;
- Opening up of new markets;
- Securing access to markets;
- Encouragement of business and market innovation, and regional investment;
- Support for regional communities; and
- Providing a basis to develop stronger partnerships with regional tourism.

"MSC has given the fishery credit on issues with NGO's (i.e. sea lions, whales) and it has led to public credibility and social licence to operate. There is always a level of mistrust of commercial fishermen and government that they are out to pillage and plunder but MSC is an independent assessment that is looking after a public amenity."

Supermarket compliance

Supermarket ups the ante on animal welfare

February 2015

A German supermarket chain has introduced a wide-ranging supply-chain policy on animal welfare. In early 2015, Aldi Süd announced a new purchasing policy tied to animal welfare.

In its new policy, Aldi Süd writes: *As a responsible company, it is important to us to bring together ecology, the social and economic developments while preserving the natural sources of life.*

Labels on meat and fish products are expected to be clear about country of origin, as well as indicating the region where the animal was raised.

The policy extends to non-food items, such as textiles (no wool products involving mulesing are allowed) cosmetics and cleaning products. And it also applies to processed food items. So pasta or noodles can contain only free-range, barn-laid or organic eggs, for instance.

Seafood products caught in ways that avoid by-catch or protected animals are preferred. For farmed fish, Aldi Süd expects humane living conditions and reduced use of chemicals and antibiotics, if any are used at all.

In addition, the policy encourages suppliers to engage more broadly and proactively with animal welfare. For example, it suggests suppliers become engaged in the development of animal welfare standards, contribute to the development of non-animal research methods and avoid animal experimentation.

Major Australian supermarket chains all have policies in regard to seafood labelling or traceability, or both. And they all express a commitment to sustainable fishing.

For many consumers, animal welfare and environmental sustainability are important ethical issues.

Increasingly the major supermarkets and overseas retailers are requiring an assurance system. At the moment it is not a front of mind issue for the WRLF as the market is very strong in China and the sense of need for compliance is not high, however as the article **Supermarket ups the ante on animal welfare** demonstrates, if the world continues to demand a level of compliance then it is essential to demonstrate the 'tick' of approval. MSC provides this to the industry.

The impact of not continuing MSC certification first and foremost would be the public scrutiny of the industry as to why it is no longer certified, which could damage the industry's reputation.

A further impact could be the ability to access markets and the risk that environmental issues will be neglected or ignored which could result in a loss of confidence in the industry which will undermine the value of the product.

Social licence to operate

Fishermen embrace MSC as it provides them with the social licence to operate and access Marine Parks. Fishermen within the Western Rock Lobster fishery are viewed as sustainable because of their MSC certification. The controls and balances that are set by Fisheries WA are aligned with MSC protocols, which also ensures the fishery is well managed.

The WRL industry can best manage sustainability and risk into the future through maintaining MSC certification, managing the quota accordingly and through conducting further research to address industry concerns such as warming oceans and forecasting lobster populations.

Victorian fishermen fear reduced crayfish quotas will devastate the industry

Vic Country Hour Brett Worthington 23 Mar 2015,

South-west Victorian fishermen say legislation governing their industry has them fishing with "two hands tied behind their back"

Apollo Bay Fishermen's Co-op's Nick Polgeest, a 40-year veteran of the industry, said marine parks, combined with falling crayfish quotas, risked devastating the industry.

"Australia has got 40 per cent of the world marine parks. Our fishermen, they're trying to fish with almost two hands tied behind their back, trying to harvest fish for our population, he said.

"What we need are some sensible political answers [so] we don't become just a country of marine parks.

"There are lots of areas where we can expand and if we're allowed to do that we can harvest more fish and supply clean, green product for the Australian consumer."

The Victorian Government lists crayfish as the state's second most valuable commercial fishing industry behind abalone.

Mr Polgeest said crayfish quotas had dropped from 260 tonnes to 230 tonnes per year in the last 12 months.

He said there was speculation authorities would reduce the quota to 165 tonnes next season.

"It's going to send people broke," Mr Polgeest said.

"What this industry badly needs is security. Security of tenure in the ocean and security of income."

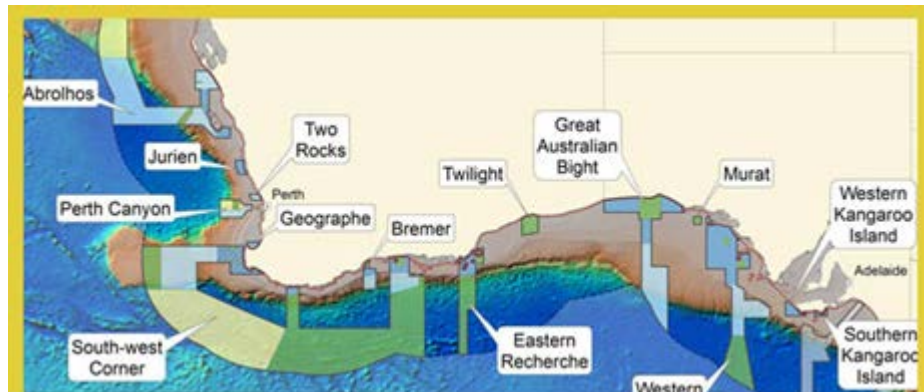
Mr Polgeest's comments come during a bumper season for crayfish.

The story taken from the Victorian Country Hour demonstrates the value and attitudinal differences between a fishery which has and has not been certified.

The matters raised by the Victorian fisherman have little fact to support an argument; the notion of self-assessment by industry anecdote that fishing stocks are adequate, and uncertainty in government policy decision making alone clearly differentiate the fisheries in attitude and operational decision making. This difference highlights the capacity of certification to deliver a significant level of social licence.

While it is hard to put a precise cost on certification, the true cost would not be realised until the industry was faced with a damaging environmental issue such as significant whale entanglements which in turn could cost the industry millions.

South-west Commonwealth Marine Reserves Network



The rock lobster industry takes 30% of its product in the Abrolhos which is a sensitive marine area. Once you are locked out of a marine park it is virtually impossible to get back in. MSC Certification in the WRLF has been a strong contributor for maintaining access to the growing areas of marine parks off the WA coastline.

The cost to industry of not continuing MSC certification would be loss of community support and public image along with the loss of the fishermen's social licence to operate, resource access and a reduced quota which could result in the erosion of the viability of the fishery.

Consumer Support



In 2012 the WA Fishing Industry Council contracted ACR Research to conduct a survey of a thousand consumers in the Western suburbs of Perth to look at the importance of WA Commercial Fisheries being independently verified as sustainable and the impact on support for local fisheries.

Two thirds of respondents (67%) gave a high rating (9 or 10 out of 10) to the importance of WA commercial fisheries being independently verified as sustainable to conserve fish stocks for the future, and 50% gave this a rating of 10 out of 10.

More than two thirds of respondents (68%) say that they would be more likely to support the local fishing industry if it were verified as sustainable by an international body such as the Marine Stewardship Council.

Young people aged 18-29 years (87%) said they would be more likely to support the industry if it were independently verified as sustainable as did Greens voters (82%).

Animal Welfare

An issue which has been raised by the industry in discussion is animal welfare. As the letter from Brett McCallum below indicates it is not such a long path from live export and humane slaughter of cattle to rock lobsters.

This is an issue for the industry to address: examples of pushing the risk of animal welfare issues to one side can be found in poultry sheds, cattle yards, livestock carriers and on the Fremantle wharf. The Western Rock Lobster industry does not need to be made an example of at Perth airport.

What does this mean to rock lobster processors?

This animal welfare process has exposed me and the other industry representatives to a new group of impassioned, committed people in the community similar to the green lobby - many are one and the same. We are already receiving advice of questions in Federal Parliament from a Green MP about 'humane slaughter of crustaceans' (Google: Senator Lee Rhiannon).

This process has also opened our eyes to the extent of the animal welfare issue - one only has to review the live cattle/sheep debate being held on national TV nearly every week.

Legislation to be considered in Federal Parliament (under Private members Bill through independent Andrew Wilke) covers 'live exports'. It is not clear if this just relates to cattle/sheep. It may cover all live exports from Australia!

The live seafood trade, **and rock lobster especially**, is exposed to a similar opportunity for the animal welfare lobby as that they have applied to live cattle/sheep. Your product is easily identifiable, you export your product live, you hand it over to a 3rd party who then on-sells to other persons who carry out the slaughter process and serve the product to a customer - often dismembered with parts of the animal still moving. *This would be a classic piece of TV for ABC 4 Corners to run.*

Similarly your processing of live lobster when cooking or tailing may come under scrutiny. How do you minimise stress prior to death in both these cases?

It is my strong recommendation to you as a processing/exporting sector that you need to pre-empt any wider publication of potential animal welfare issues in lobster processing and exporting by establishing agreed practices, guidelines, documentation and education of importers.

Brett McCallum - Executive Officer - Pearl Producers Association

Marketing the message

"The MSC label helps promote the concept of sustainable seafood to the public and they then understand the way the fishery is managed and that it is managed sustainably. However the eco-label is not widely recognised by the Australian public and it needs to be promoted to get the message out to people."

While the WRL fishery has been MSC certified for 15 years, there is still a lack of public awareness of MSC in Australia which needs to be addressed.

Lack of public awareness of MSC is a major concern for industry and a targeted campaign will help raise its profile and increase the confidence associated with the MSC brand. It will need to focus on the broader community, the local market, fishermen and the local hospitality industry.

There are also some negative connotations identified by the industry interviewees which need to be understood including:

- A current weakness in the MSC is a reluctance to engage with the fisheries that have been certified.
- There is some concern that MSC has no value or decreasing value and represents a risk to the rock lobster industry in that it has no control over setting the standards which are not applicable to WA conditions.
- Some of the green groups don't believe MSC holds any value because it is used politically and they regard it as a negative in the development of marine reserves.
- There is a problem with brand recognition and public awareness of what MSC represents and fishermen are disappointed that it hasn't translated into increased market access and/or profits.
- MSC representatives are not directly communicating with the grass roots fishermen which can give rise to their criticisms and a poorer understanding of the overall program. However there is regular engagement with other parts of the industry such as management, conservationists and scientists.
- Industry believes it needs to be peer driven communication by the WRLC or WAFIC and that MSC, as a third party accreditor, should also be involved to raise awareness of its brand.



MSC on Facebook

“There is a need to sell the message better, industry can be as sustainable as they want but if the community doesn’t believe you it makes it hard. The fishery has a long way to go with PR.”

There was a strong sentiment that MSC lacks public awareness within Western Australia and therefore it is necessary to raise its public profile and increase the confidence associated with the MSC brand. The campaign should target the broader community, the local market, fishermen and the hospitality / food service industry.

The message should focus on what MSC means, the benefits, a cost benefit analysis, and data showing that the fishery is well managed and what this means. This will in turn benefit the fishery and increase its value and the understanding of environmental impacts.

The messages need to be clearly targeted in terms of the form of communication used to address each sector. Fishermen would appreciate more face to face contact and the community could be exposed to articles in a variety of publications with a focus on good news stories.

By re-certifying with MSC, the WRLF is linking its image to that of MSC and therefore needs to be involved in monitoring MSC’s performance as well as its own industry performance in meeting MSC criteria.

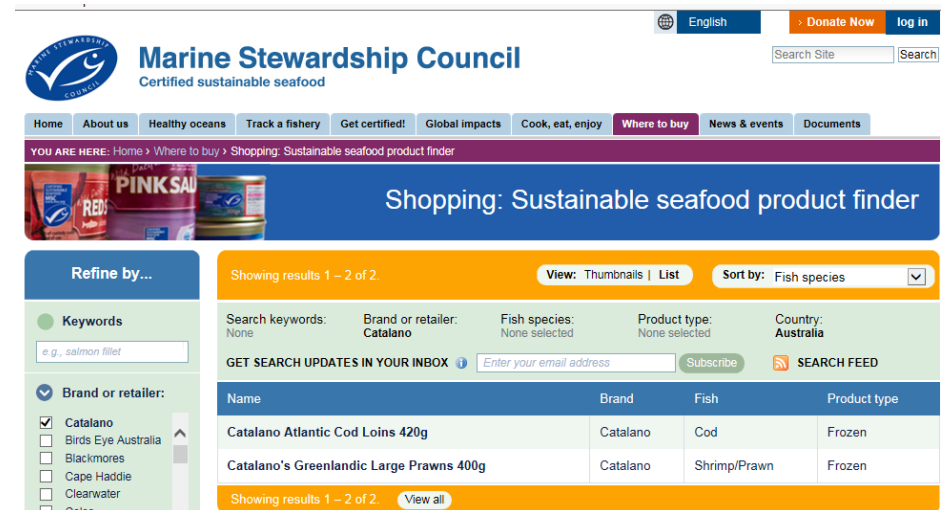
Balance reward for effort

While the Western rock lobster is in short supply in the WA local market and it is seen as a premium product, it is still important to educate the hospitality industry through a marketing campaign that will encourage them to utilise the resource and have a better understanding of MSC.

The Marine Stewardship Council has a stated primary market objective over the next five years to double the overall market share for MSC-certified seafood.

That will equate to market share of around 30-40 percent throughout advanced markets in Northern Europe, a quadrupling of current market share in the US and Canada, a growing MSC market presence in Australia/New Zealand, Japan and Southern Europe, and introducing the MSC concept in China and select markets in Asia.

While the industry is supportive of recertifying the Western Rock Lobster industry through MSC, there is recognition that some issues need to be addressed in the near future, to allow the scheme to get more traction within the Western Australian rock lobster fishery and community.



Other Fisheries are working to market their product:



NEW GAME PLAN

1. Brand our sustainable product.
2. Educate end users & general public.
3. Update NGO websites.
4. Empower chefs to tell our story.

The MSC website <http://www.msc.org/> is a comprehensive resource for the purpose of identifying and accrediting fisheries and providing a significant array of tools to meet the primary market, the challenge is how to reward participating fisheries with customer awareness and purchasing choice in favour of the certified product.

The WRLF exporters who have used the MSC logo and paid for the privilege have now ceased adding the tick to their packaging as they have seen no perceived benefit.

While the Chinese market is in a state of *buy all available product*, consumer preferences are changing and in time there will be a reward for suppliers of seafood under a quality banner, but the WA industry is not seeing the on ground work by MSC to demonstrate a change, even though there is an on-ground presence.

Certainly amongst the domestic population there is a general lack of awareness of the value of the MSC logo and the list of MSC branded products remains quite limited when compared to other parts of the globe, reinforcing the view that although the WRLF was the first certified, it appears to be by no means a 'preferred' customer.

Popular support

One of the clear gaps in the discussion on marketing and future development, aligned with the need to have a local population who understand and support the industry, is the very poor access to live Western Rock Lobsters in WA at an affordable price.

The community does not understand or accept the notion that lobsters are priced in excess of \$60/kg on the open market and even more despondently that the best quality product is destined for overseas – even at the premium.

This issue is a dilemma, for while it remains important for the industry to reap the returns from its investment, there is a backdrop of needing to invest in the domestic support for tourism, for generating pride in a successful State primary industry, and having a supportive populous should an environmental or animal health issue arise.

Most of all, the underlying notion is that the Western Rock Lobster Fishery is part of the State's resource and is not 'owned' by anyone.

MSC CERTIFICATION ASSESSMENT PROCESS

If the WRLC wants to retain its MSC certification an EOI/tender process will be entered into during 2015 to select a Certification body to undertake the 2017 recertification (the process commences in 2016) and the following four annual audits (March 2018 to March 2021). Below are the details from the 2010 call for Tenders:

The Western Rock Lobster Council (WRLC) is the Client for Marine Stewardship Council (MSC) certification of the Western Rock Lobster Fishery (WRLF) in Western Australia. The fishery became the world's first MSC certified fishery in March 2000, was recertified in December 2006 and is scheduled to be recertified for a further 5 years in November 2011.

Expressions of interest are sought from MSC accredited certifiers, or those in the process of gaining accreditation, to undertake the following:

- the annual surveillance in November 2010 (including some steps towards recertification),
- the November 2011 recertification (i.e. recertification for the third 5 year period), and
- the annual surveillances and recertification that are required between 2012 and 2016.

Please include in your expression of interest the following:

- a summary of your companies expertise and experience as an MSC (or equivalent) certifier,
- cost estimates for the:
 - 2010 annual audit,
 - 2011 five year recertification, and
 - annual audits during the third five year certification period Jan 2012 to Dec 2016,
- personnel that would be responsible for co-ordinating the MSC process (including your lead auditor) and the whether any of them are based in Australia.
- A list of fisheries experts you would nominate from to undertake the assessments of MSC Principles 1, 2 and 3,
- a list of the main advantages of having the MSC assessment undertaken by your organisation, including how you will handle communications with the Council.

The tendering process that has been established to select Certification bodies for the state-wide MSC project draws on an established pool of the most competitive and experienced Certification bodies. This process has been developed with input from the WA Department of Treasury and Finance and therefore complies with standard Government tendering procedures.

Below is the sample assessment process from 2011:

Cost	CERTIFYING BODY			
	A	B	C	D
4 th Audit Nov 10	\$9,850	\$8,270	\$7,600	\$12,700
Recertification Nov 11	\$82,050	\$86,100	\$54,500.	\$71,700
Four annual audit 2012-15	\$20,200pa	\$21,690pa	\$6,650pa	\$11,500pa
Total	\$80,800	\$86,760	25,400	46,000
Total cost for the next 6 yrs	\$172,700	\$181,130	\$87,500	\$130,400
Annual cost over 6 yrs	\$28,783	\$30,188	\$14,583	\$21,733
Audit team				
Lead assessor				
Principle 1				
Principle 2				
Principle 3				
Experience				
Difficult fisheries				
International				
Australia				
Rock lobster/crustaceans				
Time table / plan				
Budget				
Advantages				
Disadvantages				
Stakeholder comment				
Ranking of CBS	1 low and 4 high.			
• Cost	1	1	4	2
• Assessment team	4	4	4	4
• Experience	4	4	1.5	4
Total ranking score	9	9	9.5	10
• Stakeholder approval.	High	Medium	High	High
• Local coordinator	Yes	No	No	Yes
Recommendation	No	No	Rank 2	Rank 1

The second recertification was undertaken by Scientific Certification Systems (SCS) and commenced with informing stakeholders and the public that the fishery intended to undergo a full MSC Fisheries Certification issued on 1 May 2010.

The steps taken to undertake the re-certification were as follows:

- Determined Performance Indicators and Scoring Guideposts.
- Industry information on compliance with the performance indicators.
- Stakeholders submit their views on the fishery functions and performance against the MSC principles.
- Meetings with industry, managers, and stakeholders.
- The assessment team scored the fishery.
- The assessment team with the SCS lead assessor, Dr Daume, drafted the report in accordance with MSC required process.
- Release of Public Comment Draft Report (December 2011).
- Release of Final Report with certification decision (January 2012).

Assessment Summary – see the scoring table opposite

The fishery achieved a normalized score of 80 or above on each of the three MSC Principles independently. Although the evaluation team found the fishery in overall compliance, it also found the fishery's performance on 3 indicators to be below the established compliance mark. In these specific cases, the MSC requires that the Certification Body set 'Conditions for Continued Certification' that when met bring the level of compliance for the select indicator up to the 80-level score.

The team would like to acknowledge the substantial progress, development and verification of the stock assessment model and associated harvest strategy component. In addition, the development of a single report that is tailored to the MSC process and collates all the ecological information and the progress towards the EMS are all signs of progress.

Other specific signs are the policies that have been developed and implemented to introduce SLEDS into the Abrolhos Islands area and the State

Certification Recommendations and Performance Scores

Principle	Wt (L1)	Component	Wt (L2)	PI No.	Performance Indicator (PI)	Wt (L3)	Weight in Principle	Score	Principle Score			
One	1	Outcome	0.5	1.1.1	Stock status	0.5	0.25	90				
				1.1.2	Reference points	0.5	0.25	90				
				1.1.3	Stock rebuilding							
		Management	0.5	1.2.1	Harvest strategy	0.25	0.125	85				
				1.2.2	Harvest control rules & tools	0.25	0.125	75				
				1.2.3	Information & monitoring	0.25	0.125	75				
				1.2.4	Assessment of stock status	0.25	0.125	90				
Two	1	Retained species	0.2	2.1.1	Outcome	0.333	0.0667	80				
				2.1.2	Management	0.333	0.0667	90				
				2.1.3	Information	0.333	0.0667	80				
		Bycatch	0.2	2.2.1	Outcome	0.333	0.0667	100				
				2.2.2	Management	0.333	0.0667	80				
				2.2.3	Information	0.333	0.0667	80				
		ETP species	0.2	2.3.1	Outcome	0.333	0.0667	95				
				2.3.2	Management	0.333	0.0667	85				
				2.3.3	Information	0.333	0.0667	90				
		Habitats	0.2	2.4.1	Outcome	0.333	0.0667	80				
				2.4.2	Management	0.333	0.0667	80				
				2.4.3	Information	0.333	0.0667	70				
		Ecosystem	0.2	2.5.1	Outcome	0.333	0.0667	80				
				2.5.2	Management	0.333	0.0667	80				
				2.5.3	Information	0.333	0.0667	90				
		Three	1	Governance and policy	0.5	3.1.1	Legal & customary framework	0.25		0.125	100	
						3.1.2	Consultation, roles & responsibilities	0.25		0.125	90	
						3.1.3	Long term objectives	0.25		0.125	100	
						3.1.4	Incentives for sustainable fishing	0.25		0.125	100	
Fishery specific management system	0.5			3.2.1	Fishery specific objectives	0.2	0.1	90				
				3.2.2	Decision making processes	0.2	0.1	80				
				3.2.3	Compliance & enforcement	0.2	0.1	100				
				3.2.4	Research plan	0.2	0.1	90				
				3.2.5	Management performance evaluation	0.2	0.1	100				
Overall weighted Principle-level scores									Principle Score			
Principle 1 - Target species									85.6			
Principle 2 - Ecosystem									83.7			
Principle 3 - Management									94.8			

wide ban of bait bands on all fishing vessels operating in WA waters. Clearly there is more to do but the reformed EFAG have developed a framework to prioritise key research issues to be addressed. All these indicate that progress is being made and that there is a willingness and commitment by the client to address these issues.

COST OF MSC CERTIFICATION

Initial Certification Costs 2000 – 2005

In 1998 an industry led initiative resulted in WRLF becoming the first fishery in the world to be certified by the MSC in 2000. The WRLF was successfully re-certified in 2006 and for a further five years in March 2012, i.e. until March 2017. Many of the MSC certification conditions are also requirements for export approval under the Commonwealth Government's *Environment Protection & Biodiversity Conservation Act 1999 (EPBC Act)*.

A factor in obtaining accurate estimates of the cost of certification has been the difficulty in disentangling the costs associated with MSC certification (e.g. workshops, reviews, Department of Fisheries staff time, research projects and management implementation and monitoring), and those that would have been incurred by the fishery to meet the requirements of:



- World's best practice fisheries research and management, as per UN/FAO guidelines.
- The EPBC Act in order to obtain export approval, and
- The State Government conservation legislation, e.g. for threatened or endangered species.

Due to the above only the cost of the five yearly MSC recertification and the annual MSC surveillance audits are considered as the remainder of costs have been absorbed into annual Fisheries expenditure.

Financing under cost recovery arrangements

All MSC costs from pre-certification in 1999 through to the annual audit of November 2009, including the first re-certification in 2006, were financed from cost recovery. During this period there was no actual MSC item line in the WRLF cost recovery budget, however, industry agreed that all MSC certification costs would be financed from cost recovery.

The approach taken to estimate the cost of Marine Stewardship Council certification for the first 5-year period 2000 – 2005 has been to include only the direct costs associated with certification, i.e. costs based on the accounts submitted by the Certification Body, Scientific Certification Systems (SCS).

MSC Certification 2000-2005	
Pre-assessment costs (1999)	\$12,000
Initial certification costs (2000)	\$88,000
Total annual audit costs (2001-2004)	\$160,000
Final year audit (2005-2006) & recertification costs	\$116,000
Additional certification costs	\$53,000
Total	\$429,000
Average cost per year	\$85,800
Average catch per season	10,000,000 kg
Cost per kg per year	0.85c/kg

Note: Department of Fisheries costs of managing the MSC process are not included as they were met within the cost recovery budgets at that time.

Second Certification Costs 2006 to 2011

The cost of MSC certification during the second five-year period, 2006 to 2011, includes for the first time DoF's costs of managing and coordinating the process as they can now be more accurately identified within the cost recovery budget.

MSC Certification 2006-2011	
Recertification estimate (2006)	\$51,400
Risk assessment, reviews, workshops and meetings	\$84,000
Total annual audit costs (2007-2011)	\$48,000
Subtotal (not including DoF's management costs)	\$183,400
Fisheries costs of managing MSC process for 5 years	\$357,500
Total	\$540,900
Average cost per year	\$108,180
Average catch per season	8,000,000 kg
Cost per kg	1.35c/kg

Third Certification (Second re-certification) Costs 2006 to 2011

Since June 2010 when the new access fee arrangements for all WA fisheries were implemented, the WRLF’s MSC certification costs have been financed from Fisheries consolidated revenue.

Current MSC Certification 2012-2016	
Recertification (2011)	\$83,700
Total annual audit costs (2007-2011)	\$51,000
Subtotal (not including DoF’s management costs)	\$134,700
Fisheries costs of managing MSC process for 5 years	\$200,000
Total	\$334,700
Average cost per year	\$66,940
Average catch per season	7,500,000 kg
Cost per kg	0.89c/kg

Note: The costs were all quoted in US\$ - an average conversion value of .80 is used to convert to A\$.



The costs outlined include the cost of Fisheries management of the WRLF MSC process. It is currently estimated that the current part time coordinator spends ~ 50% of his 3.5 day per week dealing with issues directly associated with the WRLF’s MSC certification at an annual cost of ~ \$40,000 (not including Fisheries overheads).

The amount of time spent on MSC business has reduced significantly since the last recertification in 2012 and is likely to continue to decline because the systems to support the process are now well developed and understood. Fisheries has used them as ‘templates’ for the other WA fisheries considering MSC certification under the state-wide MSC project.

Fourth Certification (Third re-certification) Costs 2017-2021

Third five year re-certification (2017) and the four annual audits (March 2018 to March 2021):

Should the Industry decide to invest in the third re-certification and annual audits, which will commence in early 2016 and take about 12 months to complete, they are expected to be similar to the 2012 recertification and annual audit costs.

This is because the Fisheries processes (research, management / governance and compliance) that support the process are now clearly defined and routinely implemented. There may be some additional expense in the area of stakeholder consultation.

Anticipated MSC Certification 2017-2021	
Recertification (2016)	\$78,400
Total annual audit costs (2007-2011)	\$47,800
Subtotal (not including DoF’s management costs)	\$126,200
Fisheries costs of managing MSC process for 5 years	\$150,000
Total	\$276,200
Average cost per year	\$55,240
Average catch per season	6,000,000 kg
Cost per kg	0.9c/kg

Note: Depending on the Certification body chosen, it may be possible to have the next contract in Australian \$ to avoid fluctuations in exchange rates. The costs are quoted in US\$ - an average conversion value of .75 is used to convert to A\$.

The cost of maintaining MSC Certification 2012-2016: an average cost of \$55,000 per annum over a 6 million kilogram annual catch requires an investment of less than one cent/kg by the WRLF.

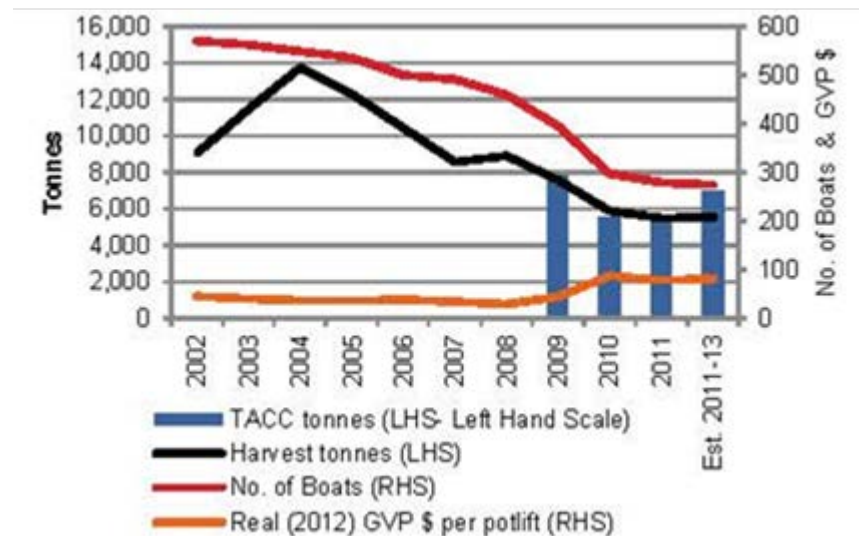
RAISING FUNDS TO PAY FOR FUTURE NEEDS

This report generally identifies the cost for MSC in two parts. The first is a direct cost of nearly \$30,000 per annum to the independent Certifying body and an indirect but real annual cost of around \$40,000 to Fisheries.

The notion of who should pay was well canvassed during the interviews and clearly the industry is of the opinion that the harvesters should pay for the future funding of certification within the Western Rock Lobster industry. MSC as an insurance policy should be paid as an industry not by individuals. Most of the respondents, including fishermen, were adamant that they are the beneficiaries and they are reaping the rewards.

Interestingly there were also comments that the government should also share in the costs as they are also a beneficiary in that MSC enhances the reputation of the management of WA fisheries along with the integrity of the fishery, and they also have a responsibility to ensure the viability of small coastal communities who rely on the rock lobster industry.

Trends in WRLF Harvest Volume, Boats and Pot-lift Productivity to 2013



Source: Western Rock Lobster Research, Development and Extension Plan 2014-23

This view is supported by the other benefits accruing to government and the interaction with Fisheries.

As indicated in the *Trends in WRLF Harvest Volume, Boats and Pot-lift Productivity to 2013* graph, the industry has stabilised the volume of catch (TACC) at about 6mkg, the efficiency in \$/pot lift has increased to world class levels and while the beach price is hovering around \$60/kg there is an opportunity to take some pre-emptive action as an industry to resolve the issue of funding for the future security of the industry.

Current Funding of the WRLC



The WRLC is the peak body representing the rock lobster industry's interests including 230 boats from Kalbarri to Esperance. It oversees a complex and important export industry and addresses a wide range of local, State and Federal issues. The organisation is in the process of transforming the Board and its rules of association to achieve an even greater commercial focus and is planning a number of other important changes in order to continue to run a professional administration.

The WRLC currently has no secure independent funding model to sustain its industry role or manage the fishery's RD&E Investment Plan.

WRLF licence holders currently contribute to funding streams to support fishery management, industry administration, advocacy, and to invest in RD&E (see the table on the next page).

The WRLC considers these cash streams are insufficient in size and inappropriate in form to enable it to discharge its charter on behalf of members and licence holders.

Current (2014/15) Funding Source and Distribution

Based on GVP ~\$350m	% of GVP	Approx \$/pa	Use of funds
WA Fisheries	5.000%	\$14,600,000	Fishery monitoring and assessment with RD&E focussed on stock and environmental issues
WAFIC	0.375%	\$1,047,000	Community investment to support fisheries industry
WAFIC/WRLC	0.125%	\$247,300	Returned to WRLC to run the organisation
RD&E	0.250%	\$730,000	Allocated to RD&E and leveraged via FRDC, SCRC
Total	5.750%	\$16.624,333	

Note: The contribution is based on a 3 year rolling average of GVP

As a MSC certified sustainable WA export industry with annual turnover in excess of \$290m and a conservative capital value of more than \$3b the WRLC is keen to explore ways to improve stability of funding for the industry.

In late 2014 a proposition was identified that additional funding specifically for the rock lobster industry could be raised via a further 15,000kg of quota added to the TACC, with financial benefit to be returned to the industry for marketing, research and industry development and enhanced financial and operational stability.

Ongoing discussions between WRLC, the Department of Fisheries and the Minister's Office have moved towards this goal, however there is also a mandatory five year review of the industry funding arrangements that the government has with WAFIC and the five peak fishing sector bodies, which includes the WRLC.

This may delay any implementation of the proposition which could generate up to \$1m per annum.

Reserve Fund

In 2008 the industry did have a reserve fund of some \$3.5m, however this was drawn down at the time of the puerulus crisis and no steps were taken to recover the fund.

"It was put away for a rainy day, and drawn down in just one day!"

Alternate Funding option

During industry interviews the topic of the perilous state of industry funding was raised on a regular basis and the additional contribution of even \$30,000 for the re-certification appeared to be a tipping point for the bank balance.

However a strong theme in the conversations was that there is a need and it is time to establish a self-generating fund for the longevity of the industry.

Should the WRLF through its range of bodies and statutory tools choose to build an industry fund over a short term (suggested 3 year) collection then a sliding scale of contribution could be implemented to raise a fund in the order of \$15m. An average of 85c/kg contribution from 6,000,000kg for 3 years would be a substantial game-changing initiative to consolidate the industry, achieve self-sufficiency and be in a position to be totally independent from external funding. This could be a fixed amount per kilo or a sliding scale related to the beach price ranging from \$40 to an upper limit of \$60. E.g. \$40-49.99/kg is 50c/kg, \$50-59.99/kg is 75c/kg, and above \$60/kg is \$1.00/kg contribution.

Underpinning this is the certain knowledge that market prices for soft commodities are as variable as the climate.

Banana Fund

A current example of this level of initiative was undertaken by the Carnarvon banana industry where funds of \$1 per 13kg carton were collected when the price exceeded the average \$34/carton (after Cyclone Larry prices averaged \$65/ctn).

The funds raised were specifically to maintain the fixed operating resources in the event a cyclone hit the Gascoyne. The collection ceased when an agreed total was achieved. In March 2015 Sweeter Banana growers were a little more comfortable knowing their key resources were safe while the industry re-builds following the devastation of Cyclone Olwyn (March 2015).

MSC COMPETITORS

Certification and eco-labelling are two types of market-based incentives that are increasingly being used to shift industry practices in commercial fisheries towards sustainability. There has also been growth in the use of public awareness campaigns intended to inform consumers about how to make sustainable choices when buying seafood.

Currently there are only two international schemes for certifying wild fisheries which include MSC and its direct competitor, Friend of the Sea. Within Australia there are a couple of other programs in competition with MSC and they are the Australian Southern Rock Lobster Clean Green Program and the Australian Seafood Standard.

Friend of the Sea

Friend of the Sea is a non-profit NGO with a mission to conserve the marine habitat. It was founded in Italy in 2006 by Dr Paolo Bray of the Dolphin Safe Project and operates an international program to certify and promote responsibly-sourced seafood both from wild caught fisheries and aquaculture.



Friend of the Sea (FOS) sets a standard for third party certification of both capture fishery and aquaculture products and it provides a label for final products. Fisheries and aquaculture products are assessed from all over the world, including a significant number from developing countries.

Friend of the Sea certification is based on criteria which follow the FAO Guidelines for the Ecolabelling of Fish and Fishery Products. It encourages fisheries to adopt more selective fishing methods, reduce ecosystem impact and manage fish stocks within Maximum Sustainable Yield.

Only stocks which are not over exploited can be certified. In aquaculture, assessments are made of energy efficiency, water quality and social accountability and the use of GMOs or growth hormones is prohibited. Products and their origins are audited by independent international certification bodies and Friend of the Sea deploys an international monitoring program to verify the Chain of Custody of approved suppliers of Friend of the Sea products.

<http://www.friendofthesea.org/>

MSC and Friend of the Sea comparison

		
What is covered		
Wild fisheries	✓	✓
Farmed fish	✓	✓
Issues addressed		
Environment/ Fisheries	✓	✓
Social welfare	✗	✓
Food Safety	✗	✗
Animal welfare	✗	✓
Features		
Does the scheme have a consumer logo?	✓	✓
Is traceability included?	✓	✓
Are processors also reviewed?	✓	✓
Which guideline does the standard comply with?		
FAO Code for Responsible Fisheries	✓	✗
FAO Aquaculture Certification Guidelines	✗	✗
FAO Ecolabelling Guidelines	✓	✓
Global Food Safety Initiative	✗	✗
Other	✓	✗
Which accreditation schemes and assessments are used?		
IAF (and member accreditation bodies)	✗	✓
ISEAL Alliance	✓	✗
ISO 65 Conformity Assessment Body (CAB)	✓	✓
Accreditation Services International	✓	✗

The Australian Southern Rock Lobster Clean Green Program

The Australian Southern Rock Lobster Clean Green Program is another accreditation system which is owned and maintained by Southern Rock Lobster (SRL) which is the national peak body owned by licence holders across South Australia, Tasmania and Victoria.

The Clean Green program is a world first rock lobster supply chain management strategy. It is a product certification program integrating pot-to-plate standards for environmental management, food safety and quality, work place safety and animal welfare.

The participants are audited by an independent third party Conformity Assessment Body, which is accredited against the ISO/IEC and Joint Accredited Standards Australia and New Zealand.

The program is underpinned by a suite of industry best practice standards developed by the industry members that address five key criteria:

- Workplace health and safety specific to the risks of rock lobster industry operations.
- Animal Welfare - this is important in itself and also important from an economic perspective since live and healthy rock lobsters achieve a premium price.
- Food Safety and Quality - ensuring a live, healthy product across the supply chain.
- Environmental Management - negating and managing any potential impacts of fishing operations on the marine environment, including managing any interactions with threatened, endangered and protected species.
- Sustainable Management - ensuring the wild rock lobster stocks are managed for long term sustainability including ongoing compliance with the Environment Protection and Biodiversity Conservation (EPBC) Act 1999.

Underpinning the success of the Clean Green product certification program is the third party auditing of each of the elements of the program listed above. The certification is unique in that a suite of standards are covered across the total rock lobster supply chain under the one integrated strategy.

The Australian Seafood Standard

The Australian Seafood Standard (the Standard) reflects the seafood industry's commitment to providing *seafood for human consumption* that is *produced* in accordance with internationally recognised standards and meets the requirements of domestic and international customers and *food safety authorities*.

The Australian Seafood Industry Council (ASIC), Seafood Directions 99 and Seafood Directions 2001 identified the need for a single standard for the *safety and suitability of seafood produced* or traded commercially in Australia as a high priority. The Standard has been developed by Seafood Services Australia in consultation with a wide range of stakeholders

The Standard will enhance consumer confidence in seafood for human consumption that is produced or traded commercially in Australia, while also providing the flexibility for seafood businesses to implement cost efficient, relevant and innovative management systems to achieve the required seafood safety and suitability outcomes.

The Standard defines outcomes that are consistent with the principles and objectives of:

- Codex Alimentarius (responsible for harmonising international food safety standards)
- the *Processed Food Orders* administered by Australian Quarantine Inspection Service
- the *Food Standards Code* administered by Food Standards Australia New Zealand
- Commonwealth, State and Territory food safety regulations.

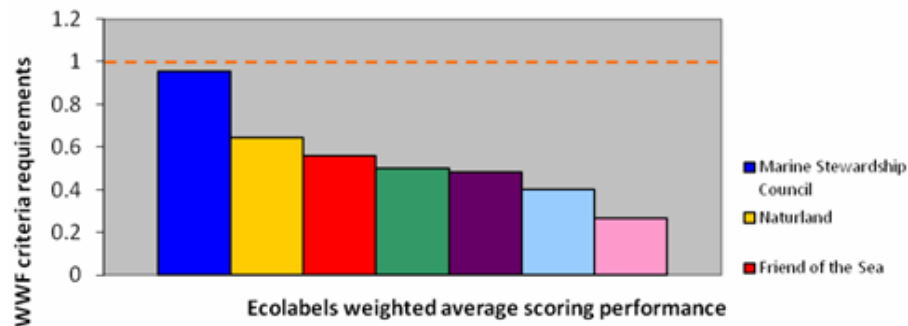
It is not prescriptive about how *seafood businesses* should achieve the required *seafood safety and suitability* outcomes, thereby providing the flexibility for *seafood businesses* to implement management systems that incorporate innovation, technology, practices and procedures relevant to their particular needs, circumstances and risk.

Independent Assessment

In terms of how these programs are viewed and compared, a report produced by WWF in 2009 showed that the Marine Stewardship Council (MSC) had come out on top in an independent assessment of wild capture seafood certification and ecolabel programs. The report concluded that MSC was the only program to be designated ‘compliant’ with the criteria of the evaluation.

Commissioned by WWF and carried out by an independent management consultancy, the report compared and ranked seven sustainability programs which included the following:

- MSC
- Naturland Wildlife
- Krav
- Clean Green of the Southern Rock Lobster, Australia
- Friend of the Sea
- AIDCP
- Marine Ecolabel Japan



There are clear and significant differences between certification schemes and recommendation lists, even though both purport to encourage informed choices about sustainable seafood. Certification schemes are the more targeted approach, following specific products from the capture or culture to the retail outlet.

Recommendation lists provide a more general picture and have the potential to cover a greater range of products more cheaply and more quickly than certification schemes. However, they can also give rise to significant consumer confusion, particularly when they provide information that contradicts other lists or certifications. They each have their pros and cons, but from the consumer perspective there is great advantage in certification and ecolabelling because of its direct and unambiguous signal to the potential purchaser.

A further report, once again done by WWF in 2012, titled “Comparisons of Wild-Capture Fisheries Certification Schemes” presented update results and an enhanced analysis of four certification schemes. This included the Alaskan Seafood Marketing Institute, the Friend of the Sea, Iceland Responsible Fisheries and the Marine Stewardship Council. All of these had undergone significant changes in their programs and requirements since the publication of the 2009 report.

None of the standards analysed in this report were in complete compliance with the criteria identified and defined by WWF as crucial to an ecolabel or certification program. The Marine Stewardship Council is the only scheme that was found in this report to be considered compliant with the topic areas in which related criteria are grouped. It should be noted that MSC is not fully compliant with the new ecological criteria in the report.

Ecolabel name	Weighted average score	Weighted average score in % to Assessment criteria score requirements	Appraisal indicator
Marine Stewardship Council	1.91	95.63%	Compliant
Naturland	1.29	64.56%	Semi-compliant
Friend of the Sea	1.12	55.83%	Semi-compliant
Krav	1.00	50.00%	Semi-compliant
AIDCP	0.96	48.06%	Non-compliant
MEL-Japan	0.81	40.29%	Non-compliant
Southern Rocklobster	0.53	26.70%	Non-compliant

Table summaries weighted average scores of individual ecolabels for all topics

Source: WWF report “Assessment of On-Pack, Wild Capture Seafood Sustainability Certification Programmes and Seafood Ecolabels”

Some other programs that are focused on recommendations and providing information to consumers, that do compete indirectly with MSC include:

- The Australian Marine Conservation Society (AMCS).
- Greenpeace.
- NOAA Fisheries FishWatch.
- Sustainable Fisheries Partnership (SFP).
- World Wide Fund for Nature (WWF) International.
- Australia's Sustainable Seafood Guide.
- The Australian Conservation Foundation.

Most of these organisations are NGOs and some are involved in a wide range of campaigning initiatives within and beyond the marine and fisheries realm. For many of them, preparation of a seafood recommendation list is part of a larger marine conservation strategy.

TABLE 2: COMPARISON OF 2009 AND 2012 ASSESSMENT RESULTS

	THEME 1 Governance, Structures and Procedures			THEME 2 Content of Ecolabel Standards		
	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5	Topic 6
Ecolabelling Scheme	Standard setting structures and procedures	Accreditation and certification structures	Accreditation and certification procedures	Ecological sustainability	Fisheries management system	Traceability
Alaska Seafood Marketing Institute 2009	1.13	Not assessed	0.67	0.95	1.33	1.33
Alaska Seafood Marketing Institute 2012	0.04	0.80	0.62	1.6	1.57	1.83
Friend of the Sea 2009	0.75	2.00	1.43	1.00	0.96	1.83
Friend of the Sea 2012	0.46	1.60	0.81	1.74	1.06	1.17
Iceland Responsible Fisheries 2009	Not assessed	Not assessed	Not assessed	0.80	0.70	0.83
Iceland Responsible Fisheries 2012	0.125	0.80	0.28	1.625	1.61	1.83
Marine Stewardship Council 2009	1.79	2.00	2.00	1.95	1.89	2.00
Marine Stewardship Council 2012	2.17	2.00	2.05	2.08	2.07	2.00

Source: [wwf_report_comparison_wild_capture_fisheries_schemes](#).

2014 Australia-China Trade Report - March 2015

In the 2014 Australia-China Trade Report released by the Australia China Business Council (ACBC) provides insights into how the structural changes in the Australian and Chinese economies are set to increase the value to our respective economies, based on a more diversified trade and investment relationship and increased confidence in the early conclusion of a Free Trade Agreement (FTA) with China.

The 2014 report analyses the impact of Australia-China Trade across industry sectors, including Australia's integration with global value chains, and the flow-on effects for the Australian economy down to the household level. The business survey of over 200 Australian firms engaged in Chinese business demonstrates new growth opportunities in industries such as *agriculture*, manufacturing, real estate, tourism, education, financial and professional services.

Findings from the Survey provide a snapshot of the opportunities respondents see for Australian agribusiness in China including:

- 100% of respondents rank China as important in their company's near term global expansion plans.
- 89% describe their two year business outlook with China as optimistic.
- 67% feel that they would benefit from coordinated Australian branding.
- 50% consider physical infrastructure as an impediment to their ability to deal with China.
- 33% of total business sales are from China business.
- Chinese administrative procedures, brand recognition and Chinese domestic market access are the three top barriers to doing business with China (specifically agribusiness).
- Personal networks and government agencies are the two main ways to find the right Chinese business partners.

The report outlines that partnerships between Australian and Chinese enterprises would become more common as trade between the countries grew. At the moment, the public debate and public attention is very much focussed on individuals buying land, or buying farms, but the real growth and expansion of agribusiness will come from joint operation of processing facilities and from integrating value chains, so you would have supply chains that run from the Australian farm, through cool transport, to the Chinese retail sector, or even into global value chains.

The Western Rock Lobster industry is at the forefront of trade, however there are significant opportunities to consolidate the position and formalise supply chains over the near term, thereby consolidating the longer term security of the sales into China.

CONSUMERS' UNDERSTANDING OF SUSTAINABILITY

The phrase 'sustainable seafood' is increasingly used in Australian public life, but what does it actually mean? The phrase can mean different things to different people, but most people agree that in general, 'sustainable seafood' can be defined as follows:

- Wild-caught sustainable seafood is produced without taking too many of the target species, doesn't cause excessive harm to the ocean environment or catch damaging numbers of vulnerable marine wildlife. Sustainable fisheries meet the long-term needs of fishermen, seafood consumers and the environment together.
- Farmed seafood is produced without causing excessive harm to the marine environment, including harming vulnerable marine wildlife or polluting surrounding waterways, and feed fed to farmed fish is not heavily dependent on fish sourced from wild fisheries.

Many consumers do not understand the differences in how different groups define sustainability. In order for consumers to make an informed choice on sustainable seafood, they need to ask questions like which fish is this, where did it come from, how much is caught and how is it caught, how is the fishery managed and assessed and who is saying/endorsing that the fish is sustainable and on what basis?

Independent research conducted in 2014 into seafood buying behaviour around the world shows that consumers are increasingly looking for fish products from a sustainable source, and that ecolabels give credibility to these claims.



60% agreed buying sustainably caught seafood is helping restore fish stocks



65% agreed it's important for supermarkets to sell sustainably caught fish



The research, conducted on behalf of the MSC, is believed to be the world's largest international survey of sustainable seafood consumption. It questioned more than 9,000 regular seafood buyers from 15 countries across Europe, Asia, Australasia and North America. It repeats similar research undertaken on behalf of the MSC in 2010 and 2012, adding

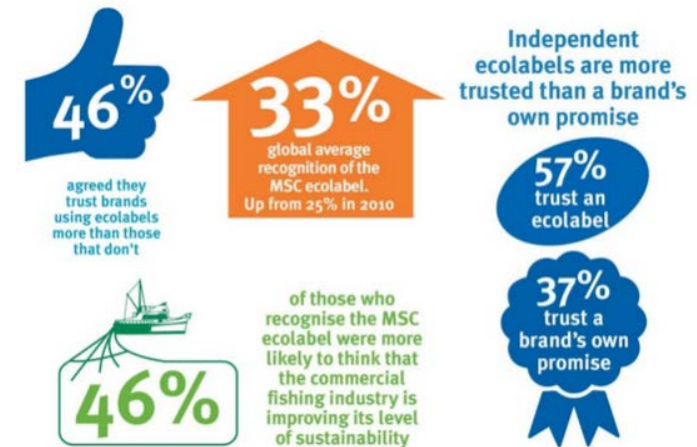
to the growing evidence base used by the MSC to encourage industry, retailers and consumers to make sustainable seafood choices.

Almost all (90%) of the respondents thought that ocean sustainability is important, with 55% saying that falling fish stocks has become a more important issue than it was a year ago. 60% agreed that buying sustainably caught seafood would help to ensure fish stocks for future generations.

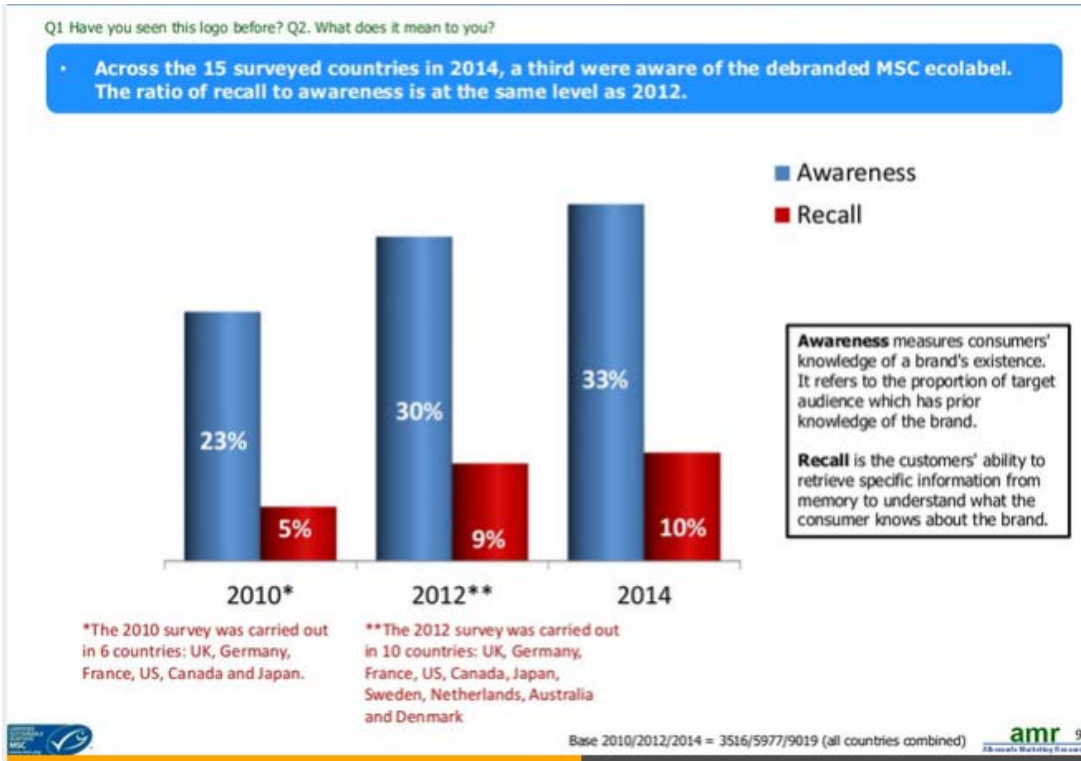
This concern for ocean health is being translated into shoppers' purchasing decisions, with 41% actively looking for fish products from a sustainable source, an increase of five percent since 2010 (36%).

Supermarkets and restaurants are seen to have a key role in ensuring the sustainability of seafood. Almost two thirds (65%) of those surveyed agreed that it's important for supermarkets to make sure that they are selling sustainably caught fish. Those in France (78%) and Australia (74%) were the most likely to place responsibility with supermarkets. Almost the same number (61%) agreed that restaurants should show sustainable seafood options on their menus.

Recent increases in the number of MSC ecolabelled products suggest that retailers are responding to these demands. Globally, the number of seafood products carrying the MSC ecolabel increased fivefold to more than 25,000 between 2010 and 2014. Almost half (46%) of respondents agreed that they trust brands that use ecolabels more than those that don't. After recommendations from friends or family (59%), independent ecolabels were seen as the most trustworthy form of information for ensuring environmental and social responsibility (57%), ahead of specialist magazines (53%) and government advice (51%). A brand's own promise on product came bottom of the trust rankings with just 39%.



Awareness and recall of the de-branded MSC ecolabel



Source: MSC Consumer survey global summary report 2014

Respondents who recognise the MSC ecolabel were more likely to think that the commercial fishing industry is improving its level of sustainability (46% compared with 33% of those who did not recognise the ecolabel).

Overall sustainability and traceability were high on the agenda for consumers when making purchasing decisions, which scored 61% and 66% respectively. Whereas 39% expressed an increased willingness to pay a little more for a product with an ecolabel.

Australian research conducted on behalf of the FRDC in 2013 into community perceptions of the sustainability of the fishing industry in Australia indicated that the community views are somewhat fragmented. From a sample set of more 1000 people, 42% believed the industry was sustainable (up from 38% in 2011), 20% said it was not sustainable while 38% were unsure.

People who fish regularly and/or eat seafood regularly were more likely to believe the industry was sustainable.

Sustainability of fishing sectors	2013 - % agree	2011 - % agree
Farm fishing	76%	78%
Traditional fishing	58%	60%
Recreational fishing	69%	67%
Commercial fishing	30%	27%

Source: FRDC Community perceptions of the sustainability of the fishing industry in Australia report, 2013

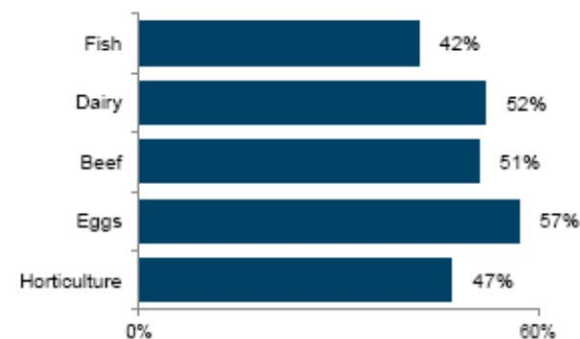
The overall results indicate that the community awareness of the efforts undertaken by Government and industry working towards sustainability remains low, where only 15% were aware of the government's efforts and 20% were aware of the industry's efforts.

On a more positive note the majority of adult Australians assume industry (58%, up 2%) and Government (52%, down 1%) are working to make improvements in this area.

In comparison to other countries, more than one in two adult Australians (56%) believe the Australian fishing industry is ahead of other countries in regard to sustainability (17% reporting Australia was well ahead and 39% slightly ahead).

Australians hold different views of the sustainability of different sectors which provides an indication that there are different perceptions of the sustainability of various rural sectors. Interestingly perceptions of the fishing industry are lower than that of other sectors most notably eggs, dairy and beef.

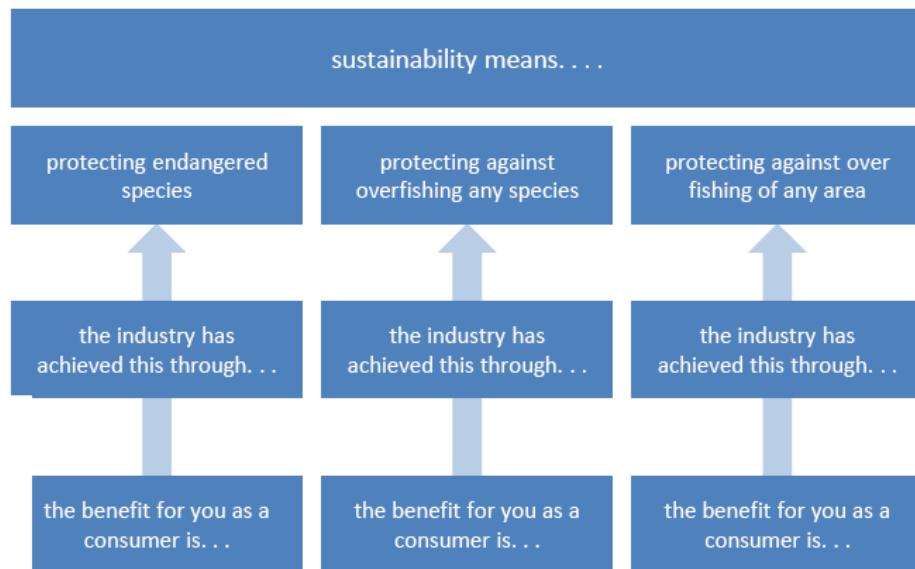
Do you think Australia's fishing industry/rural sectors are sustainable?



From the results of the survey, sustainability remains an ongoing challenge and key area of focus for the Australian fishing industry. There is a challenge then for individual fishers, companies, cooperatives, sectors and the industry as a collective to engage in a meaningful way with the community and address the following areas:

- strengthen perceptions around sustainability.
- continue to inform, educate and influence community perceptions about the long term sustainability of the fishing industry.
- focus on driving community awareness – tell the story of the journey to sustainability.
- ensure major investments and achievements by both industry and Government receive sufficient community visibility.

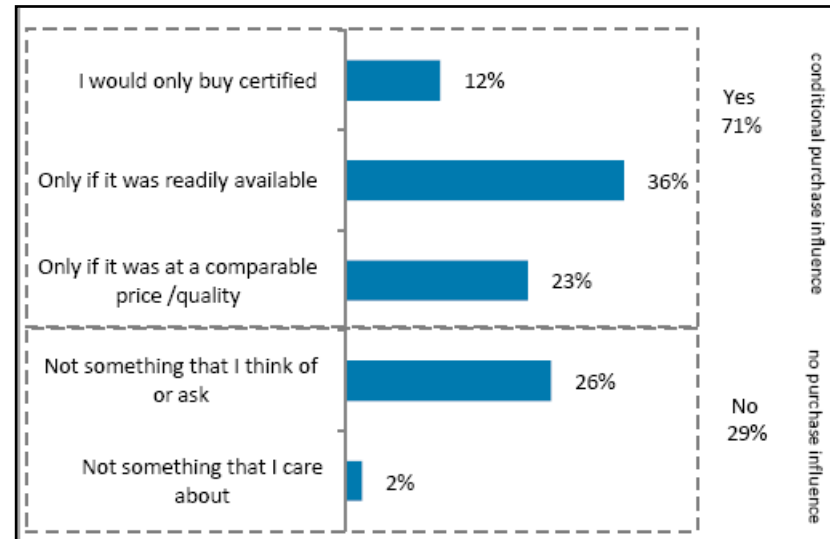
The pathway required to change community perceptions, taken from the Hearts & Minds, Community Conversations – Sustainability and the fishing industry report (2012), is outlined below.



Source: Hearts & Minds, Community Conversations – Sustainability and the fishing industry report (2012)

By addressing these issues, the study suggested that there may well be a downstream dividend for the industry considering establishing and supporting an agreed messaging framework around sustainability.

Buying intentions



The report, which surveyed over 500 consumers, found that only 11% of people were aware of the use of certification systems to promote sustainability, whereas 89% were unaware.

If certification standards are to be one of the levers to demonstrate sustainability, clearly further efforts to generate awareness and understanding of these standards is required.

Therefore the question was asked of respondents ‘does certification matter at the end of the day’? The feedback indicates that the industry can certainly reach out to the majority of people (71%), provided certified seafood is both readily and widely available and price competitive.

Certification may well then provide a useful tool to influence both community perceptions of sustainability and then, importantly, their actual purchase behaviour.

While consumers are receptive to choices influenced by certification, other critical but not problematic factors will be equally critical if perceptions and behaviours are to be shaped.

TELEPHONE QUESTIONNAIRE

Western Rock Lobster Council - MSC Review Interviews

- The Western Rock Lobster Council (WRLC) and WAFIC are reviewing the investment in the Marine Stewardship Council (MSC) certification, and Agknowledge has been asked to seek input from industry to determine outcomes if the fishery is recertified in 2017.
- As a third party we collect the information and then present it in a report that identifies 'themes' and 'issues' but not the people who expressed them. Your identity will remain confidential but your comments will enable WRLC to assess the MSC benefits and costs.

1. Can you please indicate which sector of the Western Rock Lobster Industry you participate in:

Harvester	Processor	Management	Researcher	Retail	Other (specify)

2. What is your understanding of MSC certification of the Western Rock Lobster Fishery?
Brief description, background, status etc

3. In relation to the cost to the industry of maintaining MSC certification:

a. What is your understanding of the annual audit cost?

<\$10,000	\$10-25,000	\$25-50,000	\$50-100,000	>\$100,000	Other

b. What is your understanding of the re-certification cost, every 5 years?

<\$50,000	\$50-100,000	\$100-200,000	>\$200,000	Other

c. Do you believe this cost is sustainable for the industry / fishermen to bear?

d. What is an appropriate cost for independent accreditation of the fishery?

4. What value do you perceive MSC adds to the Western Rock Lobster industry? Why?

5. Do you believe MSC certification has delivered/contributed to any of the following for the WRL industry: Please rate your views in the following areas (Rate 1 – little value, 5 high degree of return)

Topic	1	2	3	4	5	None
a. A sustainable industry						
b. Credibility through third party certification of sustainability.						
c. Access to fisheries, a continued right to fish.						
d. Improved governance of the industry.						
e. Direction and priority for research in the fishery.						
f. Ability to identify and proactively manage issues in the fishery.						
g. Public confidence in the western rock lobster fishing industry.						
h. Government confidence in the western rock lobster industry.						
i. An insurance or 'future proof' for the industry.						

j. Improved access to markets.							
k. Price premiums.							
l. A more environmentally responsible fishing industry.							
m. Improved practices in the industry.							

6. Do you have any other thoughts on the value MSC adds to the Western Rock Lobster industry? (repeat of Q7 but in the hindsight of the Q8 reminders)

7. What impact do you think the China Free Trade Agreement will have on the Western Rock Lobster Industry – and will the MCS have any benefits?

8. What levels of interaction you have had with the MSC in the past 12 months? And before?

9. Do you believe the industry should or should not renew the MSC certification in 2017? Why?

Yes	No	Maybe

10. Do you believe MSC certification is the appropriate standard to measure the industry?

11. Do you have an alternative suggestion for certification?

12. What do you believe would be the impact of not continuing MSC certification?

13. What would be the cost to the industry of not continuing MSC certification?

14. What would be the impact on the markets of not continuing MSC certification?

15. In regard to future funding of accreditation/certification:

a. Who should pay?

b. How could funds be raised?

16. How can the WRL industry best manage sustainability and risk into the future?

17. Can you please suggest the best ways to communicate MSC issues to the industry?

18. What was a) the 2014 Western Rock Lobster Beach Price (Avg)?

b) anticipated 2015 Beach Price?

Year	<\$35	\$35-45	\$45-60	>\$60	Other/Don't know
a. 2014					
b. 2015					

19. Do you have any other ideas or feedback you would like to contribute?

INDUSTRY FEEDBACK

In March 2015, 27 people were interviewed to provide feedback on the costs and benefits of the Marine Stewardship Council certification of the rock lobster industry. Survey participants consisted of a variety of industry stakeholders including commercial fishermen/harvesters; management, consultants, researchers, chefs, conservationists, auditors, traders and representatives from the finance sector.

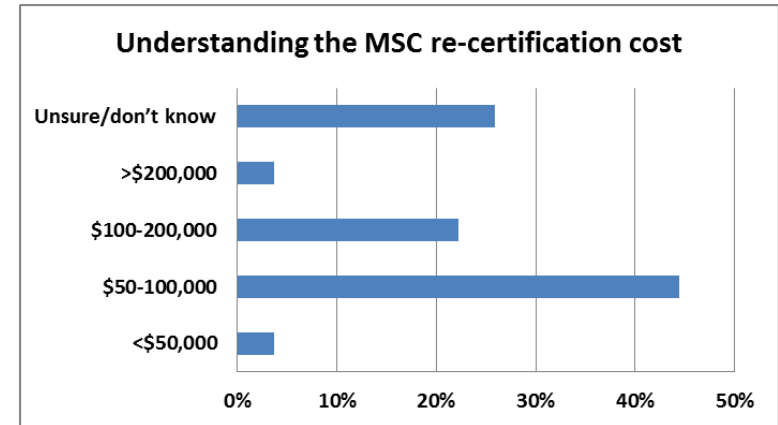
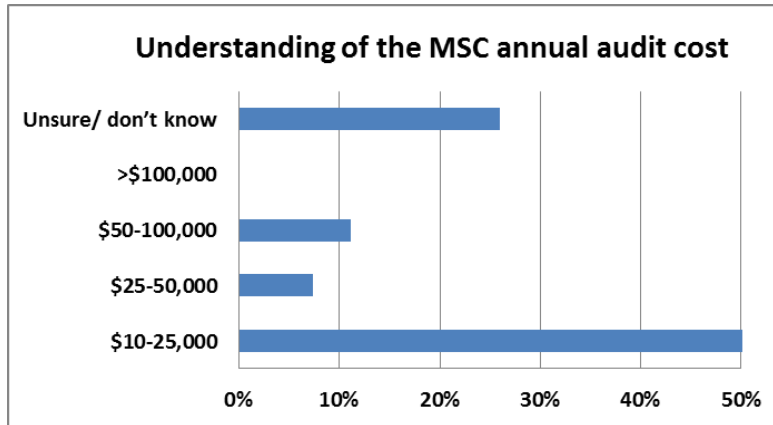
Each participant interviewed has been identified with a number and the number is aligned to their respective comments. In this way, readers can either follow the overall theme or an individual conversation.

Each interview averaged 28 minutes so this written report represents about 12 hours of conversation.

QUERY	RESPONSE	SUMMARY
<p>1. Understanding of MSC certification of the Western Rock Lobster Fishery?</p>	<ul style="list-style-type: none"> • First fishery to receive MSC certification in the world (1) (2) (4) (7) (9) (11) (13) (14) (18) (22) (23) (25) (27) • Recertification every 5 years (7) (27) • Audited on an annual basis (1) (18) (27) • Third party or independent assessment of sustainability (2) (3) (7) (8) (10) (11) (12) (15) (19) (22) (24) (25) (26) (27) • MSC ensures a range of environment, population attributes and management criteria are considered in assessing the fishery. (5) (10) (16) (20) (23) • MSC provides a marketing advantage that allows rock lobsters to be sold for a good price overseas. (5) (6) • MSC is a sign of good stewardship which may have a marketing advantage. (12) • MSC tells the world that the industry is fully sustainable/ MSC sets a standard that the fishery has to meet to be sustainable. (6) (14) (15) (17) (18) (19) (24) (25) (27) • MSC is widely recognised as premium certification product in the world/ recognition of blue tick. (9) (14) • MSC gives me the confidence that stocks are sustainable and they are being managed responsibly in marine parks. (11) • A good understanding/ know it well (1) (4) (13) (16) (20) (21) (25) (26)(27) • It was an initiative that was taken by processors and exporters with little conversation with fishermen, which had support of government. (22) • The WRL industry is a high value single species fishery which MSC were interested in so they discounted the fees and underwrote the cost of assessment. (22) • MSC is good for the industry, given the parameters are tough. (23) • MSC assess the fishery against sustainability standards in terms of stock status; ecosystem (effects of fishing) and governance and management. (27) 	<p>There is a reasonable understanding of the basics of MSC certification across the Western Rock Lobster fishery.</p> <p>The majority knew that it was the first fishery to receive MSC certification in the world and that it is an independent or third party assessment of sustainability.</p> <p>The levels of understanding of MSC varied immensely with some respondents who knew it well and were involved in the early days, right through to a very poor understanding.</p>

QUERY	RESPONSE	SUMMARY
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2. In relation to the cost to the industry of maintaining MSC certification - what is your understanding of the annual audit cost and of the re-certification cost every 5 years?



3. Do you believe this cost is sustainable for the industry / fishermen to bear?

Yes it is sustainable for industry/ fisherman to bear (1) (2) (3) (4) (5) (7) (8) (9) (10) (13) (15) (16) (17) (18) (19) (20) (21) (25)(26) (27)

- Based on the net worth of the industry, it is easily affordable. (1) (18)
- If you work it out per unit cost basis or % value of industry, it is sustainable. (2) (4) (5) (7) (13)
- The cost is peanuts for what we're harvesting per kilogram. (9)
- It is hard to argue because everyone is making too much money, we need something, we have to pay for it, we won't get away with nothing. (17)
- It is cheap and third party accreditation is critical. (3)
- The cost of MSC is sustainable as it is third party accredited. (8)
- It is essential. (5)
- The fishermen make a bucket load and should cover the costs. (10)
- You need to look at the end benefit, like any investment. (19)
- It is affordable but questionable if the benefits are worth the costs. (16) (20)
- In the medium term, yes it is a very valuable industry and while MSC has not added one cent of value to it, it is good as a proxy for the federal government. The cost of it is a good investment. (22) It is essential for a \$350m industry as it provides them with protection and the social licence to fish as they are endorsed through MSC certification. The kudos of MSC far outweighs the cost. (25)
- It is a very small cost for a very valuable and iconic fishery. The benefits far outweigh the costs and the fishery needs to show their position in the industry and in markets. (26) The costs are not unsubstantial, it depends on what benefits there are but the rock lobster industry can meet the

The survey respondents were strongly opinionated that the cost is sustainable for the industry/ fishermen to bear with three-quarters supporting it. The main supporting argument was that the industry is worth in excess of \$300 million a year and if you relate it back to a per unit cost basis – it is affordable and sustainable.

Given the WRL fishery is a valuable industry, the government won't allow the industry to get away with no certification therefore they believe the long term benefits will far outweigh the short term costs.

QUERY	RESPONSE	SUMMARY
	<p>costs. (27)</p> <p>Other comments:</p> <ul style="list-style-type: none"> • Not sure. (11) (23) • I don't know what they earn but the long term benefits far outweigh the short term costs. (23) • It is overpriced and if MSC and the Department of Fisheries are both doing the same job and if they would communicate more it wouldn't be as expensive. Plus it is already a sustainable industry which is attributed to the fishermen. (6) • Our bank was funding the rock lobster industry before MSC, it hasn't changed anything for us. (12) 	<p>Aside from this there were questions raised that while it is affordable – what are the benefits and are they worth the costs?</p> <p>One respondent stated that MSC had not added one cent of value to the industry however it was advantageous in the political arena which justified the investment.</p>
<p>4. What is an appropriate cost for independent accreditation of the fishery?</p>	<p>The current costs are fair and reasonable. (1) (2) (4) (5) (7) (9) (10) (11) (15) (16) (17) (19) (20) (21) (22) (25) (26) (27)</p> <ul style="list-style-type: none"> • The cost pays for a certifier's time and the tender process is very competitive and it is priced correctly. (4) • It is an involved process with little margins and no major mark-up on costs. They are professional fees with a little bit of overhead. (7) • It is a lot cheaper than what it was. (15) • It is prestige value as what you are paying is not the direct costs of certification, you are paying for the MSC brand which is obviously expensive. There are other certifiers who offer the same thing but at a reduced cost. (16) • Everything is expensive but the price is acceptable as I know it is quite involved. (17) • It is appropriate and it is delivering a high standard and I wouldn't like to see the industry move away from certification given the costs. It will be expensive and there should be a commercial gain. (20) • I think it is good value. (21) • The costs for the WRL industry are on par with other fisheries but it does seem like a lot of money for MSC certification. (27) <p>Other</p> <ul style="list-style-type: none"> • Whatever it is going to cost for an industry worth \$350 million. (3) 	<p>It appears that the majority of industry respondents agree that the current costs for independent accreditation are fair and reasonable whereas 21% were unable to comment or couldn't put a cost on it. They understand that there is value in MSC as it is quite involved and that there are such costs involved with using a high profile brand.</p> <p>According to people in the know, MSC is an involved process that pays professional fees with little margins and there are no major mark-ups on cost and only a little bit of overhead.</p> <p>Accreditation will always be expensive and the feeling is</p>

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> I can't see a huge benefit for the costs, the industry could save a few thousand if the Department of Fisheries worked in with MSC as they both play a similar role and take the kudos for a sustainable fishery. (6) I can't put a cost on it unless I know what and how much value it contributes to the industry. There needs to be a cost benefit analysis of MSC done. (8) (12) The WRL industry is a high value single species fishery. MSC was interested in it so they discounted and underwrote the cost of assessment.(22) No view/ can't comment. (14) (18) Not sure (13) (23) 	<p>that industry shouldn't move away from certification given the costs as there is certainly community gain.</p> <p>On the flip side, some of industry has questioned the cost in terms of the benefits/ value it creates for the industry itself. Therefore a cost benefit analysis would be beneficial in terms of the value MSC brings to industry.</p> <p>Apparently the accreditation costs are cheaper than what was originally priced after MSC became interested in the high value fishery and discounted the cost of assessment.</p>
<p>5. What value do you perceive MSC adds to the Western Rock Lobster industry?</p>	<p>Social licence for the fisherman to operate (1) (2) (9) (20) (25) (26)</p> <ul style="list-style-type: none"> Ethical value (1) Value of social licence to operate and demonstrates the fishery is gold standard and sustainable in the eyes of the wider community (1) Licence to fish and credibility amongst general public and conservation sector. (2) (25) MSC has had some bearing on resource access i.e. Marine Parks and Abrolhos Islands. (9) It provides a social licence in terms of WA environment which is very important and shows the fishery is sustainable and they know that the community knows that as well. (20) It gives the industry a long term surety of their resource with the environmental standards in place(20) It has an intangible benefit in that it gives fishermen protected access to marine parks that they aren't normally allowed to access. (24) <p>Public value to show environmental stewardship (2) (4) (7) (9) (15) (16) (18) (19) (21) (22) (24) (25) (26)</p> <ul style="list-style-type: none"> Demonstrates science and good management of the industry (4) 	<p>The main value that the Western Rock Lobster industry attributes to MSC is the public value to show environmental stewardship. It gives the industry credibility in terms of environmental management and sustainability and gives fishermen the social licence to operate.</p> <p>As it is independently certified,</p>

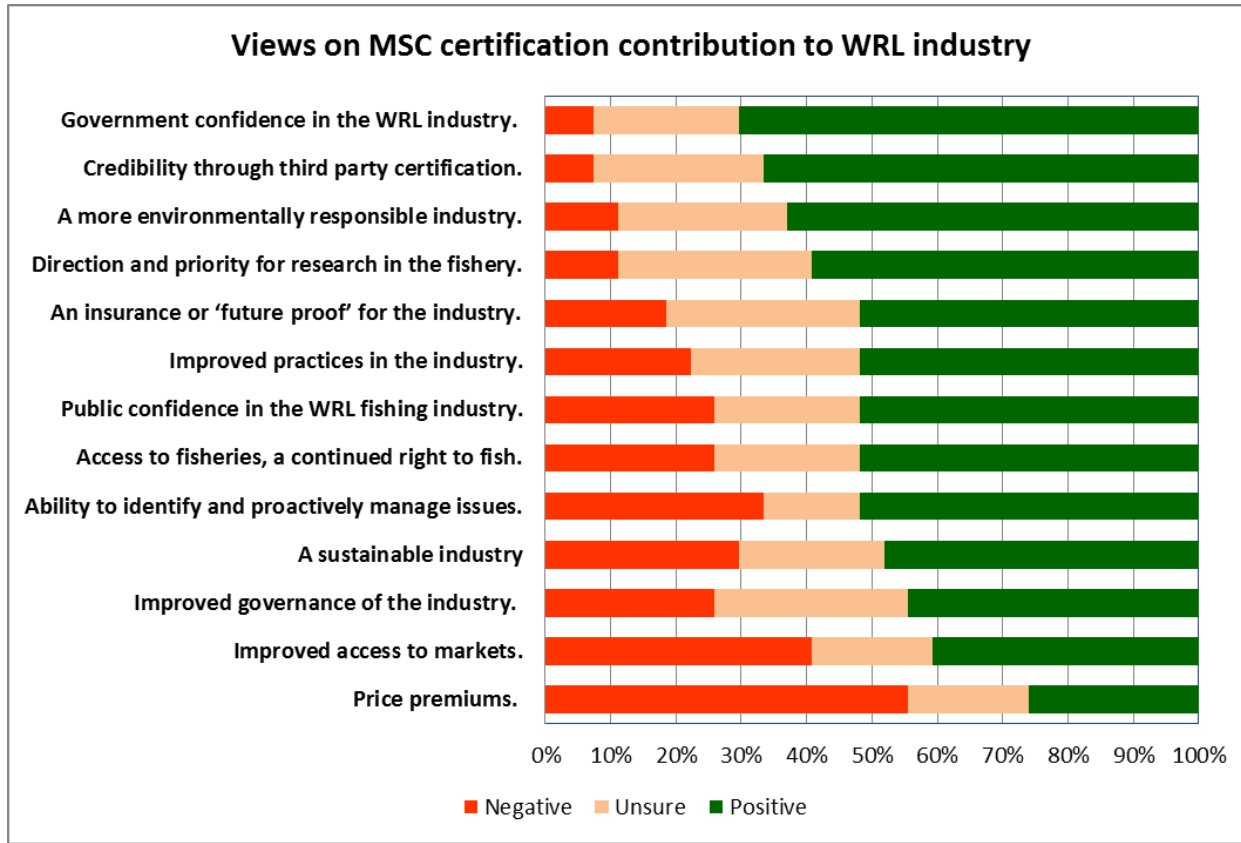
QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> • Allows industry to answer to NGOs. (7) • Immune to pressures for a while, MSC has had a bearing (9) • MSC stops NGOs from attacking the industry to shut it down, it is a good back stop but how do you put a value on that. (15) • If stocks collapse, there is no knee jerk reaction because the fishery has MSC backing which takes the pressure off because it is being tracked independently. (15) • MSC helps with credibility and certifies management arrangements of the fishery and government themselves. (16) • It provides certification that the industry is sustainable and helps how I market the product to my customers. MSC is a marketing tool.(18) • It shields the industry from political debate and gives them the social licence to operate and shores up environmental credentials. (19) • It gives the WRLF credibility in terms of environmental management and sustainability that are accepted by third parties, particularly NGOs. (21) • MSC is of a reputational value and offers a proxy for environmental standards. It is a requirement for all Australia seafood exports to meet ESD standards and MSC is an easy path way to get through without going through the hoops. (22) • It provides credibility and an understanding it is a sustainable industry. It shows the industry is doing the right thing by the planet and earthlings that inhabit it. If they continue to rape and pillage, there will be nothing left and we will die. (23) • It demonstrates the industry is sustainable and operating against an independent environmental standard. (24) • It helps build community support and demonstrates sustainability credentials in the broader community. (26) • MSC provides an industry and community return which is more difficult to measure compared to price return. (26) • MSC has given the fishery credit with issues with NGOs i.e. sea lions/ whales and it has led to public credibility and social licence to operate. There is always a level of mistrust of commercial fishermen and government that they are out to pillage and plunder but MSC is an independent assessment that they are looking after a public amenity. (27) <p>MSC related</p> <ul style="list-style-type: none"> • World's best practice. (1) • Recognition of blue tick. (14) (18) • Third party or independent assessment. (1) (2) (3) (19) (24) (25) 	<p>the standards are accepted by third parties and hence it shields the industry from political debate.</p> <p>Another perceived value is the social licence for the fisherman to operate including access to Marine Parks and the long term surety of their resource.</p> <p>Other values include MSC attributes, access to new markets and prioritisation of research.</p> <p>Some respondents were unsure of the value to the industry given that there has not been any cost benefit analysis done.</p> <p>They were also critical that it has not resulted in price premiums and the lack of public awareness of MSC.</p>

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> • First fishery to be certified in the world. (9) • Industry is certified in a valid way and historically it has set a benchmark for other fisheries in Australia to meet in terms of their leadership position. (11) <p>Markets</p> <ul style="list-style-type: none"> • Potential tool for fishery to look at new markets for their product and secure supply in existing markets. (4) (5) (7) (9) (15) (19) (20) • Access to more profitable markets. (5) • Keeps the industry certified and above competition. (13) • Provides a marketing edge. (19) • I am not a marketing expert but understand that markets are looking for independently viewed supply and responsible stockists and MSC provides that opportunity with the growing trend of looking for authority that the product is from sustainable sources. (26) <p>Scientific</p> <ul style="list-style-type: none"> • Allows for prioritisation of research. (5) • MSC makes the government do the research which is good as they need to show they are managing the fishery properly. (15) • I was amazed the number of people in Fisheries and what they need to do to show MSC as part of the assessment. All these things I'd never thought about, from seagrass research and impacts etc. it means we are getting a lot of research work put into the industry. Most don't know it is happening.(31) • It helps to give verification on research and management of the fishery which provides justification for the industry to fish. It was valuable when the industry faced difficult times in 2009 and sections of the greens movement would like to have to shut down the industry but MSC endorsed the industry's right to fish. (25) • MSC certification makes it easier to get funding to do research within the fishery. (27) • The fishery has international recognition as it was the first fishery to be certified and it is a shining example of a fishery that got it right and it is well recognised and well respected and also gives the fishery access to high level scientists because of that. (27) <p>Other</p> <ul style="list-style-type: none"> • Feel good. (2) • Government are clear on how the fishery is tracking and don't need MSC internally to show that the fishery is sustainable but they need it to demonstrate its credentials to the broader community and NGO's. (26) • MSC allows the fishery to play politically and play politically with money. (27) <p>Negative comments</p>	

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> • The bulk of the product goes to China and MSC is not an issue with the public. (7) (9) (10) (14) (17) • No price premiums for industry. (6) (7) (10) (27) • Can't equate in terms of dollar value. (9) • There have been a lot of hangers-on, it created jobs for a myriad of people that we ultimately pay for in our licenses.(30) • MSC is following a basic set of guidelines. As the first to be accredited we more or less set up the parameters.(30) • We've never made a cent from anything having a MSC label on it. (30) • Not sure, no cost benefit analysis done and MSC doesn't contribute much to the industry. (8) • No value for the domestic market as they can't afford to buy rock lobster. (10) • I don't know, there has been no cost benefit analysis done. (12) • MSC needs to market label more to the community to increase its awareness. (18) • MSC has not realised an improvement in the market price. (25) 	

QUERY	RESPONSE	SUMMARY
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6. Please rate how you believe MSC certification has delivered /contributed to any of the following issues for the WRL industry.



Please rate your views in the following areas (Rate 1 – little value, 5 high degree of return)

The positive response indicated those who rated the issue as a 4-5, Negative a 0-2 and Unsure a 3.

7. Do you have any other thoughts on the value MSC adds to the Western Rock Lobster industry?

- Social licence to operate
- Social licence and respect for the individual involved in the industry at the local community level. (20)
- Community perception
- Sea lion exclusion devices and entanglement. (2)
 - Acceptable to community and overall social licence to operate, it shows the industry is doing the right thing and managing it responsibly. (1)
 - Community engagement. (4)
 - It helps focus people outside industry and lift the profile. (8)

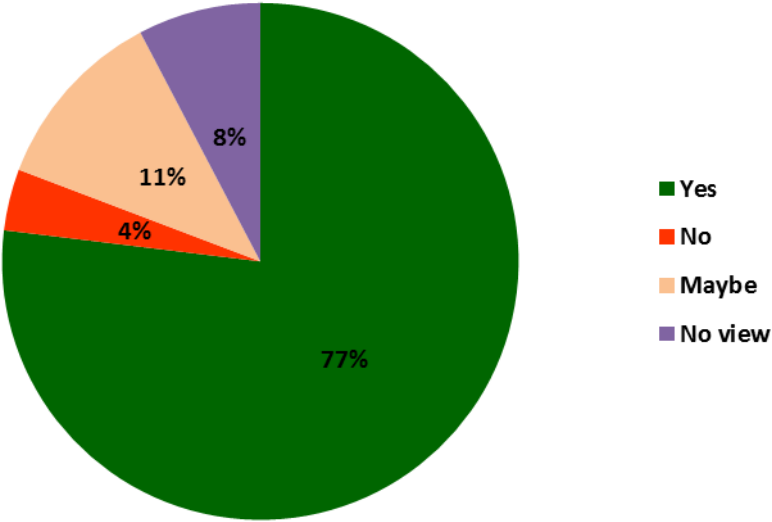
After prompting the respondent with topics that MSC may have contributed to the industry, the respondents appeared to be somewhat more negative about it. However they did believe it is very valuable in terms of

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> • Engagement and sustainability and promotion of sustainability. (14) • MSC gives the WRLF a robust platform to address issues concerning sustainability. (21) <p>MSC related</p> <ul style="list-style-type: none"> • Independent 3rd party assessment of industry. (3) • It shows the fishery is the best managed in the world. (4) • The sustainability tick is advantageous. (17) <p>Markets</p> <ul style="list-style-type: none"> • Potential for market premiums in the future. (3) • Diversify business model and base in terms of markets and customers. (4) • Does any Australian consumer care about MSC, they won't pay for Aus lobster at \$60 because it is tagged MSC vs cheaper imported lobster. They won't pay for it. The processors won't pay for it. (30) • The amateur fishery is massive in WA, they would catch a fifth of the commercial catch. They are doing full quota each day. Licensed fishermen would want them monitored. (30) <p>Management</p> <ul style="list-style-type: none"> • MSC helps improves fisheries governing and management of the fishery. (1) • MSC had a big influence on the industry managing the fishery, it is good to be able to say we have it, it is still a powerful tool even though it hasn't been used to any commercial value, yet. (30) <p>Scientific</p> <ul style="list-style-type: none"> • In the past industry hasn't agreed with government research - MSC is the vehicle to scrutinise and provide independence on the research side of things and keeps everyone on their toes. (9) • MSC put into place chain of custody stuff, fisheries themselves have an interest in making sure no one cheats on quota. (30) <p>Other</p> <ul style="list-style-type: none"> • MSC should be continued. (13) • Inspire others to get aboard. (23) • It provides insurance – you don't need it most years but every now and again you do. MSC certifies that the research and management of the fishery is approved by a third party. (25) • MSC has lots of community and external benefits but not really tangible as they are difficult to quantify and measure. (26) <p>Negative</p> <ul style="list-style-type: none"> • MSC should stand up for industry more. (6) • WA public have no clue what MSC is, there needs to be a public awareness campaign. (8) 	<p>addressing community perception to show that the industry is responsible, sustainable and well managed environmentally which was backed up with a sustainability tick from MSC.</p> <p>The respondents believed that MSC should stand up for industry more and that there should be a public awareness campaign to raise its profile.</p> <p>Concern was also expressed that MSC had no value or decreasing value and represented a risk to the industry as it set the standards which should be set and developed in Australia by industry and government.</p> <p>On the extreme side, it was said that MSC would have a value if it wasn't used politically and that it was regarded as a negative in the development of marine reserves.</p>

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> • MSC is being used to combat moves for marine reserves which I regard as a negative as they use eco -labels as a way to prevent creation of marine reserves. (10) • If MSC wasn't used politically, it would have a value. (10) • Why MSC, there are a number of certifiers out there? (16) • The industry has always been sustainable even before certification. MSC has demonstrated that rather than changed the habits. The big issue is that people don't know what MSC is. (18) • Personally and professionally I think MSC represents a risk to the industry. Industry has allowed a third party to set standards. My preference is that you use a 3rd party to audit performance against standards which should be set and developed in Australia in a process set by industry and government. The catalyst for taking another look at this relates to an increase in requirements for traceability in food safety and biosecurity and as they merge new standards will be developed along with new certification requirements. MSC has done its thing and it will be gradually replaced with a new system. (22) • Industry hasn't optimised the return on investment that they could have got from MSC. (26) 	
<p>8. What impact do you think the China Free Trade Agreement will have on the WRL Industry – and will the MSC have any benefits?</p>	<p>Negative</p> <ul style="list-style-type: none"> • Not sure / can't comment/ don't know. (1) (2) (5) (12) (14) (20) • None. (11) • Not a lot. (3) (10) (22) • Product is already in the market, it will just go through more legally. (3) • Bugger all, we already have a market into China and MSC is no benefit. (10) • It won't make a huge difference, it may become less complicated and less expensive in terms of delivery into the market. The FTA hasn't added value to the SRL industry but translated into more administration. (22) <p>Positive (4) (6) (8) (13) (15) (17) (16) (18) (19) (21) (24) (25) (26)</p> <ul style="list-style-type: none"> • It will open up more expensive markets. (6) • It will improve the competitive nature of the fishery and the ability to market and brand a Western Australian product. (4) • It will free up tariffs and the market and clear the pathways for a freer trade although there will be no immediate effect, it will take years. (8) • It will open markets up. Last week the industry sold more than 35 tonne of product but could only get air freight for 10 tonne. We get a good price at the moment with one door but in the future it will be good and the Chinese are becoming increasingly aware of food safety. (15) • It will have a big impact as we will be able to get crays directly into mainland China and increase air freight volumes and reduce the time frame. At the moment it takes 42 hours to get the product 	<p>The China Free Trade Agreement is viewed as a positive for the Western Rock Lobster industry in that it will open up the market and clear the pathways for a freer trade. According to fishermen, they have struggled to get enough air freight into China and they believe they will now be able to increase air freight volumes and reduce the time frame it takes to get the product to market.</p> <p>A small percentage believed the FTA would not affect the Chinese market other than allowing the product to enter</p>

QUERY	RESPONSE	SUMMARY
	<p>to market and this will be cut in half. (17)</p> <ul style="list-style-type: none"> From New Zealand there is very little going in via grey trade and there are reduced costs however the documentation is more onerous. (16) It will open up a new market but the downside is that it will create a price push and make lobster less accessible to the local hospitality industry. (18) The proof will be in the implementation but I can't see why it won't have a great impact. (19) The FTA should benefit the industry, especially the continuity of getting the product into the country. (21) Hopefully it will be positive and lead to better returns for the WA rock lobster fishery and a healthier more financially viable industry. (23) It will have a massive impact on industry as it will allow branding of the product so it won't lose its identity through the grey trade. (24) It means that the market won't be limited by air freight availability and open it up to more opportunities. (25) It will de-risk that market and get the product in safely and provide security of market access. (26) <p>Don't know (27)</p> <p>China Benefits</p> <ul style="list-style-type: none"> MSC is no benefit and is not widely recognised in China. (7) (10) (16) (17) (22) (24) (25) MSC benefits. (5) (9) (13) (18) (19) (21) There will be no gain in the short term but in the medium to long term China will look for more environmentally friendly certified products. (5) (24) (25) Initially not a lot but in the long term there is huge gain as MSC becomes more established and the Chinese become more affluent and westernised, it will impact on the Chinese market. (9) 95% of product goes into China and if it goes through open doors, MSC will add weight to potential purchases of the product and show that the fishery continues to be well managed. (13) Australian products going into China have a strong natural organic and sustainable appeal. (18) China has a growing middle class and is becoming increasingly aware of environmentally friendly products. (19) The Asian area has been slower to take up MSC but it is starting and will continue to expand. (21) The credibility of MSC will help build Australia's position for land products and as they trust us more, the Chinese will realise they will need to pay more for quality. (23) MSC won't have any specific benefits but giving the growing trend with MSC and that China has the largest amount of chain of custody certifications registered, then it could have more of an 	<p>the country through more legal pathways.</p> <p>There were 30% of respondents who were not informed enough to comment on the impact. In regards to the benefits of MSC with product going into China, it was not deemed to be very important as it is not widely recognised in that country.</p> <p>However it was envisaged that it will become more important in the longer term as China looks for more environmentally friendly certified products as the population becomes more affluent and westernised.</p>

QUERY	RESPONSE	SUMMARY
	<p>impact later. (26)</p> <ul style="list-style-type: none"> China is a long way behind at the moment, but they are expanding and MSC could well be valuable in the future. (27) 	
<p>9. What levels of interaction have you had with the MSC in the past 12 months?</p>	<p>None (3) (5) (6) (8) (9) (17)</p> <ul style="list-style-type: none"> A little interaction with MSC. (1) (11) (15) (2) (19) (23) Sit on the State Government MSC certification advisory panel for roll out of all fisheries. (1) Indirectly, I delivered a report with the main MSC consultant. (11) I occasionally talk with the MSC person based at the WAFIC office as I am also involved in other fisheries who are going through the certification. (15) Once a year as I have been involved in the annual audit process each year. (2) I have some level of engagement with MSC as a WAFIC Board member and I am also going through the certification process for my industry. (19) I went to a MSC lunch and have connections through WAFIC and receive the newsletter. (23) <p>Regular interaction (14) (16) (7) (21) (20) (22) (24) (25) (26) (27)</p> <ul style="list-style-type: none"> I speak regularly with the MSC auditor as we are both interested in sustainable food. (14) I have spoken with them on several occasions in regards to projects and products. (16) I communicate with MSC weekly as they set the standards and I do the auditing. (7) As I coordinate the process for DOF and WRLC, I deal with MSC regularly. (21) I have had significant involvement with MSC for submissions supporting industry going through the MSC process and work with the retailer to source MSC products. (20) Regular debate with New Zealand representatives as our fishery has rejected MSC as we don't want a third party to set our standards. (22) I communicate with them fortnightly about all fisheries, not just the WRL industry. (24) Monthly communication and involved in audits and pre-assessments. (25) Significant contact with MSC through projects. (26) (27) <p>Not applicable (12) (13)</p> <ul style="list-style-type: none"> I am a MSC employee. (4) I am required to be part of MSC but we don't have the resources to deal with it. (10) I only use as an end user to promote a premium sustainable product. It is important to chefs these days to serve food to customers with a clear conscience and MSC gives it a big tick. (18) 	<p>There are varying levels of engagement with MSC in the past 12 months from respondents who have had nothing to do with them right through to regular interaction.</p> <p>It appears that those who regularly communicate with MSC are industry representatives made up of management, conservationists and scientists.</p> <p>Whereas it appears the grass roots fishermen have not had any direct communication with MSC representatives, which could be attributed to a poorer understanding of the overall program.</p>

QUERY	RESPONSE	SUMMARY										
<p>10. Do you believe the industry should or should not renew the MSC certification in 2017?</p>	<p style="text-align: center;">Should the industry renew the MSC certification in 2017?</p>  <table border="1" data-bbox="1227 499 1346 671"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td>77%</td> </tr> <tr> <td>No</td> <td>4%</td> </tr> <tr> <td>Maybe</td> <td>11%</td> </tr> <tr> <td>No view</td> <td>8%</td> </tr> </tbody> </table> <p>Yes:</p> <p>Community acceptability</p> <ul style="list-style-type: none"> • MSC ensures management is deemed to be acceptable i.e. whale entanglement. It is not about market access and profits. (1) • It does set the framework for good environmental practice from an ecosystem perspective and the need to ensure that extraction is not having a wider impact on the ecosystem. (5) • The MSC label helps promote the concept of sustainable seafood to the public and they then understand the way the fishery is managed and that it is managed sustainably. However the eco-label is not widely recognised by the Australian public and it needs to be promoted to get the message out to people. (14) • To assure the local community that the fishery is sustainable and that it is a leader and it offers a premium product. (20) • It is world's best in terms of management practice for sustainable fisheries and puts the Western Rock Lobster fishery at the forefront. (21) 	Response	Percentage	Yes	77%	No	4%	Maybe	11%	No view	8%	<p>The industry convincingly agrees that they should renew the MSC certification in 2017. This is based on the community acceptability of MSC, the third party certification, the need to stay with MSC, market access and that it provides an insurance for the industry.</p> <p>Concern was raised that if the industry was to drop MSC – a recognised worldwide brand, questions will be asked and the sustainability of the industry severely questioned and its reputation damaged.</p> <p>Industry believes that they can't afford not to be certified in today's society and the effort has already been put into MSC and it is better the devil you know because the risks of not recertifying are far greater.</p> <p>It was also mentioned that it would be noticeable if the industry did not renew their MSC certification at a time when the State Government is encouraging other fisheries to sign up to MSC.</p>
Response	Percentage											
Yes	77%											
No	4%											
Maybe	11%											
No view	8%											

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> Given the current political and community environment, the cost is minor and the benefits are broad and protect the fishery going forward. (26) <p>Need to stay with MSC</p> <ul style="list-style-type: none"> There are far great benefits in terms of the costs associated with reaccreditation compared to dropping it now and reaccrediting down the track when market benefits are there. (2) Stay with MSC as the industry has spent the time and money on it already. (3) Crazy if the industry didn't stick with it as community will query the right to access and the management of the fishery. (4) It would be interesting if the rock lobster fishery opted out when other fisheries in the state are opting in. (5) It has come too far to let it go now. We would be mad to drop it. (6) It makes sense to retain it, the industry needs to keep holding up the banner and tell the story of the fishery. (9) We have to continue, sustainability is locked in even though the benefits are not there – the risks are far greater to not certify. (16) We can't drop it as people will think "what's wrong with the industry"? It is not a big cost to an industry worth \$300 million, we can't afford not to be certified and as the world is becoming more affluent it is questioning sustainability. (15) We need something as an industry and government won't allow us to have nothing. We will have to have something at a cost so we should stick with MSC, given the time the industry has put into it. MSC is recognised worldwide and better the devil you know. (17) If you don't stay with it, why not? There will be damage to the MSC brand and the rock lobster industry. MSC gives the confidence to use and promote products that have best management practices. The market is prepared to pay a premium for a product they can trust. (23) The perception on not having MSC certification is negative especially when dealing with environmental groups. Alaska pulled out and MSC became aggressive against that fishery. (24) If it was to be dropped, it would look bad and would be damaging internationally and politically if the fishery didn't renew. (26) Compared to 10 years ago, the fishery has come so far and has made so many improvements – it is now a smooth, easy process and there are no issues in the fishery. If they weren't to renew, it would do more damage to its reputation and how it is perceived than good and it could miss out on future benefits and as a critical mass (with other WA fisheries) they will start to see benefits. (27) <p>Third party certification</p> <ul style="list-style-type: none"> It is great as a third party check and it needs to be looked at as a whole quota per kg and include 	<p>Only one respondent answered no in that they see no real evidence that MSC added value to the industry and that the industry was already sustainable and didn't need to be propped up by MSC certification.</p>

QUERY	RESPONSE	SUMMARY
	<p>the recreational fishers too. (3)</p> <ul style="list-style-type: none"> MSC is truly third party and gold and the industry gets its bang for its buck. (9) The industry needs a variety of tools at its disposal in terms of fisheries management and third party certification is important as it is an insurance policy which is future proofing the industry. (19) <p>Insurance</p> <ul style="list-style-type: none"> It is an extremely cheap environmental and access insurance. (21) It offers an insurance policy against resource access issues. (9) It is a very valuable fishery and the costs associated with MSC are very small compared to the risks and it provides a great insurance for industry. (25) It is a great low cost insurance policy. (26) <p>Markets</p> <ul style="list-style-type: none"> MSC will allow for market diversity. (4) (20) Market premiums. (5) It could be a valuable marketing tool. (6) If the Chinese market was to collapse, then Europe would recognise the MSC product differentiation and premium. (9) To continue to assure market place and community that the fishery is sustainable and it remains as a premium product. (20) A lot of suppliers now have sustainability mandates (i.e. Coles, Woolworths, Ikea, Aldi) and this is where the fishery will benefit. The WA public are becoming more aware and there will be a tidal wave soon. (27) <p>Other</p> <ul style="list-style-type: none"> MSC has had benefits and while the fishermen may not see it, some recognition has helped in terms of allocations and catches for the stability of the fishery. (7) It gives all stakeholders confidence and improves the position of western rock lobster in the market place. (11) MSC maintains the continuance of good controls and governance. (13) <p>No</p> <ul style="list-style-type: none"> If a business case justifies the renewal then so be it. Personally I see no real evidence it has added any economic value to the WA industry. In terms of a social licence to operate, the WA industry are sophisticated and sustainably and environmentally aware anyway. I don't think they need to be propped up by MSC. MSC could have assisted but the WA government are more focused on productivity than protection. (22) 	

QUERY	RESPONSE	SUMMARY
	<p>Maybe</p> <ul style="list-style-type: none"> The industry needs to understand what other third party accreditation there is and determine if MSC is the best. Is there a better way? There needs to be a review of the best accreditation for the industry and what provides the best value. (8) I see the fishery as sustainable regardless of MSC certification. If it is stopped the fishery would not pillage the industry because it is well managed regardless. There are controls and balances that are set within the industry that are not going to change with or without MSC certification. (18) <p>No view</p> <ul style="list-style-type: none"> There needs to be a cost benefit and it needs to be explained to the industry. As a bank, we don't have a view except that if people invest a dollar, they need to make money from it. (12) 	
<p>11. Do you believe MSC certification is the appropriate standard to measure the industry?</p>	<p>Yes (1) (2) (3) (4) (5) (6) (7) (9) (14) (15) (16) (18) (19) (20) (21) (23) (24) (25) (26) (27)</p> <ul style="list-style-type: none"> It is the most widely recognised. (1) (27) Nothing else is as highly rated in the industry. (2) Brings the industry up to world's best practice. (4) No point changing. (15) Don't know of any others to compare it with. (6) (18) It is a standard and independent. (3) It is the only fishery standard that can capture details and specifics on the industry and it is third party. (7) MSC results in a quick response to some issues that impact on perception of public profile i.e. whale entanglement which is a very visible impact but unfortunately the less visible issues aren't dealt with as quickly or readily. (5) Two years ago MSC was still the most appropriate and a premium product. However we need to always keep our eyes and ears open for other systems that are robust. Every five years we need to analyse what's available and keep MSC on their toes. Is MSC the best vehicle? (9) It is the best standard available at the moment, there is nothing else that competes with it. It holds the fishery to a high standard but is the MSC benchmark high enough? Different organisations have different values but the same objectives of a sustainable fishery. (14) It is the only MSC certified system that is independent of the standard itself and the science based standards ensure the product is objectively certified. (20) It is a responsible fishery that follows FAO standards. (16) For now it is the best standard available. (19) It is the most robust, comprehensive and independent there is and the most widely accepted. (21) 	<p>MSC certification is viewed as the appropriate standard to measure the industry by two-thirds of the respondents. This is based on the program being widely recognised as an independent certification that a fishery is sustainable, responsible and meets environmental standards that are recognised worldwide.</p> <p>Industry is unaware of other standards that compare to MSC and that are third party accredited like MSC. While MSC is seen as the appropriate standard at the moment, there is the belief that industry needs to keep abreast of other systems that are robust in order to keep</p>

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> • MSC has been around a long time and people understand it – it highlights eating, farming and fishing sustainably with integrity. It is a good thing. (23) • It is the best environmental standard in the world but is it appropriate – it depends if the fishery starts to use the logo as part of their branding. (24) • In a review of all certification schemes available, MSC rated the highest and the best third party model available. (25) (27) • It is a world leading gold standard. (26) <p>No (8) (10) (17) (22)</p> <ul style="list-style-type: none"> • There are no others out there and industry needs to determine if they need it. There is a need for third party accreditation but we want to know it is the best. (8) • The appeals process is expensive and negligible and it doesn't hold much credibility with us. (10) • There are still some dubious decisions in regards to a sustainable fishery. Take for example 5-6 years ago the fishery nearly collapsed and given we had MSC is should have still been sustainable but on the ground it was far from it. (17) • I don't, sustainability is a given if the fishery is still in business they are sustainably managed. The challenge for the product to be traceable and aware of food safety and biosecurity issues (chain of custody) which requires a different set of standards. MSC is too focused on the catching sector. (22) <p>Others</p> <ul style="list-style-type: none"> • Without knowing what else is available, I am not sure. (13) • Industry should have a standard, the fishery is doing it and tracking it already regardless of another layer of oversight. Industry should have its own brand to demonstrate they are doing it right. (12) 	<p>MSC on their toes and to ensure that industry has the best certification.</p> <p>However some respondents are of the opinion that the rock lobster fishery was sustainable prior to MSC certification and that they need to move on from MSC as it is too focused on the catching sector, to encompass traceability through food safety and biosecurity.</p> <p>There is also some thought that the rock lobster industry needs to develop its own brand to demonstrate they are fishing sustainably.</p>
<p>12. Do you have any alternative suggestions for certification?</p>	<p>No (1) (2) (3) (4) (5) (7) (11) (13) (14)(15) (20) (21) (23) (24) (25) (26) (27)</p> <ul style="list-style-type: none"> • Others will still cost the same. (3) • There is no other reasonable process. (5) • It compliments the monitoring that Fisheries do as it is independent scientific monitoring. (11) • No others have the credibility in the market place. (14) • No intelligent reason to move away. (20) • I have looked at all the other schemes in the market place and none match the MSC by a long way. (21) 	<p>There appears to be no other alternative suggestions for certification aside from the WA rock lobster industry developing its own standard.</p> <p>MSC is an independent accreditation program that has established credibility in the market in which no one</p>

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> MSC is the best scheme and the WRL industry has no other choice as the government is pushing for other WA fisheries to become MSC certified. (24) <p>Develop own standard (6) (8) (17) (19) (22)</p> <ul style="list-style-type: none"> There is not much else out there, it would be good to have a future WA generic one for all fisheries and make it a WA sustainable brand through the department. (6) Not sure because I am not aware of what is out there but perhaps we could come up with one that is suited to the WRL industry and develop an Australian third party accreditation for crustaceans. (8) South Australia developed its own and that is the path I would like to take if we do move away from MSC and develop our own. (17) While MSC is a globally recognised gold standard, there is a need to develop an Australian standard, it doesn't have to have international credibility. (19) Australia needs to develop their own and the standards should be set and developed by industry and government. The catalyst for this move is related to an increase in requirements for traceability in food safety and biosecurity and as they emerge new standards will be developed and new certification requirements developed. MSC is too focused on the catching sector and needs to be replaced with a new system and processes gradually. (22) The WRL and the SRL industry need to be confident about setting their own standards and establish an identification to go with their product. Traceability of the product is important not to mention sustainability, which in today's world it is taken as a given.(22) <p>Other comments</p> <ul style="list-style-type: none"> Not really, you have to be very careful take a neutral stance on eco-labelling for fear of being burnt especially if fishermen continue to push the marine reserve agenda as the best way to protect marine environment from exploitive uses. (10) Other independent certifiers use the same standard as us, there is no need for any fishery to be certified by a third party if they are confident in the industry itself. I.e. Brand US. (16) <p>Other programs mentioned in interviews</p> <ul style="list-style-type: none"> Friend of the Sea WWF Scheme Brand US Alaskan Fisheries are branding their own product against the UN (FAO) standard which they are using as a marketing tool but it is not third party. (9) The Alaskan fishery were MSC certified and the government put it back to industry to pay, but they didn't see the benefits and didn't renew which created difficulty for MSC with a diminished brand. MSC paid for their own re-certification. MSC is a business, not only a player. (16) 	<p>scheme appears to be able to match.</p> <p>Given the limited availability of such schemes, it appears that some harvesters are keen to move away from MSC to create a WA sustainable brand that is more applicable to WA standards but still has international credibility.</p> <p>According to one respondent MSC is too focused on the catching sector hence in a few years it will need to be replaced with a new system and processes in which he supports the need for an industry developed standard that encompasses traceability in food safety and biosecurity.</p>

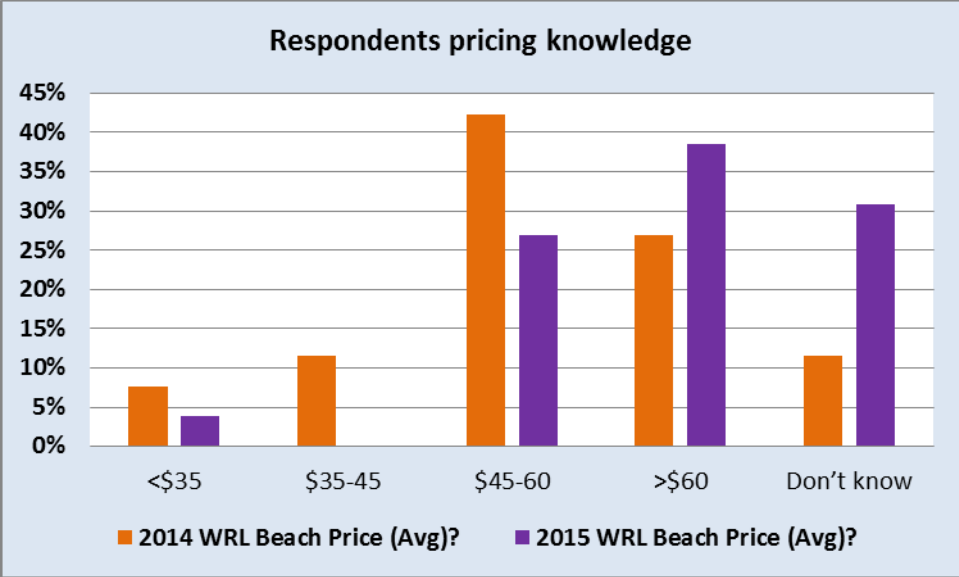
QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> NZ rock lobster industry uses another certified brand, Global Trust which has reduced cost and independent third party in Italy. (16) In the early days South Australia had their own label “clean and green” which sounded good but didn’t mean anything as it is not as high as MSC. (15) 	
<p>13. What do you believe would be the impact of not continuing MSC certification?</p>	<p>Questions asked if MSC not continued (1) (4) (7) (10) (14) (16) (18) (19) (23) (24) (25) (26) (27)</p> <ul style="list-style-type: none"> It would be a retrograde step if the industry didn’t renew as questions will be asked as to why the industry has lost it and that would have a far greater impact as it would be seen that MSC was taken away. (1) Community will ask questions as to why the industry has lost MSC certification. (4) It will leave questions as to why the state government is looking at certifying other fisheries, and create a false impression that the rock lobster industry is not sustainable or up to scratch to meet MSC standards. (7) The antennae would go up as to why the industry no longer qualifies. (10) It will be viewed negatively by the public if the industry pulls out of MSC. (14) There would be a backlash and questions asked in the public arena. (16) (23) Questions would be asked as to why the industry didn’t maintain it which will be immediate. (19) It would have a reputational impact if the industry was to pull out and questions asked as to why? (24) Why go backwards, the public will be suspicious that the industry is not sustainable and that they are pulling out because they can’t meet the standards. The pain you get from pulling out along with the bad publicity is not worth it. (25) It would be very damaging to the fishery’s reputation and image and it will come with great social risk in terms of the community trust and questions as to why MSC certification was not continued. Especially given that the WA government is currently investing in other fisheries, it would have a perverse outcome for our largest and most valuable fishery.(26) A loss of face as there will always be questions as to why they didn’t renew or if they failed to meet the standards which will be misinterpreted internationally and jeopardise the credibility of the industry. They have done the hard yards in the last 15 years and copped it, and they are now at a point where they can cruise long. The damage of dropping out would be far worse than the cost. (27) <p>Impact on markets</p> <ul style="list-style-type: none"> Won’t be able to access alternative markets like Europe. (6) (17) Potentially impact on ability to export to a range of markets. (5) (20) Risk of not being able to open up new markets or maintain current ones. (19) I don’t know if the market would look at it too kindly if there is no control or governance over the industry. (13) 	<p>The impact of not continuing MSC certification first and foremost would be the public scrutiny of why the industry is no longer certified?</p> <p>It will also create questions as to why the state government is looking at certifying other fisheries when the rock lobster industry withdraws from MSC certification. The public would assume the industry lost their MSC status and it would create a false impression that the rock lobster industry is no longer sustainable or environmentally responsible.</p> <p>Politically, if MSC certification wasn’t continued it would open the industry up to criticism around their fishing operations and a major environmental issue or a change in government could bring the industry down. On that basis industry agrees that there is a risk associated with not having MSC.</p> <p>Other impacts include the potential impact on the ability to access markets and the risk that environmental issues will</p>

QUERY	RESPONSE	SUMMARY
	<p>Prices</p> <ul style="list-style-type: none"> • It will have a negative impact on prices/ no price premium. (5) (14) (20) <p>Environmental issues</p> <ul style="list-style-type: none"> • Environmental issues will be neglected or ignored unless highlighted through the MSC approach. (5) • A slow loss of confidence in terms of industry not keeping an eye on the sustainability of the fishery or monitoring fish stocks hence more pressure on the Fisheries Department to care take the issue. (11) • The level of environmental performance will decline and undermine the value of the product and market access. (20) <p>Politically (1) (3) (2) (9) (10) (17) (21) (16) (24) (26)</p> <ul style="list-style-type: none"> • Industry will potentially be exposed to criticism around operations. (1) • It would result in more scrutiny of the industry from environmental organisations and the government. (2) • The industry will not be future proofed. (2) • Down the track, there will be no doubt be a situation where government want to increase the volume and there will be a conflict somewhere. Therefore without MSC there is no credibility to the argument. (3) • It would jeopardise the relationship between the fishery and government. (2) (10) • If there is a change in government (i.e. to the Greens) then the landscape i.e. marine parks and resource access will be up for debate and hence there is a risk associated with not having MSC. (9) • NGO's and the public would scrutinize the fishery more closely and they would be far more critical and vocal i.e. whale entanglement, sea lions etc. (21) • Risk of the green movement i.e. whales, sharks, birds, sea lion. It would only take one and the front page of a paper to bring down the industry if it is not recertified. It is dangerous to have nothing.(17) • Green groups will be asking for changes to the management of the industry – more marine parks and they will be putting political pressure on to reduce the quota. (16) • Environmental groups and government would have a greater ability to bear down on industry on issues like whale entanglement, stocks, marine park access etc. Hence they could lose access. MSC provides a level of protection to the industry. (24) • It would have significant political impact in WA and damage the reputation and image of the fishery. (26) <p>Other</p> <ul style="list-style-type: none"> • Industry will lose its own independence and self-determination. (11) • Nothing, no effect. (15) (18) 	<p>be neglected or ignored which could result in a loss of confidence in industry which will undermine the value of the product.</p>

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> • Not a lot in the first instance. (8) • Don't know, the only way to find out is not to renew it. Does the current market pay for it and does the current market require it? (12) • It would save the industry thousands in auditing and accreditation fees. In the end government will require something so industry might have to front up to the development of ESD standards. (22) 	
<p>14. What would be the cost to the industry of not continuing MSC certification?</p>	<p>Loss of community support and public image</p> <ul style="list-style-type: none"> • Loss of community support and recognition as a fishery that is managed to world's best practice for sustainability. (1) • I think it would cost the industry in its public image and it would go into firefighting mode with knee jerk reactions to issues. (21) • Loss of public and political perception. (7) • Risk of a perception cost. (14) • Loss of credibility. (16) • It could be high in order to buy back credibility whereas the industry should be building on credibility. (23) • The cost would be a lot of bad publicity as industry would no longer have a third party endorsement of its management actions. (25) • It will cost the fishery in terms of its reputation and image and the community will lose trust in it. (26) • The fishery would get a lot of grief from NGOs and other similar bodies who have left them alone because of MSC. (27) <p>Loss of right to social licence and resource access (9)</p> <ul style="list-style-type: none"> • No position of strength when negotiating ongoing access in terms of right to fish and access to marine parks. The costs will be worn by the government who will have to refute claims made by others. (2) • Potential loss of right to access resource is low risk. (4) • Loss of social licence to operate which could be significant and damaging. (20) • Risk of loss of access to the resource itself in the lobster. (19) <p>Loss of markets (3) (6) (7) (27)</p> <ul style="list-style-type: none"> • Lose potential new markets and access to current ones. (7) (9) • Risk losing market access for the product. (19) (20) • Might have a marketing crisis in a major international market if we discontinue our sustainability guarantee. (18) 	<p>The cost to industry of not continuing MSC certification would be loss of community support and public image along with the loss of the fishermen's right to social licence and resource access.</p> <p>Respondents believe there would be a loss of public and political perception in the recognition that the fishery is managed to world's best practice for sustainability. This in turn could result in the potential loss of the fishermen's social licence to operate, their right to fish and access marine parks, and the potential risk of loss of access to the resource.</p> <p>There could also be the associated risk of losing market access along with a reduced quota for fishermen which would therefore result in an erosion of the viability of the fishery.</p> <p>While it is hard to put a cost on it, the true cost would not be realised until faced with a damaging environmental issue</p>

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> The fishery may lose market access. (27) <p>Lose focus in terms of research and management support. (7)</p> <p>A reduced quota. (20)</p> <p>Financial loss</p> <ul style="list-style-type: none"> Impact on incomes as a whole and price and could see erosion of the viability of the fishery. (5) Potential loss of future earnings in market access. (9) Could be a price reduction. (13) Lose price premium. (20) There is not a measurable quantifiable cost. (26) <p>No comment. (11)</p> <p>No cost. (24)</p> <ul style="list-style-type: none"> There would be a cost saving on the costs associated with MSC accreditation hence there would be less costs. (24) <p>Not a lot in the first instance. (8)</p> <p>Hard to put a price on it. (3)</p> <p>Nothing. (10) (15) (17) (22) (24)</p> <ul style="list-style-type: none"> It may end up as a better conservation reserve system than it would have otherwise which the Council would see as a success and the fishermen as a failure. (10) It will cost nothing until the ___ hits the fan and we can't say that won't happen but if it is a big issue like whale entanglement, the industry could lose millions. (17) There is no evidence the industry has received any dollar value since it has carried the MSC label. (22) It wouldn't impact on the markets as MSC is not recognised and it would not change the price of the product as MSC does not translate into premiums. (24) 	<p>such as whale entanglement which in turn could cost the industry millions.</p>
<p>15. What would be the impact on the markets of not continuing MSC certification?</p>	<p>Loss of markets in the fishery (13) (18) (11) (23)</p> <ul style="list-style-type: none"> Impact in international markets that rate MSC highly. (18) It will impact on market access and market share if we back off on the level of certification. (11) Confusion, doubt and loss of potential markets. (23) <p>Very little impact on markets in the short term (1) (2) (4) (5) (8) (9) (15) (16) (21) (25) (27)</p> <ul style="list-style-type: none"> There won't be a big impact on markets at the moment but that is not always going to be the case. (2) 	<p>The impact on the markets on not continuing MSC certification according to the majority of respondents would be very little given that the majority of the product goes into China and MSC is not</p>

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> • The local domestic market, there may be some push back as to why the industry isn't continuing its certification and questions about its proof of sustainability. (4) • MSC and sustainability issues aren't important in China. (8) (16) • In the long term, it may have a dramatic effect if another certified lobster species comes onto the market. (9) • In the short term it would be minimal but in the longer term it could have an impact. (25) • It will leave the industry not as well positioned to respond to changing market needs in the future. (26) • Negligible at the moment as the product is not labelled or marketed as MSC, but it is becoming more of an issue and will change in the future. (27) <p>Nothing (3) (10) (17) (22) (24)</p> <ul style="list-style-type: none"> • They may play a bigger role in the future. (3) • If the Chinese economy falls away and other markets become more important then it would be a problem. (10) • The Chinese market where the 98% of the product currently goes does not look at MSC favourably over other products. (17) • China is not aware of MSC nor are any important markets in Europe or the USA. (22) • There is no evidence that MSC has a bearing in the Chinese market place or in the domestic market. (24) 	<p>recognised in the market place.</p> <p>However in the future and if the Chinese economy falls away and the industry moves to target other markets, it will impact on the availability of markets for the product.</p> <p>On the other hand some respondents believe in that not continuing MSC certification would result in the loss of international markets who rate MSC highly. It would also create confusion and doubt about the Western Rock Lobster industry not being environmentally sustainable.</p>

QUERY	RESPONSE	SUMMARY																		
<p>16. Can you please indicate the beach price received in 2014 and now in 2015?</p>	 <table border="1"> <caption>Respondents pricing knowledge</caption> <thead> <tr> <th>Price Category</th> <th>2014 WRL Beach Price (Avg?)</th> <th>2015 WRL Beach Price (Avg?)</th> </tr> </thead> <tbody> <tr> <td><\$35</td> <td>~8%</td> <td>~4%</td> </tr> <tr> <td>\$35-45</td> <td>~12%</td> <td>0%</td> </tr> <tr> <td>\$45-60</td> <td>~42%</td> <td>~27%</td> </tr> <tr> <td>>\$60</td> <td>~27%</td> <td>~38%</td> </tr> <tr> <td>Don't know</td> <td>~12%</td> <td>~31%</td> </tr> </tbody> </table>	Price Category	2014 WRL Beach Price (Avg?)	2015 WRL Beach Price (Avg?)	<\$35	~8%	~4%	\$35-45	~12%	0%	\$45-60	~42%	~27%	>\$60	~27%	~38%	Don't know	~12%	~31%	<p>Various sectors of the industry were unaware of the price including researchers/ auditor/ Marine Parks/ Marine Conservation and management.</p>
Price Category	2014 WRL Beach Price (Avg?)	2015 WRL Beach Price (Avg?)																		
<\$35	~8%	~4%																		
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Don't know	~12%	~31%																		
<p>17. Who should pay for future accreditation / certification?</p>	<p>Industry (harvesters/fishers) (1) (3) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (17) (18) (21) (25)</p> <ul style="list-style-type: none"> • They are reaping the rewards and better markets, the beneficiary should pay. (1) • Both commercial and recreational fishers as the price stops at them. (3) • Industry usually pays but there could potentially be some support from other sources, not necessarily government. (7) • Licence holder - \$200 each. (9) • The only one who can pay is industry, it is an industry good thing. (12) • Fishers if there is a price benefit or value to them. (14) • Fishermen will always say “not us” but it should be fishermen. (17) • End users ultimately pay. (18) • It should be those who benefit and who have the licence to fish. (25) <p>Fishers and Processors i.e. Co-ops (2) (4) (19) (24) (26)</p> <ul style="list-style-type: none"> • It should be those who benefit, in the short term the fishermen who have access to the resource and whose reputation is improved as a result and in the future, if branding has its benefits and translates into price premiums, then the processors as well. (24) <p>Industry and government (5) (20) (22) (23) (27)</p>	<p>The view was that fishermen/ harvesters should pay for the future funding of accreditation/ certification within the Western Rock Lobster industry.</p> <p>Most of the respondents, including fishermen themselves, were adamant they are the beneficiary and they are reaping the rewards.</p> <p>Interestingly there were also comments that the government should also share</p>																		

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> The fishermen should pay and the government as they need to support communities around the state and to also be seen to be maintaining the integrity of the fishery. (5) You need to look at what the benefits and costs are to determine if industry should have a capacity to get commercial benefit from it and demonstrate that the return to community is significant as well. The government also need to contribute to it along with other parts of the supply chain. (20) There is some merit in the cost being shared with industry and government on the basis that it enhances the reputation of the management of WA fisheries management. Who are the beneficiaries? (22) Industry driven with government assistance as the government has an interest and responsibility to maintain a healthy industry and small coastal communities. If the fishery is not viable, the communities will fold. (23) A cost sharing arrangement needs to be looked at with funding through government coffers and industry – fishermen and processors. It shouldn't just be the licence holders. The government, who support certification, should put money into MSC in kind through research and management advice through the resourcing of people and research. (27) <p>Government (16)</p> <ul style="list-style-type: none"> They are the greatest beneficiary. (16) 	<p>in the costs as they are also a beneficiary in that MSC enhances the reputation of the management of WA fisheries along with the integrity of the fishery and they also have a responsibility to ensure the viability of small coastal communities who rely on the rock lobster industry.</p>
<p>18. How could funds be raised?</p>	<p>Industry levy (1) (2) (3) (6) (9) (11) (12) (13) (15) (17) (18) (19) (21) (25) (27)</p> <ul style="list-style-type: none"> Levy on each pot/ per kg of total allowable catch (3) (9) (11) (13) (15) (17) (18) Not a fixed price but scaled. (11) For both commercial and recreational fishermen (3) If you worked out a rough cost – 63,000 pots at \$1.20 should cover it and it is not a great cost. (13) <p>Add on fee to fisheries licence as a line item (4) (8) (22)</p> <ul style="list-style-type: none"> It will hold fishermen to account and encourage them to take more interest in it. (8) <p>As a component of licence fees. Industry needs to have own level of setting mechanism but it is difficult to develop the legal structure around levies. (22) Government imposed levy (16) (13) (24) (26)</p> <ul style="list-style-type: none"> Contribution to government as an industry access fee for the fishery, which is the existing arrangement for fee collection. (24) Put in a federal marketing levy as not set up for state levy. It will allow 100% of the fee to be used as industry want it and to promote MSC as well and branding of product. (24) Government imposed levy on cents/unit. (26) 	<p>The funds should be raised through an industry levy that is scaled based on the number of pots or per kilogram of the fishermen's total allowable catch which would make the fee fair and equitable.</p> <p>Another thought was that the fee should be an add on fee to the fisheries licence which would hold fishermen to account and encourage them to take more interest in MSC.</p>

QUERY	RESPONSE	SUMMARY
	<p>Special purpose fee for MSC. (2) Quota allocation. (21) Annual payment. (2) Voluntary contribution. (4) Reduce beach price to cover costs. (12) Industry levy with government funding. (5) (23) Industry wide cost. (20) Funding bodies like Sustainable Fishers Fund or WWF who support some assessments in industry through a market fund. (7) No idea/ don't know. (10) (14) Other suggestions</p> <ul style="list-style-type: none"> • Fees collected by the Department of Fisheries. (9) • In the future the WRLC could administer and collect fees. (9) • WAFIC to collect and administrate fee. (20) • Industry need to sit down and work out a cost sharing arrangement between fishermen and processors. Government shouldn't pay as they have already helped industry start off. (26) 	
<p>19. How can the WRL industry best manage sustainability and risk into the future?</p>	<p>Maintain MSC (1) (7) (9) (13) (15) (16) (17) (19) (20) (21) (26) (27)</p> <ul style="list-style-type: none"> • MSC plays a large part in maintaining criticism along the way. (1) • MSC enables to fishery to refute claims to close the fishery and shows it is being actively managed. (2) • It has been regarded as a tool to manage risk for potential environmental attack. (7) • Meeting and consultations with MSC is just an audit and checks that we are doing it right i.e. not catching sea lions as it is all documented now through MSC. (15) • Keep MSC and refine the management plan in place to reflect changing community values. (16) • MSC is only one of the tools required to maintain a social licence to operate. (19) • MSC is a tool in de-risking the investment but it is not the only tool. (26) • The industry needs to continue to do what they are doing. MSC is a great thing as it has brought together all of the components – management, researchers, compliance and fishermen (professional and recreational) and opened up the dialogue and they need to continue to work together. (27) <p>Manage with the quota</p> <ul style="list-style-type: none"> • The quota is an insurance policy and you can change it if there is a threat to sustainability, it is a 	<p>The majority of respondents believe that the WRL industry can best manage sustainability and risk into the future by maintaining its MSC certification. It is seen as a tool to manage the risk of a potential environmental attack and necessary to maintain a social licence to operate.</p> <p>The industry can also continue to be managed via the quota which ensures the industry harvests conservatively and responsibly and it is viewed as</p>

QUERY	RESPONSE	SUMMARY
	<p>tool to control sustainability. (6)</p> <ul style="list-style-type: none"> • Move the quota system up and down in liaison with fishermen, peak bodies and the Department of Fisheries. (8) • Harvesting conservatively bullet proofs the industry to a certain point. (9) • Manage with quota and MSC. (17) <p>Research</p> <ul style="list-style-type: none"> • There is an opportunity for the fishery to fund research and development outside of the government organisation to become more proactive. The Fisheries Department has a mantra and some issues are not within their priorities. (5) • Government need to invest more into tracking of improvement of industry, then there would be more benefits if you can clearly show case the improvement on certain issues. (7) • Target focused investments in research not environmentally or production driven. There is a big concern about warming oceans and more robust methods are required to forecast the population. Puerulus settlement is not a reliable indicator. (11) • Industry needs to continue to act with regards to research. (13) • Stay actively engaged in research and aware of tools needed to maintain social licence to operate. (19) • By investing in good science (data collection and stock assessment) and setting TAC commercial catches from one season to next. The quota is a misnomer as a mechanism. (22) • Continue to invest in research. (24) • Conduct the annual risk assessment, which the industry currently does, and continue with the level of fishing which is conservative. Industry needs to stay one step ahead and support appropriate research. (25) <p>Promotion</p> <ul style="list-style-type: none"> • There is a need to sell the message better, industry can be as sustainable as they want but if the community doesn't believe you it makes it hard. The fishery has a long way to go with PR. Given the fishermen benefit the most, the fishery has to use a brand and brand itself as the first fishery to be certified. (9) <p>Other</p> <ul style="list-style-type: none"> • The fishery is going well at the moment. (3) • The fishery has been doing it for years already, they need to continue on. (12) (18) • Not really sure / can't comment. (4) (14) • The industry needs to continue to manage maximum economic yield and keep total allowable 	<p>an insurance policy. There is also an opportunity to provide the local market with more product to raise awareness of rock lobster and develop relationships with the hospitality industry.</p> <p>Given the industry concerns about the warming oceans and the need for more robust methods to forecast the population, further research is also high on the agenda to ensure the future sustainability of the industry.</p>

QUERY	RESPONSE	SUMMARY
	<p>catch conservative. There is a risk in how and where it markets products and there is a need to be more diverse. (2)</p> <ul style="list-style-type: none"> • It is necessary to have a strong peak body that actively engages with the fishery and the Department of Fisheries. (8) • The industry needs to make peace with the rest of the world and stop pretending they own the ocean. There needs to be a change of attitude to the rest of the population to be helpful. (10) • Proactive self-management is important and work more closely with the regulator. (19) • Industry needs to be united and embrace independent assessment such as MSC. (21) • I would like to see a certain percentage of rock lobster caught stay in WA, given it is the state's resource, and hence the supply into the local market increase and chefs can more readily access it. The industry needs to do more to look after the local market if they want support in tough times. (23) • A targeted education campaign in schools, TAFE, hospitality colleges, chefs etc. to explain the industry and how it works. It is important to sell the product and ensure that the hospitality industry is aware of it and how to cook it and they can assist in promotion and increasing sales in the local market. (23) • Continue to look at sustainability issues against the Ecological Sustainability Development (ESD) framework which ranks risks against sustainability and which MSC globally has adopted to review the fishery. (24) • Other tools, apart from MSC, include investing in market access, the economics and look at building the industry through risk assessment and environmental scanning. (26) 	
<p>20. Can you suggest the best ways to communicate MSC issues to the industry?</p>	<p>Industry body to communicate messages</p> <ul style="list-style-type: none"> • Needs to be peer driven communication by the WRLC or WAFIC as the fishermen don't trust the government. (1) (2) (17) • It needs to be through the industry association, it is the only strong communication pathway. (4) • MSC, as the third party accreditor, needs to work with the peak body to raise awareness within the community. (8) • WAFIC (24) • WAFIC and WRL (25) • WRLC and MSC (26) <p>Aim</p> <ul style="list-style-type: none"> • Need to promote MSC more as it hasn't got much of a public profile. (1) (2) (3) (6) (7) (9) (15) (17) (19) (20) (21) (27) 	<p>There was a strong sentiment that MSC lacks public awareness within Western Australia and therefore it is necessary to raise its public profile and increase the confidence associated with the MSC brand. The campaign should target the broader community, the local market, fishermen and the hospitality industry.</p>

QUERY	RESPONSE	SUMMARY
	<ul style="list-style-type: none"> • Raise public profile and increase confidence in MSC. (11) (13) • MSC is a less recognised brand in Australia and there is a role for MSC to educate the public. (19) • Educate fishermen. (20) • Educate the hospitality industry. (23) • Need to demonstrate that the industry is getting a return from MSC and invest in branding the product. (24) • There needs to be an education process about the protection of the brand and promotion. Industry and MSC need to look at how to optimise their return on investment through a communication strategy, end marketing strategy, market access strategy and through building community support. (26) <p>Target audience</p> <ul style="list-style-type: none"> • Community/ Public <ul style="list-style-type: none"> ▪ To give them the confidence the fishery is being managed responsibly. (8) • Local market <ul style="list-style-type: none"> ▪ If MSC product is sold locally, people don't know what it is so why would they look for it and pay extra. (15) ▪ The retail customer has no understanding of meaning of the weight of MSC. (18) • Fishermen <ul style="list-style-type: none"> ▪ Fishermen don't even know about MSC and the benefits which is the biggest issue with it. (17) ▪ There are a lot of fishermen disconnected from the MSC process. The grass roots need to be educated and asked of the best form of communication. (20) • Hospitality industry <ul style="list-style-type: none"> ▪ Chefs and TAFE are not across the industry or the benefits of MSC. Like the potato and pork campaigns, the rock lobster industry needs to do one to raise awareness and increase local sales. (23) <p>Message</p> <ul style="list-style-type: none"> • What MSC means and its benefits as fishermen see it as a chore. (1) • Promote how to do it, benefits and raise the profile of MSC. (2) (9) • Explain the upside of MSC. Fishermen are in the dark as to what benefits they are getting from it and they feel it is a money grab and they have been left on a deserted island. (6) • It needs to show a clear argument as to what the benefits are and data right across the board. This in turn will increase value of fishery, increase potential markets and increase understanding 	<p>Respondents believe it needs to be peer driven communication by the WRLC or WAFIC and that MSC, as a third party accreditor, should also be involved to raise awareness of its brand.</p> <p>The message should focus on what MSC means, the benefits, as cost benefit analysis, and data associated with showing that the fishery is well managed and what it means. This will in turn benefit the fishery and increase its value, increase potential markets and increase the understanding of environmental impacts.</p> <p>The messages need to be clearly targeted in terms of the form of communication used to address each sector. In regards to fishermen, they would appreciate more face to face contact and in respect to the community, articles in a variety of publications including good news stories.</p> <p>While the western rock lobster</p>

QUERY	RESPONSE	SUMMARY
	<p>of environmental impacts and benefit the fishery. (5)</p> <ul style="list-style-type: none"> • The Department of Fisheries needs to sell good news stories about fishermen doing a good job and that it is a sustainable industry, something they have neglected to do. (8) • Ensure that the public is aware that allowing rock lobster fishing in parks is safe and sustainable due to MSC certification and combine with positive images similar to the mining industry campaign as to what they do for the local community.(11) • Promote what MSC has done in the past and what it will do in the future and the benefits of it along with any positive news to show that the fishery is a well-managed industry. (13) • Interview with fishermen to measure the success of the program. (19) • Convert what we know is good to raise the profile of MSC within the Australian community in terms of social licence and community perspective. (20) • A cost benefit analysis targeted at fishermen. (11) <p>Forms of communication</p> <ul style="list-style-type: none"> • Publications – industry newsletters, magazines, newspaper articles. • Face to face workshops with MSC involved. • Industry meetings. • Websites – WAFIC and Department websites. • WAFIC visits. • Annual Management meetings. • Tap into MSC resources. MSC Liaison Officers. MSC representative in the field. MSC publication. • Emails. Social media. • Sustainable Seafood day. • An education campaign in hospitality colleges and schools about the industry, the benefits of MSC and promotion of the product. • Marketing campaign to promote rock lobster in the hospitality industry with a Chef sundowner with 100 top chefs and stakeholders in one room to promote product and MSC with speakers and targeted messages. 	<p>is in short supply in the WA local market and it is seen as a premium product, it is still important to educate the hospitality industry through a marketing campaign that will encourage them to utilise the resource and have a better understanding of MSC.</p>
<p>21. Do you have any other ideas or feedback you would like to contribute?</p>	<ul style="list-style-type: none"> • MSC also provides benefits to the recreational sector and they ride on the coat tails of the professionals as they share the resource which makes them sustainable too. (1) • There are only four processors of lobster and the Geraldton Co-op is the only one making money. If processors are only operating in WA lobster they appear to go broke unless they are processing other items as well. (3) • The cost involved to get a lobster into China - \$50 (beach price) plus \$10 (air freight) plus \$2 	

QUERY	RESPONSE	SUMMARY
	<p>(processing) plus allow for cost across border and mortality = \$80 (with \$25 in costs). (3)</p> <ul style="list-style-type: none"> • The domestic market currently takes a limited amount with 1500 tonne of imports. (3) • It is important that there is a full review of fishermen as to the best third party. • I have never had a view about MSC as it wasn't there when we started funding the industry, at the moment it is an expense but it is not clear what the benefits are. (12) • MSC is no advantage to us and Marine Parks are a waste of time. They are all being protected anyway with MSC so it should be ok. The whole coast is a marine park and is being sustainably harvested. (15) • MSC originated from an environmental NGO which was signed into a system endorsed by WWF. When the rock lobster industry faced exclusion issues in 2012-14, MSC had zero impact. It is a hard system to sell and has no tangible benefits other than its reputation. While the state government want it, the environmentally sustainable certification of fisheries is waning and has worked itself out. The focus now is on traceability in food safety and biosecurity. In 5 years' time, MSC will not be useful at all. (22) • Data is missing that shows there is a price premium for MSC, we need to investigate overseas examples. (24) • I support industry going through this reassessment analysis as it is good to determine the benefits and great to review if MSC is still the best scheme for the fishery to use. MSC is currently the best scheme but in 5 years' time it might not be, so it is good to always assess it.(26) 	

APPENDIX 1 – THE MSC PROGRAM

The Marine Stewardship Council (MSC) operates a certification and ecolabel program based on a scientifically robust standard for assessing whether wild-capture fisheries are ecologically sustainable and well managed.

The market incentives created by the existence and operation of the MSC program, and its uptake by major global buyers of seafood are at the core of how the MSC promotes positive change in the world's fisheries.



The MSC vision is of the world's oceans teeming with life, and seafood supplies safeguarded for this and future generations.

The program was founded in 1997 in a partnership between WWF and fish processor, Unilever, in response to the Newfoundland Grand Banks cod fishery collapse. It's now an independent, not-for-profit organisation based in London.

Its fishery certification program and seafood ecolabel recognise and reward sustainable fishing. Together with fisheries, seafood companies, scientists, fishery experts, conservation groups and the public, the MSC works to promote the best environmental choice in seafood and drive change.

MSC's mission is to use its ecolabel and fishery certification program to contribute to the health of the world's oceans by:

- Recognising and rewarding sustainable fishing practices;
- Influencing the choices people make when buying seafood; and
- Working with partners to ensure the seafood market remains sustainable.

MSC fisheries certification is open to all wild capture fisheries whatever their size, type or location. The MSC program does not include farmed fish, which is why the MSA ecolabel is only displayed on wild caught fish. Although certain enhanced fisheries are eligible.

MSC standards and certification requirement

The standards were developed through consultation with the fishing industry, scientists, conservation groups, experts and stakeholders. These standards detail the requirements for fisheries to be certified as sustainable and for businesses to trade in certified seafood.

Fisheries and seafood businesses voluntarily seek certification against the relevant standards. These standards meet international best practice guidelines for certification and ecolabelling.

These include:

- The MSC fisheries standard - the fisheries standard measures the sustainability of wild-capture fisheries. The standard is open to all fisheries, including those from the developing world.
- The MSC chain of custody standard - the chain of custody standard ensures that the MSC ecolabel is only displayed on seafood from an MSC certified sustainable fishery.
- Third party certification - to ensure that certification is credible and robust, assessment to our standards is carried out by independent, third party assessment bodies.
- Reviewing MSC standards - to ensure that our program remains fit for purpose, standards and certification requirements are reviewed periodically.

The MSC Fisheries Standard

The MSC Fisheries Standard is designed to assess if a fishery is well-managed and sustainable. It has been developed in consultation with the fishing industry, scientists and conservation groups. Only seafood from an MSC certified fishery can carry the MSC ecolabel.

Certification to the MSC Fisheries Standard is voluntary. It is open to all fisheries involved in the wild-capture of marine or freshwater organisms. This includes most types of fish and shellfish, of any size, type or location.

Each fishery must prove that it complies with the MSC's standard for sustainable fishing, which has three overarching principles:

1. Sustainable fish stocks: The fishing activity must be at a level which sustains the fish population. Certified fisheries must operate in a way that avoids over-exploitation so that fishing can continue indefinitely.
2. Minimizing environmental impact: Fishing operations should be managed so that the structure, productivity, function and diversity of the ecosystem on which the fishery depends is maintained.
3. Effective management: The fishery must meet all local, national and international laws and have a management system which can respond to changing circumstances while maintaining sustainability.

To determine if each principle is met, the MSC Fisheries Standard comprises 28 performance indicators. These are used by independent conformity assessment bodies to score the fishery.

The MSC Chain of Custody Standard

The MSC Chain of Custody Standard is a traceability and segregation standard that is applicable to the full supply chain from a certified fishery or farm to final sale. Each company in the supply chain handling or selling an MSC certified product must have a valid MSC Chain of Custody certificate. This assures consumers and seafood-buyers that MSC ecolabelled seafood comes from an independently assessed and certified as environmentally sustainable fishery with full traceability.

There are five key principles that every company must meet to achieve certification which include the following:

- Purchasing from a certified supplier.
- Certified products are identifiable.
- Certified products are segregated.
- Traceable and volumes are recorded.
- The organisation has a management system.

Businesses must be audited by independent certifiers to ensure that all requirements are met.

Third party certification

To maintain impartiality, MSC is operated by a third-party certification program which means that MSC itself does not assess fisheries or businesses or issue certificates. Certificates are issued by certifiers who are independently

accredited to perform assessments of fisheries and businesses against the standards.

To ensure the complete independence of MSC from the certification process a third organisation, Accreditation Services International GmbH (ASI), manages the accreditation of certifiers to conduct MSC assessments.

Third-party programs offer the highest level of assurance and ensure outcomes are unbiased:

- First party: An organisation, product or service meets standards it has set for itself.
- Second-party: It meets standards established by peers, for example by an industry association.
- Third-party ('certification'): An independent assessment shows that the organisation, product or service meets standards that have been established by impartial experts, often in consultation with stakeholders. A certificate is issued to prove that the standard has been met.

Operating a third party certification and ecolabelling program ensures that MSC is robust, credible and meets the highest benchmarks for credible certification and ecolabelling programs.

MSC offer the world's only seafood certification and ecolabelling program that is consistent with all of the following international norms:

- The Code of Conduct for Responsible Fishing (UN FAO).
- Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries (UN FAO).
- The Code of Good Practice for Setting Social and Environmental Standards (ISEAL).

Reviewing MSC standards

To ensure that the MSC program remains fit for purpose as the world's leading certification program of wild capture fisheries the MSC standards and scheme requirements are reviewed regularly to reflect new scientific understanding and industry practices. MSC works with fisheries, seafood companies, scientists, conservation groups and the public to ensure rigour and objectivity of its program.

MSC in the market place

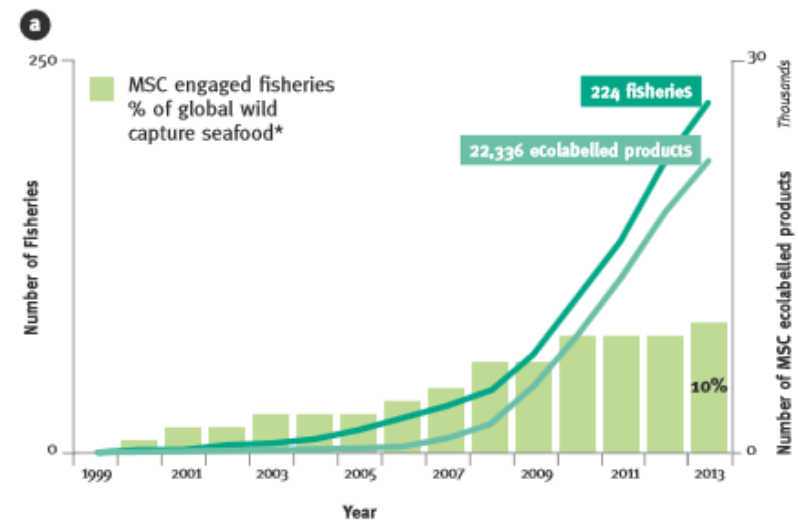
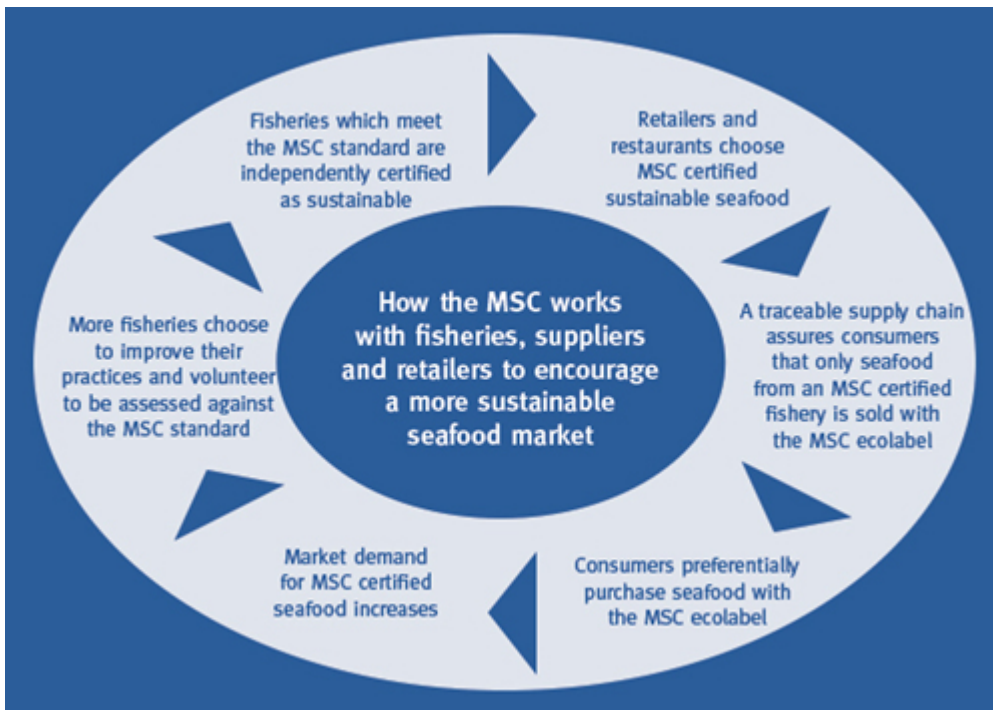
MSC-labelled seafood is traceable through the whole supply chain. When a product is sold with the MSC ecolabel, each business in the chain must have a Chain of Custody certificate, proving they have demonstrated to independent auditors that MSC certified fish comes from a certified supplier and is kept separate from non-MSC certified fish.

The MSC ecolabel is only applied to fish and seafood products that come from a MSC-certified fishery. Seafood products with the MSC's seal of approval are sold worldwide, and make it easy for consumers to identify fish and seafood from well-managed and sustainable fisheries. Consumers choosing fish with the blue MSC eco-label reward responsible fishing practices and contribute to a healthy marine environment.

Since MSC was founded in 1997 the momentum has seen the fishery and market engagement continue to drive real and lasting change in the way the oceans are fished as markets increasingly demand traceable and sustainable seafood choices.

There are now over 250 fisheries that have voluntarily entered into the program, another 100 fisheries are currently in assessment and about 45 are in confidential pre-assessment. More than 100 different species are certified through MSC.

Compared to five years ago, MSC has seen a 234% increase in certified fisheries and an 811% increase in ecolabelled products which reflects that MSC is playing an increasingly important role.



(a) Number of fisheries and ecolabelled products, and percentage of MSC engaged fishery tonnage in respect to Food Agriculture Organization landings estimates of wild capture seafood. *MSC engaged fisheries include certified, suspended and In assessment fisheries tonnages.

(Source: Marine Stewardship Council Global Impacts Summary report 2014.)

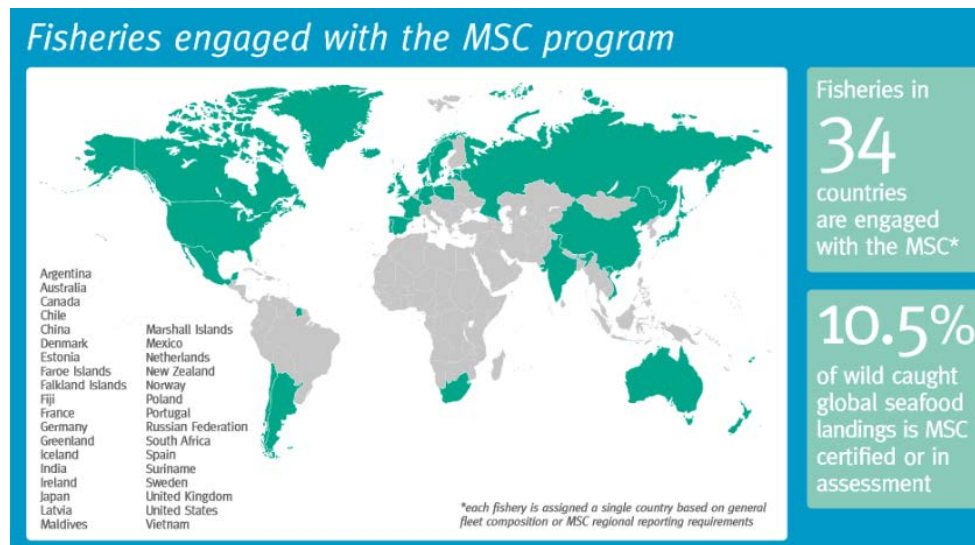
Global MSC position

A Global Impacts Summary report published by MSC in 2014 demonstrated that almost all fisheries in the MSC program make significant improvements to their operations.

Improvements are seen in target stock sustainability and management, as well as the impact of fisheries on non-target species and habitats.

Results show that MSC assisted with 575 completed improvements towards best practices across 125 fisheries with that expected to increase to 1,244 improvements by 2020.

The proportion of fisheries in the MSC program with stocks that are maintained at or above sustainable levels is increase from 80% in 2009 to 94% in 2013. Findings from the report show no certified fisheries caused serious or irreversible harm to ETP species, with 88% at or above best practice.



Source: Marine Stewardship Council Annual Report 2013/14

In regards to habitat and ecosystem impact, 82% of certified fisheries are operating at or above best practice which has increased from 71% in 2009 and means the proportion of fisheries with very low impacts has risen.

For the MSC program to work there has to be an economic case that rewards good practice and incentivises improvement, and an ecological case demonstrated by changes on the water, when needed, which is ultimately what it is all about. The engine for transformation is the market.

The evidence in support of this approach is increasing and is illustrated perfectly by the findings of a number of recent independent evaluations of the South African hake fishery. These studies indicate that the fishery was able to use certification to gain new export markets – now worth in excess of \$187 million – and secure the livelihoods of some 12,000 people. At the same time, improved fishing practices have led to a 90% decline in seabird mortalities and the preservation of natural refuges for hake.

Today's MSC accredited fisheries record catches of around 10 million metric tonnes of seafood which represents over 10% of the annual global harvest of wild capture fisheries that goes direct for human consumption.

Chain of Custody certification is held by companies in 66 countries and ecolabelled products are available in 102 countries, up from 41 and 79 respectively in 2010. This equates to more than 45% of countries globally that are selling MSC ecolabelled products.

The MSC's Chain of Custody program provides a high level of integrity and assurance related to labelling of seafood products. DNA testing conducted in 2013 from 15 different countries in 17 different species indicated 99% were found to be correctly labelled products.

On the demand side, there are over 25,000 products on sale around the world that bear the blue MSC eco-label, from prepared seafood meals to fresh fish from the seafood counter in over 100 countries. The market value of MSC-certified and ecolabelled seafood has grown to \$4.8 billion annually.

Major retail supporters around the world include Walmart, Whole Foods, Carrefour, Metro, ALDI, Lidl, Sainsbury's, Waitrose and Aeon. The use of MSC's consumer facing ecolabel is also expanding rapidly in food services. McDonald's, for example, now uses MSC's eco-label on all fish sold in their 22,000 restaurants in the USA, Canada and throughout Europe.

Since 2010 there has been an 11% increase in seafood consumers purchasing products carrying the MSC logo. An average 40% of seafood consumers across countries surveyed have purchased MSC products. The Food and Agriculture Organisation of the United Nations estimates that over 90% of global fish stocks are fully exploited – being fished as hard as they can be – or overfished. While there is no silver bullet to the global challenge of overfishing, a market-based program like the MSC has a part to play.

Australian MSC situation

Within Australia there are currently seven fisheries that are MSC certified and these include:

- Western Australian rock lobster fishery – the first fishery in the world to gain MSC certification in 2000.
- Spencer Gulf king prawn fishery (August 2011)
- Australian HIMI mackerel icefish fishery (March 2006)
- Australian HIMI toothfish fishery (March 2012)
- Northern Prawn fishery (November 2012)
- Macquarie Island toothfish fishery (May 2012)
- Lakes and Coorong Fisheries (June 2008, expired in March 2014, currently completing final stages of reassessment)

There are a further three fisheries currently in assessment which include the Walker Seafood Australia Albacore and Yellowfin tuna, swordfish and mahi mahi longline; Exmouth Gulf prawn fishery and Shark Bay prawn fishery. One third of all fisheries are now engaged in the MSC program.

In the supply chain 29 seafood companies are certified for Chain of Custody in Australia and they include Simplot, Kailis Bros, Geraldton Fishermen’s Co-op, Craig Mostyn and Co, Bayview Seafood, South Australian Prawn Co-operative Ltd,

Pacific West Foods, Indian Ocean Rock Lobster, Moreton Bay Seafood and Coorong Cockles. There are only three certified restaurants and cafes within Australia, the View Café at Taronga Zoo, Rockpool Bar and Grill in Melbourne and the Fish & Co Café in NSW.

There are now over 250 MSC certified products on Australian shelves. These products all bear the blue ecolabel and are available in the seafood sections of major retailers Woolworths, Coles and Aldi. They include recognised brands such as John West, Pacific West, Birds Eye, Tally’s, Sealord, Fish4Ever and Vital Choice, as well as Woolworth’s own Select brand, Aldi’s Ocean Rise brand and Coles’ private label. Both Coles and Woolworths have seafood sustainability policies that recognise the Marine Stewardship Council.

Woolworths has adopted a sustainable fish sourcing strategy with the long term goal of sourcing all of its seafood from sustainable sources. As part of this strategy Woolworths has introduced a number of MSC certified Select products including canned salmon and tuna and frozen battered fish and they are also working closely with the Sustainable Fisheries Partnership to ensure that where MSC certification is not available the company is able to source from alternative sustainably managed fisheries.

Coles is also providing customers with fish that has been sourced in an environmentally friendly, ethical way. In partnership with WWF, Coles is acting to preserve fish stocks with its commitment to source only responsibly harvested seafood products. They are also seeking to clearly label Coles brand seafood to enable consumers to make an informed choice. Coles is also working with the Marine Stewardship Council (MSC) to provide more Coles brand



seafood from certified sustainable fisheries and they are actively encouraging their major brand suppliers to assess their own sustainable seafood practices. In response to this customer feedback, Coles has committed to only selling responsibly harvested seafood by 2015.

Success stories taken from some of the Australian MSC certified fisheries in a 'Net benefits report' produced by MSC in 2009 are as follows:

- Lakes and Coorong fishery in South Australia – according to fishermen since achieving certification, reasonable returns have not been a problem. They believe they are commanding premiums of 30 to 50 per cent for produce carrying the MSC label because there are so few MSC-certified products in Australia.

They have also seen a substantial increase in demand, primarily from restaurants and hotels whose customers are suddenly demanding sustainable seafood. MSC certification has brought clear economic benefits to the fishery.

Fishermen say their fishery was well managed before and that they have constantly improved and modified their fishing practices over decades with only sustainability in mind. They knew that if fishermen are impacting on bycatch and juveniles, there is no future. What they lacked was quantitative data about these impacts: they needed someone on their boats to count the discards and the bycatch.

- Australian Mackerel icefish fishery of Heard and McDonald Islands – MSC has put mackerel icefish on the map according to the industry. The real gain of MSC certification has been in the area of greater scientific rigour, peer review and outside thinking on the science of stock assessment. It threw up some alternative approaches – other hypotheses to test the way the stock was managed – and that has been a useful process. It has added to the quality of the stock assessment they were doing with icefish.

Similarly, a condition requiring the fishery to assess the ecological risk of bottom trawling, including benthic impacts, spun off quite a bit of research. Meeting the gold standard is a way of saying to the world: fishermen think they are damn good, the fishery is in good hands and there are high levels of quality science and transparency in their day-to-day operations. It was something fishermen had to do.

Western Australian MSC situation

Western Australia is viewed as a world leader in fisheries management. In 2000, the Western Rock Lobster industry became the first in the world to attain Marine Stewardship Council (MSC) certification and the fishery was also the first to be re-certified for a third time.

In total there are three fisheries currently MSC certified in Western Australia which include the Western Rock Lobster industry, the Heard Island and McDonalds Islands mackerel ice fish fishery and the Heard Island and McDonalds Islands toothfish sector.

The Department of Fisheries, in partnership with the Western Australian Fishing Industry Council and with support from the State Government, has invested \$14.5 million over the next four years to have every WA wild-capture fishery assessed against the MSC standard.

The funding will cover application fees for wild-capture fisheries to undergo pre-assessment and the initial full assessment. It will also cover the initial audit for each fishery achieving full assessment. A portion of the pre-assessment funds will be available to assist with fishery improvement programs to help fisheries to transition through to full certification. This allocation will be available to leverage funding from other sources.

Western Australia selected the MSC program as they believe that the environmental standard is widely recognised as the most complete and comprehensive and that is already in use by a number of major retailers and fish processors.

MSC provides Western Australia with an opportunity to benchmark the status of all 47 commercial fisheries based on world's best practice. Almost all of the fisheries have now being pre-assessed with a vision to have every WA fishery to MSC standard within the next two decades.

The Shark Bay and Exmouth Gulf Prawn fisheries have also entered the full assessment process and recently the Mandurah commercial crab fisher's association announced they would collaborate with the recreational fishery, in a world first, to undergo MSC certification. Also the West Coast Deep Sea Crab Fishery has just announced it is entering into the MSC assessment.

Western Australia is a world leader in fisheries management and each year the Department of Fisheries publishes its Status of Fisheries report that delivers a scientific assessment on each fishery; last year's report concluded that 97% of WA Fisheries are sustainably managed. Of the remaining, management responses are in place or proposed to support stock recovery.

Western Rock Lobster industry benefits of MSC certification:

A paper prepared by MSC *Fisher's Stories – Net Benefits 2009* reported that MSC had resulted in a number of benefits for the WA rock lobster fishery:

- **Access to new markets, reduced tariffs and political influence:**
 - Major supermarket chains in Australia are now demanding MSC-labelled product which puts the fishery in a strong position.
 - MSC has also helped access European markets. The EU imposes a tariff on Australian seafood going into Europe and MSC certification was a very powerful tool in reducing it by half which offset some of the costs of certification.
 - Four months after the rock lobster industry became certified, the Australian government implemented its Environment Protection and Biodiversity Conservation (EPBC) Act 1999, requiring businesses to be audited and EPBC certified in order to export seafood. That act was modelled on the MSC standard and because the fishery were already MSC certified, they could get export certification.
 - Negotiations are underway whereby the WA Government will be accredited by the Commonwealth to undertake EPBC certification. This will result in significantly reduced costs to the WRL fishery but also other WA fisheries MSC Certified.
- **Reduced negative effects of global recession:**
 - In a global recession, rock lobster is not something people have to eat but MSC certification helps when targeting specialised boutique markets as they look for something to differentiate the product at a high price.
- **Helped with the long term management of the industry:**

As a result of their MSC certification the Western Australian rock lobster fishery has eliminated sea lion mortalities. At the time when the fishery was first certified in 2000, it was known that Australian sea lions bred in the areas where the fishery operates.

One threat to the sea lion population was their interaction with fishing gear, where juveniles could become entangled or trapped in lobster pots and traps. A condition of MSC certification was for the fishery to collect information about the number of sea lions and other bycatch interactions associated with their gear.

When the WARL fishery was re-assessed in 2006, the required data on sea lion mortalities had been collected and was estimated at 20 juveniles per year. A new condition was then applied for the implementation of management actions to reduce the risk of this fishery to the sea lions, with the aim of having zero mortalities. In addition, the condition required that any bycatch of sea lions be subject to a scientifically-robust monitoring system.

As a result of the conditions, the fishery introduced Sea Lion Excluder Devices (SLEDs), a modification to the pots and traps that blocks access by sea lions while still allowing lobsters to be caught.

The use of these devices was made mandatory in water less than 20m deep within a specified zone near a breeding colony. Video surveillance was used to monitor compliance and the effectiveness of this measure.

In 2008, the Australian sea lion population was assessed and designated as endangered by the *International Union for Conservation of Nature (IUCN)*.

Like all MSC certified operations, the WARL fishery undergoes yearly surveillance audits. By the third surveillance (2009), the use of video monitoring had identified a new area where juvenile sea lions were vulnerable to interaction with gear. As a consequence, another condition was added to make the use of SLEDs mandatory in this area as well.

The monitoring showed that these measures were successful in preventing sea lions from entering lobster traps. As a result, the conditions of MSC certification were closed in 2011. By the time of its second re-assessment in 2012, the monitoring data indicated that the fishery had reduced sea lion mortality to zero, and eliminated its unintended impacts on an endangered species.



To reduce the interaction of Australian sea lion pups with rock lobster pots, sea lion exclusion devices (SLEDs) have been fitted to pots.

APPENDIX 2 - CONSULTATION LIST

Christian	Surname	Title//Business	Role
Geoff	Adams	Rabobank	Finance
Peter	Bailey		Harvester
Lynda	Bellchambers	Department of Fisheries	Science
Russell	Blaikie		Chef
Heather	Brayford	Department of Fisheries	Public Policy
Rhys	Brown	Department of Fisheries	Management
Patrick	Caleo	Aust, NZ & Pacific	MSC
Nick	Caputi	Department of Fisheries	Science
Bruce	Cockman		Harvester
Kym	Coffey	Paspaley Pearls	Public Policy
John	Cole	Former Chair WAFIC	Harvester
Kim	Colero	President, Southern Zone Assoc	Harvester
Sabine	Daume	Scientific Certification Systems	Management
Nick	Dunlop	Conservation Council	NGO
Peter	Glass	Former Director	Harvester
Robbie	Glass	President Kalbarri PFA	Harvester
Don	Hancey	Food Ambassador	Chef
John	Harrison	former CEO WRLC	Public Policy
Tom	Hatton	Marine Parks and Reserve	Public Policy
Patrick	Hone	Fisheries R&DC	Public Policy





Christian	Surname	Title//Business	Role
Wayne	Hosking	Geraldton Fishermen's Co-op	Processor
Glenn	Hyndes	Edith Cowan University	Science
George	Kailis	MG Kailis Group of Companies	Public Policy
Jo Anne	Kennedy	Department of Fisheries	Management
Guy	Leyland	WACIG	MSC policy
Tooni	Mahato	Aust Marine Conservation Society	NGO
Joanne	McCrae	WWF	NGO
Ross	McGregor	Indian Ocean Rock Lobster	Processor
Steve	McLeary		Harvester
Shane	Mills	ANZ	Finance
Gary	Morgan	Southern Rock Lobster Limited	Management
Terry	Mouchemore	President Geraldton PFA	Harvester
James	Paratore		Harvester
Ben	Patton	Ocean Phoenix	Trader
Paul	Pollard	Bankwest	Finance
Andrew	Rowland	RecFishWest	Recreational
Colin	Suckling		Harvester
Daryl	Sykes	NZ Rock Lobster Industry Council	NZ Assoc
Trevor	Whittington	CoS - Minister for Fisheries	Public Policy
Linda	Williams	WRLC Chair	Harvester



The Restaurant and Caterers group chain of custody program
for sustainable seafood.

the opportunity

What we have:

-  A growing number of certified sustainable fisheries.
-  An established and growing MSC certified supply chain
-  MSC ecolabelling program to identify sustainable seafood
-  Consumers who will purchase Sustainable fish if we can make it easier to find (LOHAS market)

What we don't have:

-  A program to reach consumers through the restaurants



barriers to certification

 Knowledge /expertise

 Time

 Cost

 Value proposition

trac group program

Trac group coc program is the simplest and most cost effective way for restaurant and catering businesses to track their seafood and display the ASC™ and MSC™ ecolabels on their sustainable seafood **and responsibly farmed fish.**



trac group removes barriers

Knowledge	<p>A trac group manager is a CoC expert and will provide advice and support on call to achieve and maintain certification including:</p> <ul style="list-style-type: none">🐟 All training, internal compliance and external audits.🐟 Managing all updates and changes to CoC standards.🐟 Support with promoting your certified seafood.
Time	<ul style="list-style-type: none">🐟 The trac group program includes all procedures, training tools and checklists to track certified seafood.🐟 We manage the entire external audit and ongoing compliance, so businesses can get on with business.
Cost	<ul style="list-style-type: none">🐟 Many businesses in one group bring cost efficiencies which will reduce certification costs between 30 and 50%
Value	<ul style="list-style-type: none">🐟 A marketing program to promote your business, attract customers, communicate the benefits of MSC certified fish and elevate trust in your brand.



fees to join (MSC and ASC)

Single Certificate

	Initial #	Annual#
Audit fee	\$2,000	\$2,000
MSC Licence ⁺	\$ 360	\$ 360
ASC Licence ⁺	\$ 360	\$ 360
Total	\$2,720	\$2,720

Group Certificate

	Initial#	Annual#
One Total Fee*	\$1,760	\$1,360

Saving 35% Saving 50%

Notes:

Currency is Australian dollars.

+ Licence fee is USD \$250 converted to AUD @ 0.7 USD

* One all inclusive fee excludes gst and is based on a minimum of 20 group members.



fees to join (MSC only)

Single Certificate

	Initial #	Annual#
Audit fee	\$2,000	\$2,000
MSC Licence ⁺	\$ 360	\$ 360
Total	\$2,360	\$2,360

Group Certificate

	Initial#	Annual#
One Total Fee*	\$1,620	\$1,220

Saving 32% Saving 48%

Notes:

Currency is Australian dollars.

+ Licence fee is USD \$250 converted to AUD @ 0.7 USD

* One all inclusive fee excludes gst and is based on a minimum of 20 group members.



marketing program

- 🐟 Website dedicated to promoting trac group members.
 - 🐟 Search function to find MSC certified restaurants
 - 🐟 Menu's to promote MSC certified fish
 - 🐟 Information about the certified fisheries and supply chain to plate
- 🐟 Inbound marketing campaign
 - 🐟 Social media
 - 🐟 Google adword campaign
 - 🐟 Content marketing
- 🐟 In-store signage



marketing program costs

-  Website dedicated to promoting trac group members.

	Year 1	Year 2
Website development	\$18,000	\$6,000
Inbound Marketing	\$14,000	\$16,000
In store signage	\$10,000	\$10,000
Subsidy to CoC certification	\$8,000	\$8,000
Total	\$50,000	\$40,000

funding

- 🐟 Sponsors (4 producers/wholesalers)
- 🐟 MSC
- 🐟 WAFIC.

reduction of certification costs

- 🐟 \$8,000 from finding will reduce costs per site a further 20% as follows:
 - 🐟 Initial evaluation to \$1,220 and
 - 🐟 surveillance to \$900



what you get

- 🐟 A simple, compliant Chain of Custody (CoC) system tailored for restaurants.
- 🐟 A CoC expert to manage certification, provide advice and ongoing support.
- 🐟 Access to chain of custody procedures, training materials and checklists tailored for restaurants to ensure compliance of all records to MSC standards.
- 🐟 Initial on site audit and training and annual desk audits of all sites.
- 🐟 The trac website portal to download and upload resources and records.
- 🐟 External audits of the system and a group CoC Certificate.
- 🐟 Licence to use the MSC and ASC ecolabels for promotion and menus.
- 🐟 Listing on the MSC web site
- 🐟 Dedicated consumer website and inbound marketing campaign
- 🐟 Participation in Sustainable Seafood Day event
- 🐟 Access to MSC marketing materials and in store signage



trac management

- 🐟 The trac group certification is owned and managed by Green Marketing Concepts (GMC).
- 🐟 GMC manages all program costs including certification fees and licence fee's. (excludes any travel related costs to member sites for initial audit & training)
- 🐟 Member fees are 'all inclusive' and paid annually.
- 🐟 Group members have a contract with GMC to participate in the group and operate according to the program rules.
- 🐟 Members will provide data to trac group manager on annual purchase value of certified fish which, will be kept confidential, aggregated provided to MSC and ASC for calculating licence fees.
- 🐟 Members can leave at any stage with no penalties for leaving group scheme.
- 🐟 GMC coordinates marketing program



Understanding & Activating Seafood Consumers – Europe

MSC & GlobeScan, 9 October 2018

GLOBE SCAN



Today's agenda

- **Welcome**
- **Overview of key consumer trends**
- **Update on European activities**
- **Q/A**
- **Close**



Abbie Curtis O'Reilly
Associate Director, GlobeScan



Camiel Derichs
Regional Director, Europe, MSC



Richard Stobart
Head of Marketing, MSC

Introduction to MSC Consumer Insights for Europe 2018

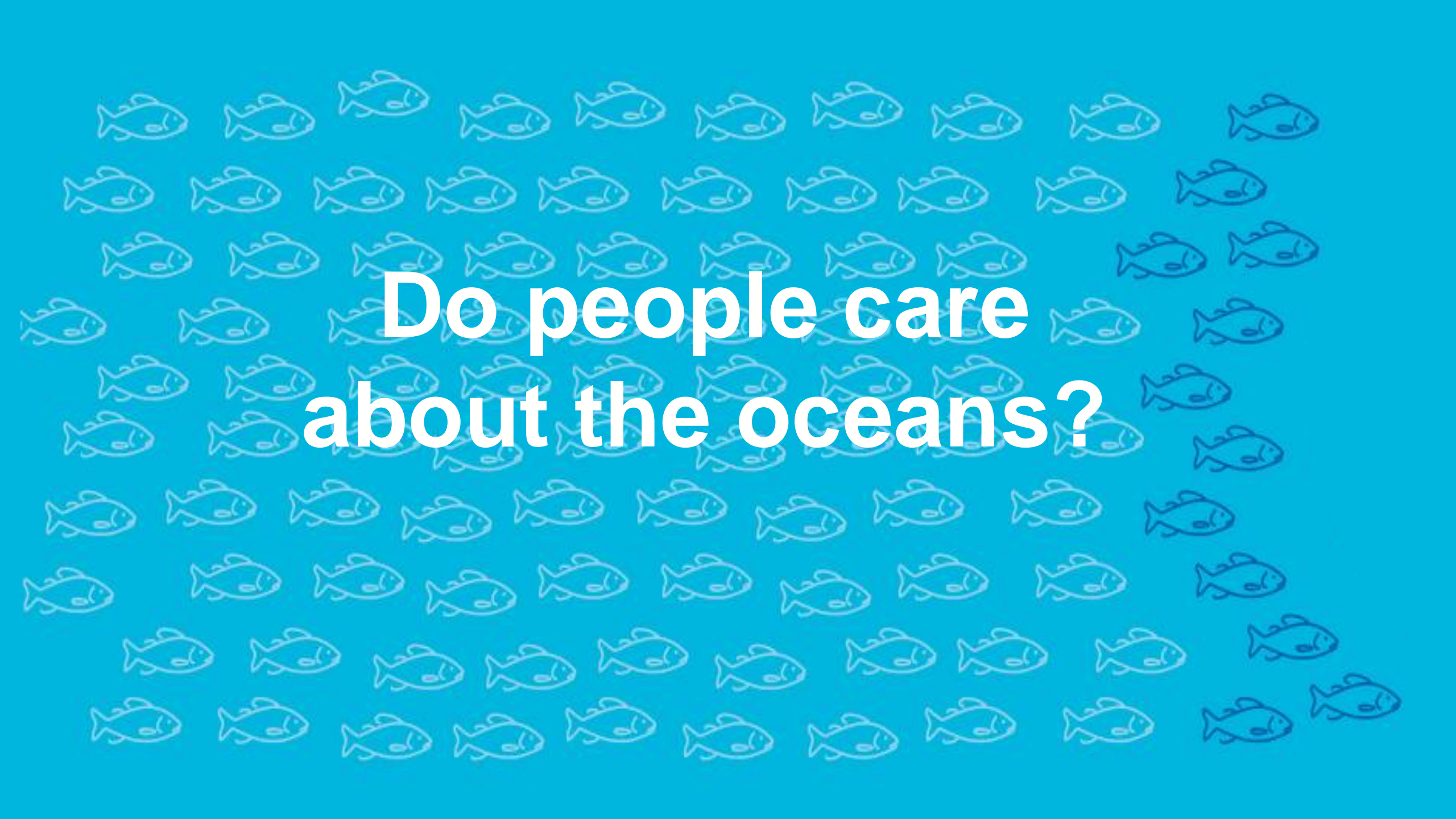


Austria
Belgium
Denmark
Finland
France
Germany
Italy

Netherlands
Norway
Poland
Spain
Sweden
Switzerland
United Kingdom

	Type of consumer	Sample
	General public	$n=15,278$
	Seafood consumers	$n=11,132$

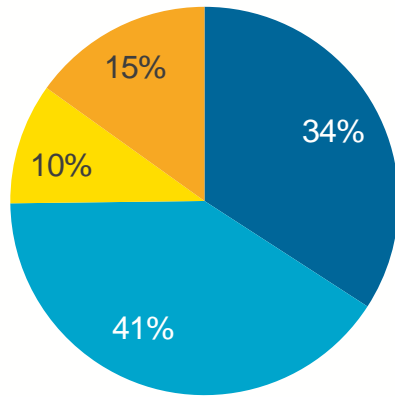
- Do people care about the oceans?
- Are people acting on their values?
- How do we trigger action?
- How MSC and partners engage consumers

The background of the slide is a solid blue color. It is covered with a repeating pattern of white, stylized fish outlines. The fish are arranged in a grid-like fashion, with some rows being more densely packed than others, creating a sense of movement and depth. The fish are simple line drawings, showing the basic shape of a fish with fins and a tail.

**Do people care
about the oceans?**

A third of consumers are self-declared seafood lovers; seafood love varies by country but increases closer to the coast

Love of seafood, 21-country average

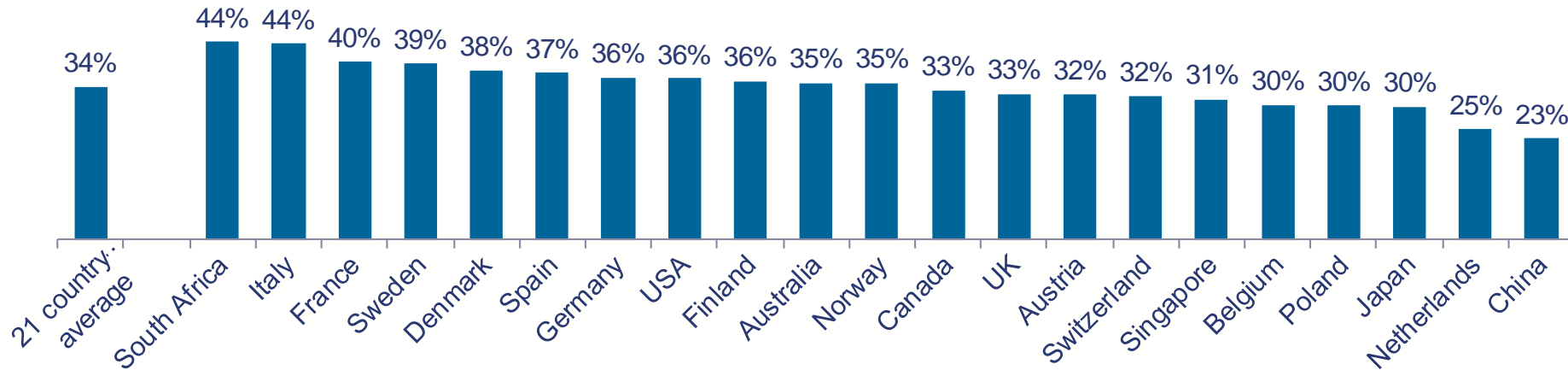


- Really like eating fish/seafood
- Like eating fish/seafood
- Neither like or dislike
- Dislike/really dislike eating fish/seafood / not purchased



Seafood lovers

Love of seafood (“really like”), by country



Base: General public, global, $n=25,810$

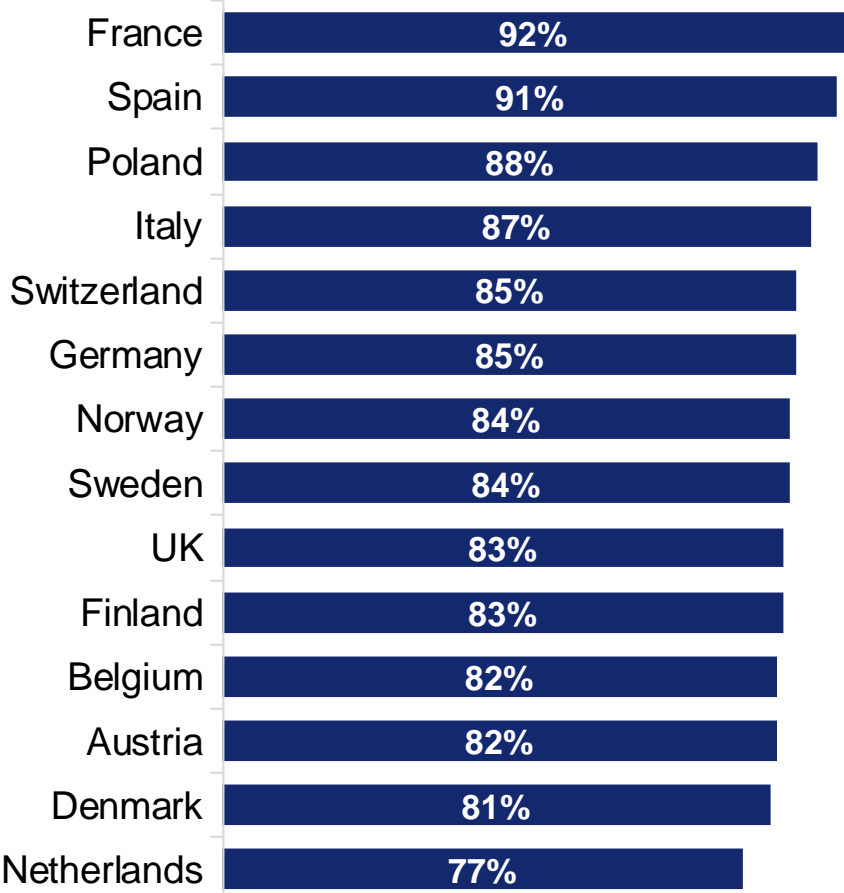
Q2.7: How much would you say you personally enjoy eating fish and other seafood?

A large majority of consumers agree that we need to protect fish so our children and grandchildren can continue to enjoy seafood

Describes opinion well, top three (5+6+7 on 7-pt scale)



Total agree, by country

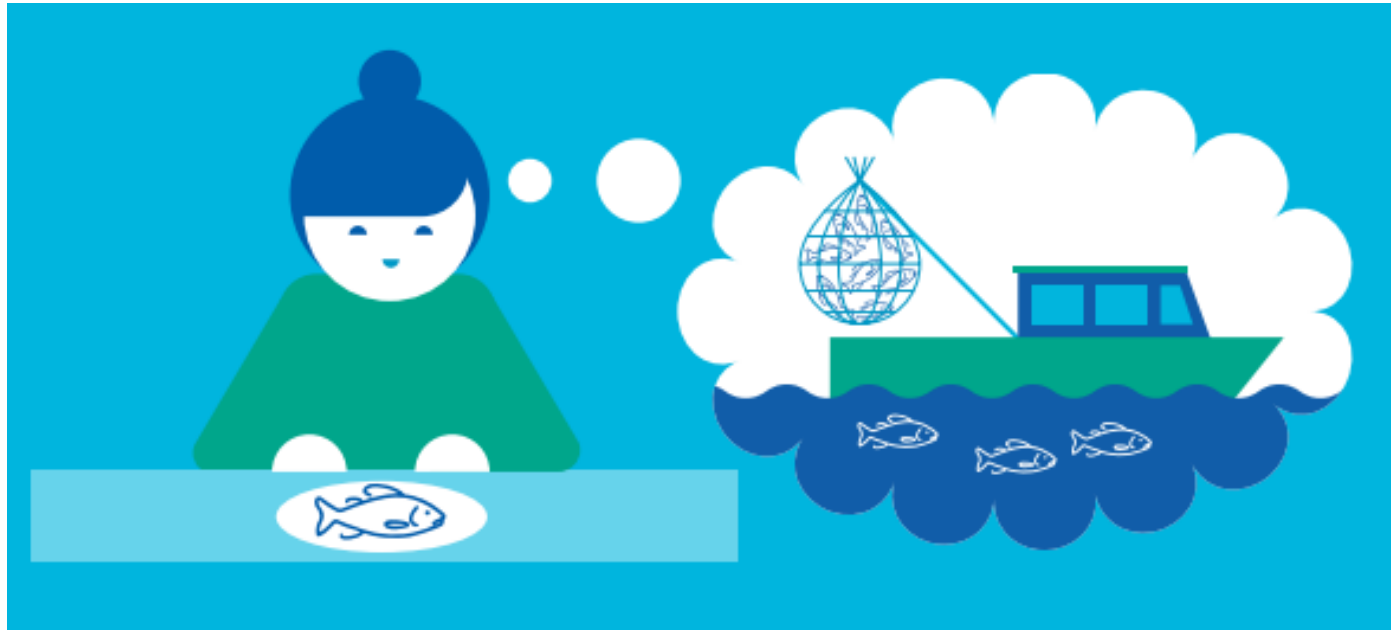


Base: Seafood consumers, Europe n=11,132
Q5.1: How well does each of the following statements describe your opinion? 7-pt scale:
1 = "Does not describe my opinion very well," 7 = "Describes my opinion very well"

Are people acting on their values?

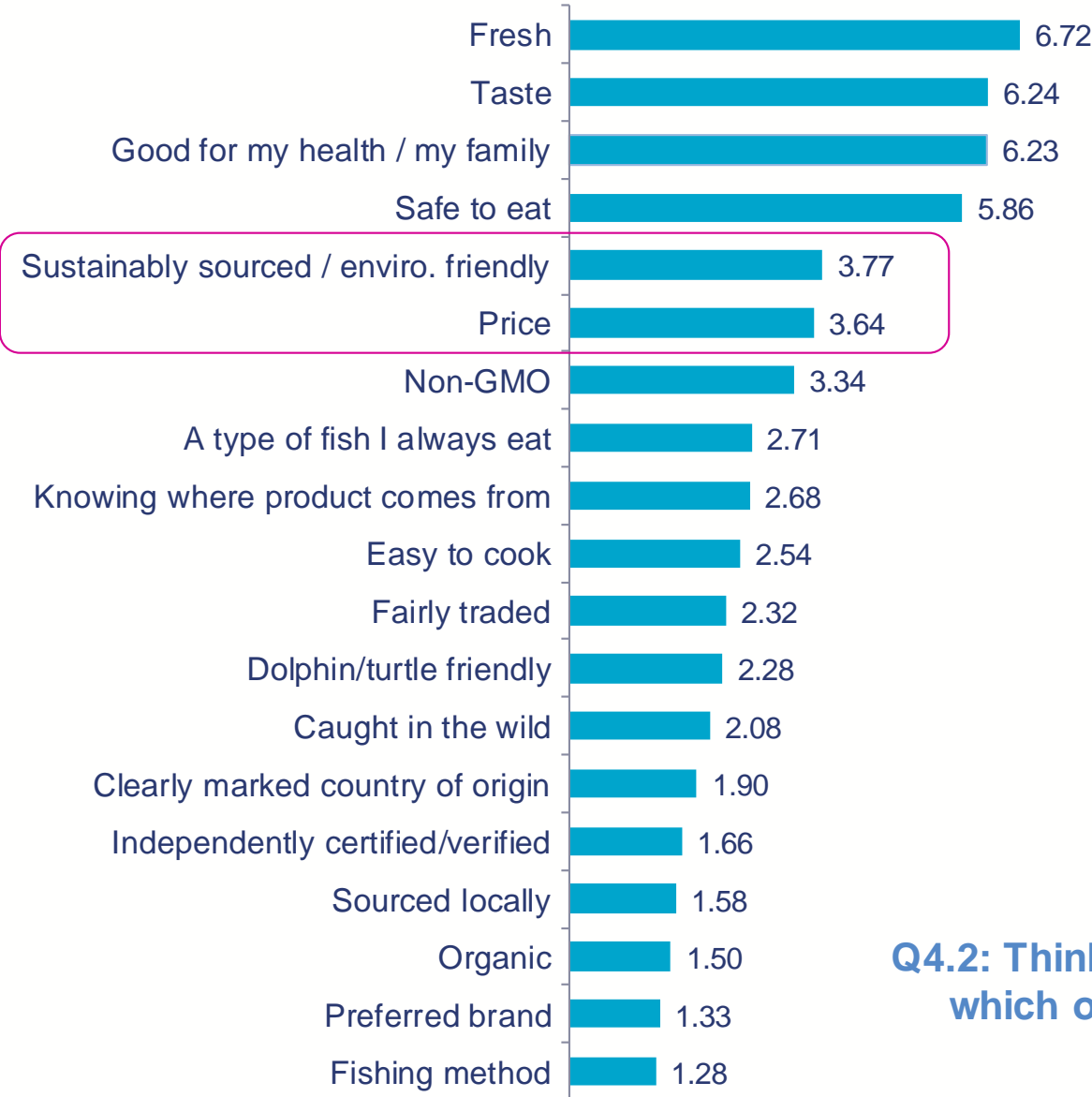


What motivates consumers when purchasing fish and seafood?



Fresh
Preferred brand
Price
Safe to eat
Taste
Easy to cook
Good for health
A type of fish I've always eaten
Caught in the wild
Dolphin/turtle friendly
Organic
Fairly traded
Fishing method
Sustainably sourced
Independently certified/verified
Is not GMO
Clearly marked country of origin
Sourced locally
Knowing where the product originally comes from

Sustainably sourced and environmentally friendly is ranked just slightly above price as a purchase motivator – unique to Europe



Base: Seafood consumers, Europe, $n=11,132$
Q4.2: Thinking about your recent purchase of “[fish product purchased],” which of the following five considerations was the most important and which was the least important?

How do we trigger action?



Educate

Equip

Excite

Engage

Educate

Raise awareness of the issues

Equip

Provide easy solutions:
accessible, sustainable seafood

Excite

Positive vision and personal
benefits

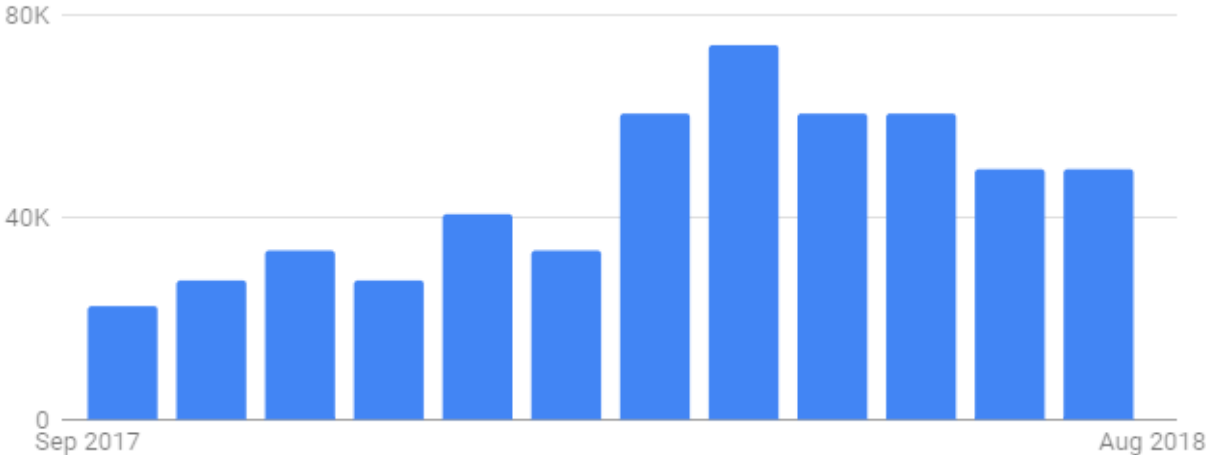
Engage

Create a movement, using
inspiring storytelling

Blue Planet II has been a success across Europe

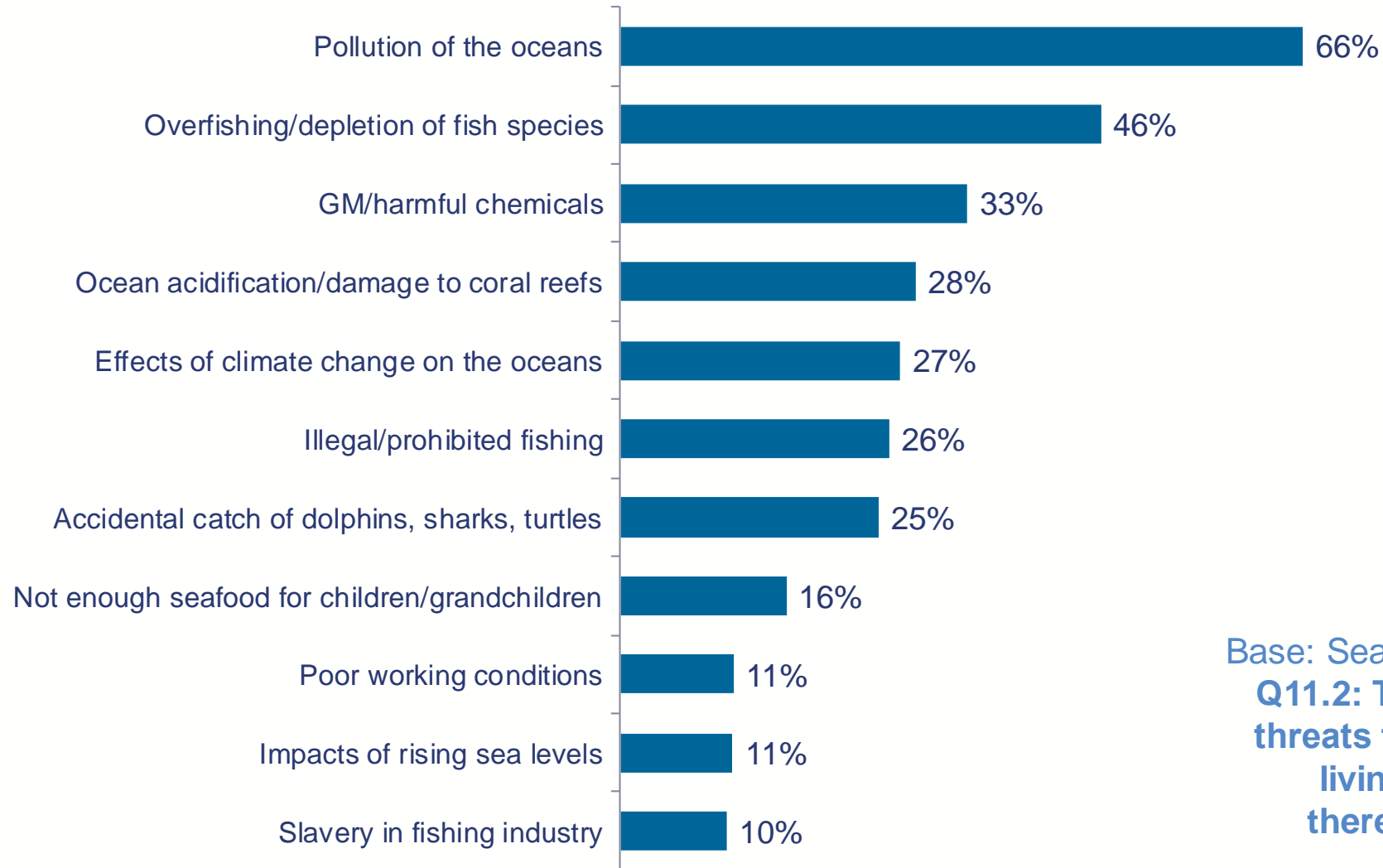


Google search volume: 'plastic in oceans'



Pollution of the oceans is the most concerning ocean issue for consumers, followed by overfishing

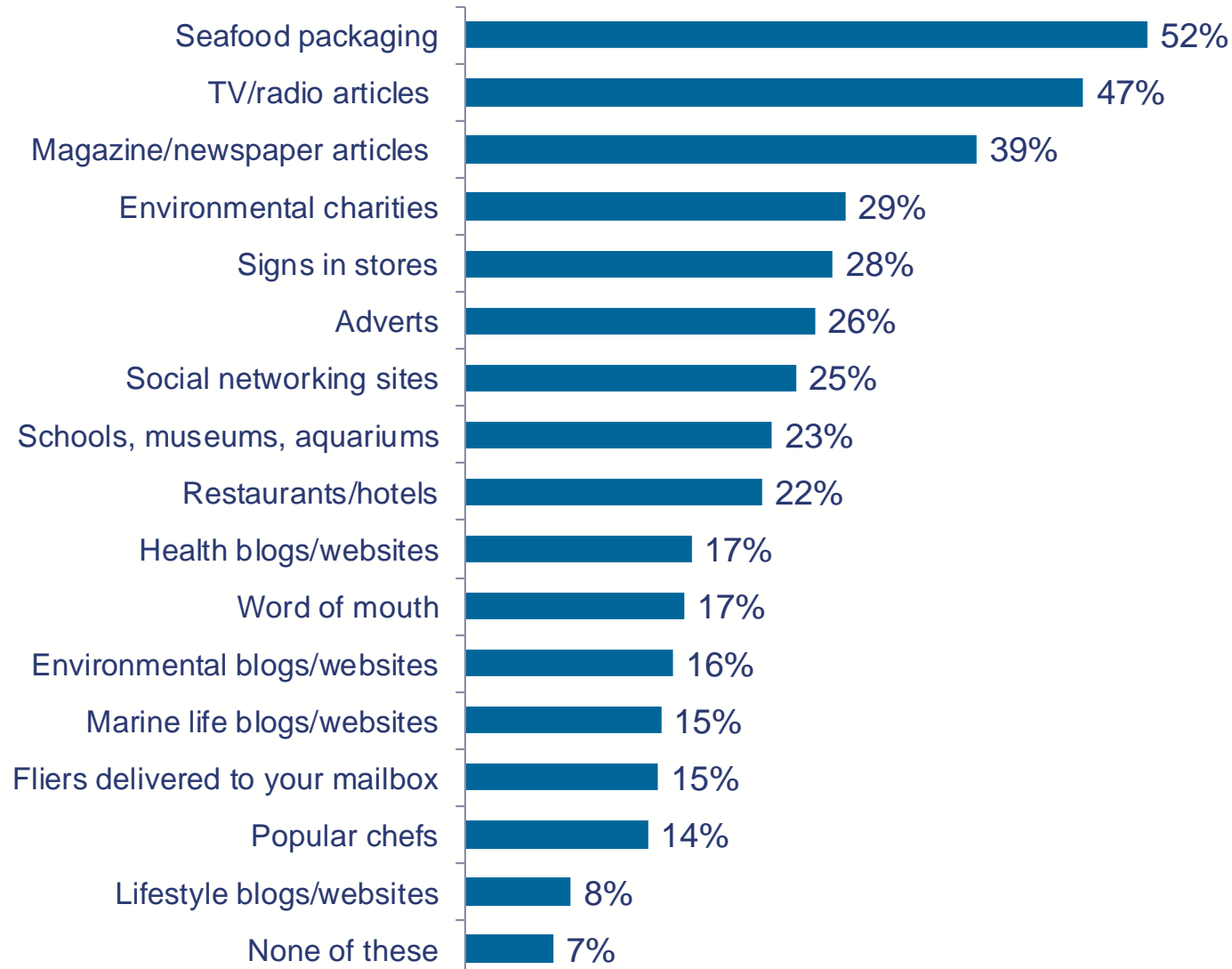
Most concerning issues; percentage choosing each issue in top three



Base: Seafood consumers, Europe, $n=11,132$
Q11.2: There are many different potential threats to the world's oceans, the wildlife living there and the people who work there. Which of these potential issues worries you the most?

Seafood consumers are keen to find out more about sustainable seafood from product packaging

Percentage choosing each channel (multiple select)



Base: Seafood consumers, Europe,
n=10,677

Q13: How would you like to find out more about sustainable fish and seafood?

Educate

Raise awareness of the issues

Equip

Provide easy solutions:
accessible, sustainable seafood

Excite

Positive vision and personal
benefits

Engage

Create a movement, using
inspiring storytelling

General opinion is also very favourable toward independent labelling

Describes opinion well, top three (5+6+7 on 7-pt scale)



Base: Seafood consumers, Europe $n=11,132$

Q5.1: How well does each of the following statements describe your opinion? 7-pt scale:

1 = "Does not describe my opinion very well," 7 = "Describes my opinion very well"

Visibility of ecolabels is significantly higher than in other regions of the world but there is still a gap between demand and visibility

Describes opinion well, top three (5+6+7 on 7-pt scale)

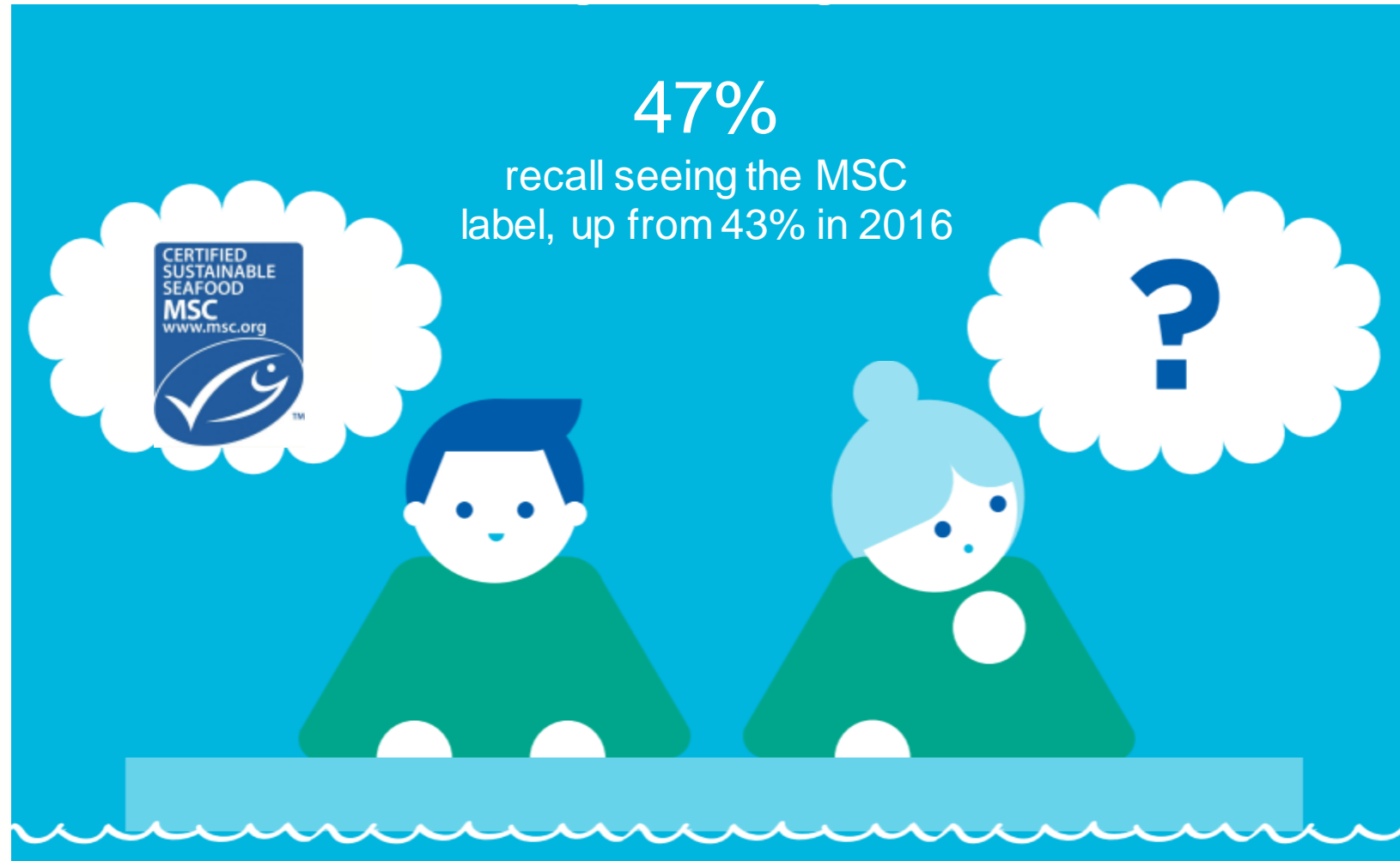


Base: Seafood consumers, Europe $n=11,132$

Q5.1: How well does each of the following statements describe your opinion? 7-pt scale:
1 = "Does not describe my opinion very well," 7 = "Describes my opinion very well"

MSC awareness levels have seen an increase in Europe

Awareness of the MSC label “often” or “occasionally”

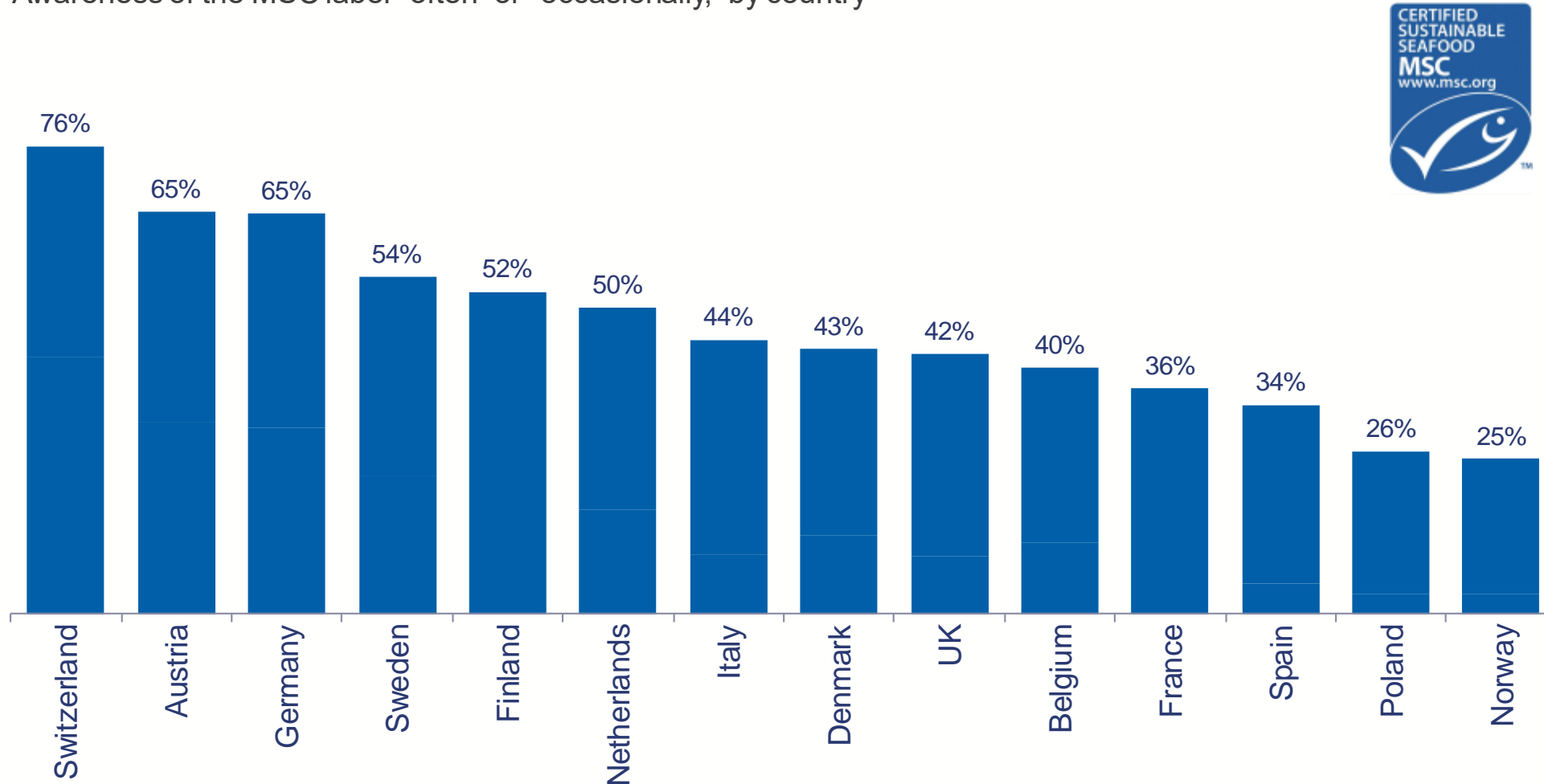


Base: General public, Europe, $n=15,278$

Q1.1: Have you ever seen the following logos?

MSC awareness is strong in Europe, with the highest levels of awareness seen in Switzerland, Austria and Germany

Awareness of the MSC label “often” or “occasionally,” by country



Base: General public, by country
Q1.1: Have you ever seen the following logos?

Trust in the MSC label is high, and understanding of the label is very strong compared to other regions

Trust in the MSC label (5+6+7 on 7-pt scale) and spontaneous understanding of the label (unprompted)



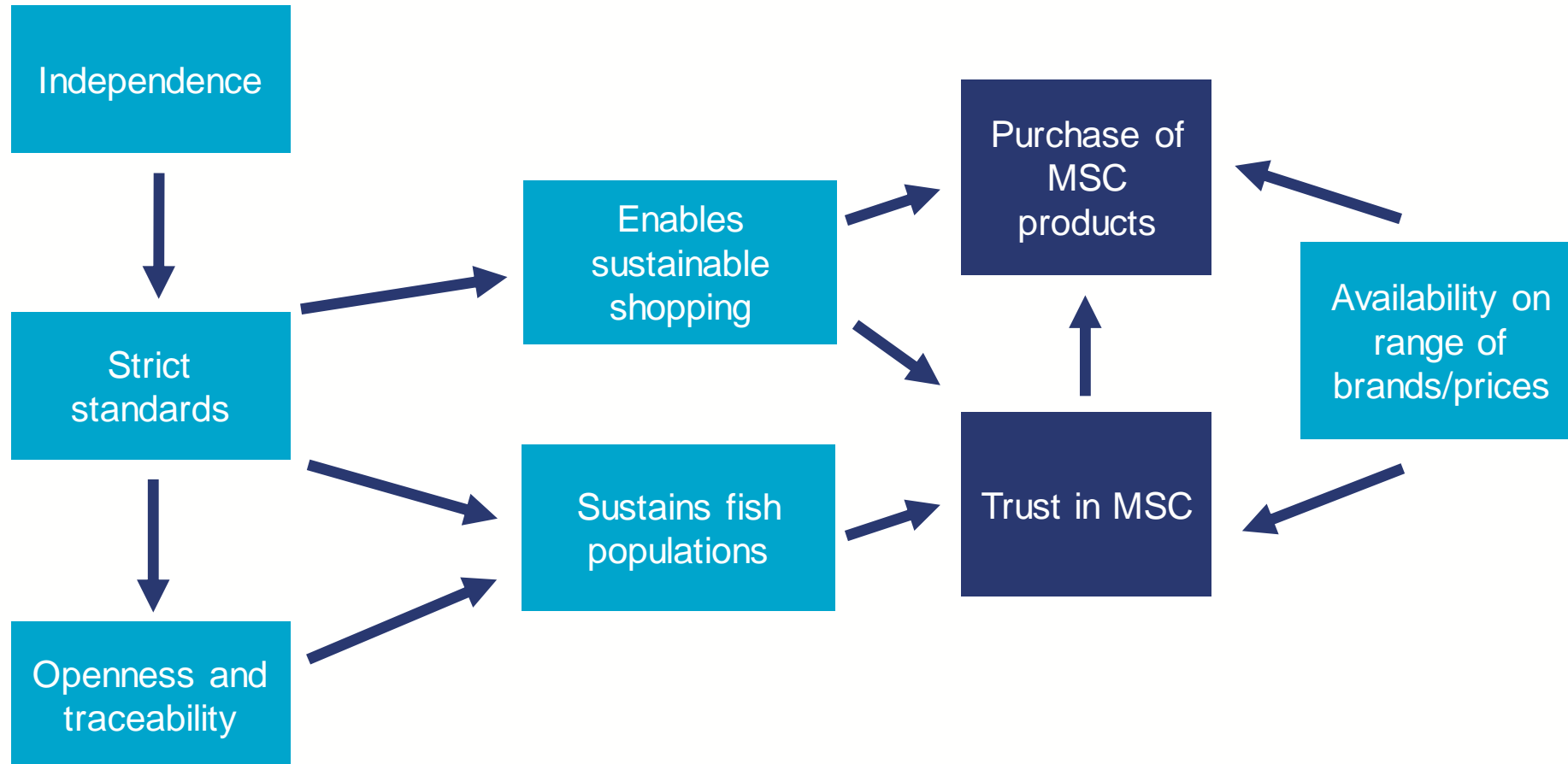
Base: MSC-aware consumers, Europe, $n=5,581$ *NOTE: in 2016, this question was not asked in Italy

Q9.2: How much trust do you have in the claims of each of the following initiatives/organisations? 7-pt scale: 1 = "No trust," 7 = "A lot of trust"

Q6.1: What does this logo mean or represent?

Trust in the MSC label is underpinned by its independence

Pathways to trust in the MSC label, structural equation modelling, simplified path model



Educate

Raise awareness of the issues

Equip

Provide easy solutions:
accessible, sustainable seafood

Excite

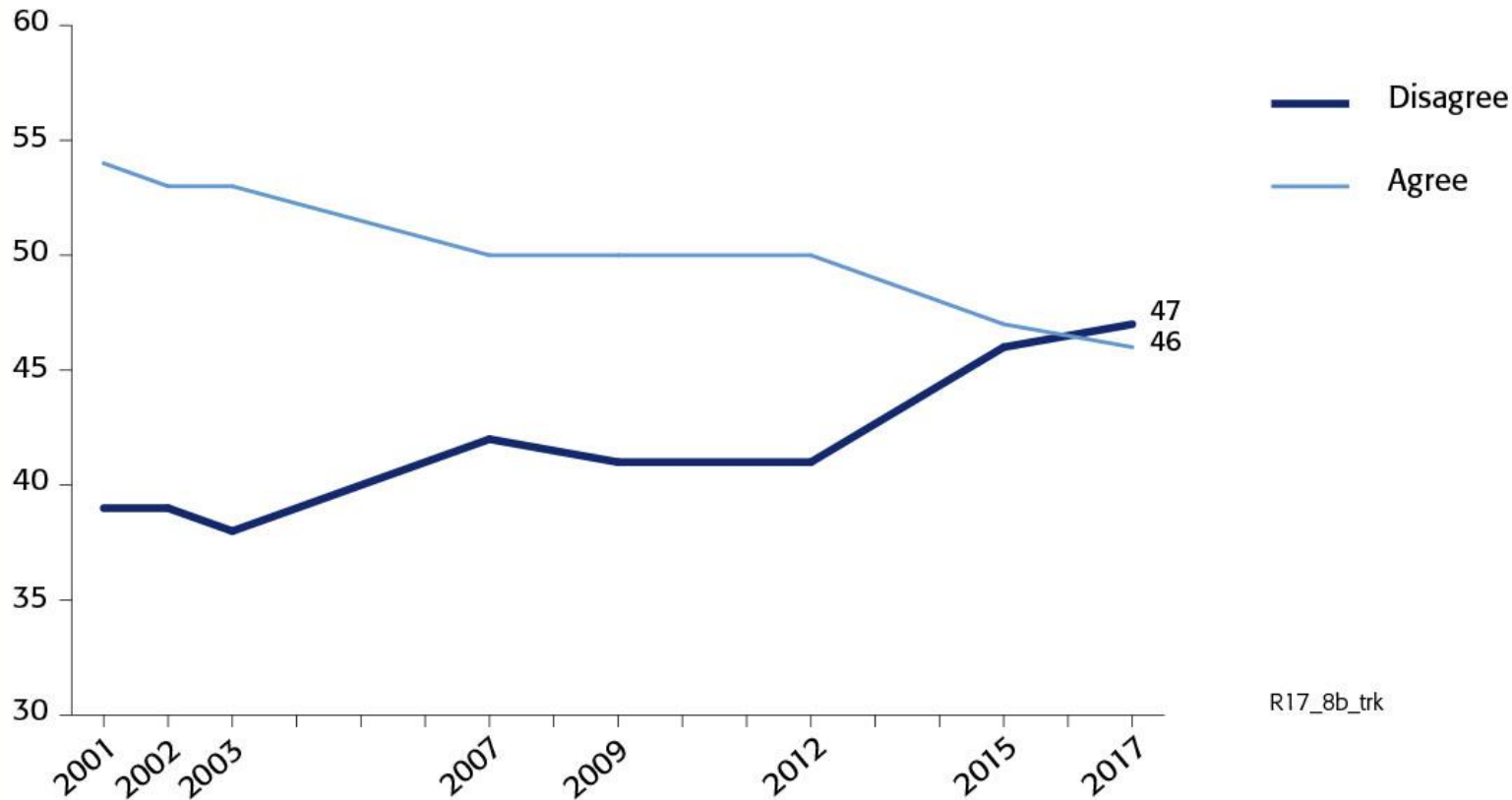
Positive vision and personal
benefits

Engage

Create a movement, using
inspiring storytelling

People around the world are increasingly pessimistic about the future for their children and grandchildren

Our Children and Grandchildren Will Have a Higher Quality of Life than We Do Today
Agree vs Disagree,* Average of 16 Countries,** 2001–2017



R17_8b_trk

*"Strongly agree" and "Somewhat agree" vs "Strongly disagree" and "Somewhat disagree"

**Includes Australia, Canada, Chile, China, France, Germany, India, Indonesia, Kenya, Mexico, Nigeria, Russia, Spain, Turkey, UK, and USA

Future generations is the most motivating message for MSC to communicate

Optimal MSC messages: four most compelling messages

**Top motivating
MSC message**

Ensures seafood we enjoy now is available for future generations

**Secondary MSC
messages**

Helps stop the destruction of life in our oceans

Helps protect our oceans

Ensures seafood is from a sustainable source

Optimal messaging: emotion + evidence + reassurance

NOTE: Total of 15 messages were tested – other messages not shown here as they did not resonate as strongly with consumers

Base: Seafood consumers, Europe, $n=11,132$

Q12. Which of the following statements is the most likely to motivate you to purchase seafood with the MSC blue fish label and which statement is the least likely? *The MSC blue fish label...*

Educate

Raise awareness of the issues

Equip

Provide easy solutions:
accessible, sustainable seafood

Excite

Positive vision and personal
benefits

Engage

Create a movement, using
inspiring storytelling



A woman with dark hair, wearing a white long-sleeved shirt, is pushing a shopping cart in a grocery store. She is looking down at a display of seafood, specifically salmon, in a clear plastic tray. The background is slightly blurred, showing other grocery store shelves and products. The text is overlaid on the left side of the image.

WHO WE'RE TALKING TO

People who consume seafood, and have enough basic knowledge (of the oceans, fishing and the origins of food) to digest the MSC's value proposition*.

When shopping, they “aspire” to a better, healthier life and balancing “right thing to do” with the “cool thing to do”.

They are represented across every age, culture, geography and income.

(*Wild. Traceable. Sustainable.)

OUR
OBJECTIVE:

TO BECOME
THE EASIEST
AND MOST
TRUSTWORTHY
CHOICE FOR
ENJOYING **WILD** 
SUSTAINABLE
SEAFOOD

OUR
APPROACH:

FROM THE DEEP
BLUE OCEANS...

Science and rigour
will always be our
backbone. But we
need to become
relevant to the people
who buy seafood.
We will do that by
moving the
conversation

MSC
CONNECTS FOOD
TO SUSTAINABLE
OCEANS

...TO PEOPLE'S
LIVES AND PLATES



OUR
POSITION:

PEOPLE WHO
LOVE SEAFOOD

CHOOSE

MSC



[msc.org/teach](https://www.msc.org/teach)



**THE LATEST
DEVELOPMENTS
IN EUROPE**

MSC in European public procurement

MSC certifications recognised in government guidance:



The Norwegian Directorate of Health



Ministry of Agriculture and forestry



A new legislation allowing ecolabels to be part of the public procurement



Public agriculture and fisheries directorate and DFPO Fisheries Association of Denmark



City of Paris Sustainable Food Plan



The German Council for Sustainable Development recommend MSC in their Sustainable Shopping Basket



The Italian Government procurement policy GPP for collective restaurants



The Dutch Ministry of Economic Affairs, Fisheries Directorate recognised MSC in public procurement policies as equivalent to organic



I worry where Lidl get their seafood.
I don't want to find it's from a ditch.

Chris



Doit-on préférer le
sauvage à l'élevage ?



A scenic view of a coastal town, likely Lofoten in Norway, with snow-capped mountains in the background and a harbor with boats in the foreground. The text is overlaid on the image.

OUR 20TH ANNIVERSARY CAMPAIGNS SUMMARY



msc.org/marketing

- Ocean sustainability is very important to European consumers, and is balanced against price as a purchase driver
- In order to trigger more action, we need to:
 - **Educate** – use popular channels to raise awareness of ocean sustainability
 - **Equip** – utilise high visibility of ecolabels in Europe
 - **Excite** – sustainability messaging around future generations can help to inspire
 - **Engage** – the power of partnerships are key to engaging the mainstream



Thank you

GlobeScan is an insights and strategy consultancy, focused on helping our clients build long-term trusting relationships with their stakeholders. Offering a suite of specialist research and advisory services, we partner with business, NGOs and governmental organizations to meet strategic objectives across reputation, sustainability and purpose.

Established in 1987, GlobeScan has offices in Cape Town, Hong Kong, London, Paris, San Francisco, São Paulo and Toronto, and is a signatory to the UN Global Compact and a Certified B Corporation.

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MSC UK and Ireland Market Report 2020

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Executive Summary

The first edition of the MSC UK and Ireland Market Report showcases the leadership of the UK and Irish markets in sustainable seafood. It highlights the growing number of certified products and menu offerings available to consumers and profiles emerging sectors in the sustainable seafood space. The data analysed and presented in this report is provided to the MSC by businesses using the ecolabel on products and menus.

Key findings:

- Consumer spend on certified sustainable MSC fish and seafood in the UK and Ireland hit £1.3 billion in 2020.
- Increasing sales of white fish like cod, haddock and pollock, and chilled-prepared, frozen-prepared and pet food product categories have driven market growth in recent years. In 2019/20, chilled-prepared and frozen-prepared products accounted for 48.6% of the total volume of MSC certified product sales in the UK and Irish market, with cod, haddock and pollock representing nearly 80% of sales in these two categories.
- The sale of MSC labelled preserved and canned products in the UK and Ireland have declined since 2018/19. The suspension of all Northeast Atlantic mackerel fisheries will have a significant impact on the UK/Irish market, as the species accounts for over 50% of MSC canned sales by volume.
- Historically a high performing market with regards to MSC labelled tuna products, the UK/Irish market has now fallen behind Germany, Switzerland and the Netherlands, with a 2,511 tonne reduction since 2017/18 despite a growing volume of certified supply.
- MSC labelled pet food and supplements are both emerging sectors. The number of labelled pet food products has more than doubled in the past five years while consumer spend on certified sustainable supplements topped £6.5 million in 2019/20.
- Ireland is a growing MSC market with the number of products on sale to Irish consumers increasing nearly six-fold over the past five years.

The UK and Irish markets continue to demonstrate deep commitment to the MSC programme. This report is designed to profile the impact of these commitments, made across the supply chain, and highlight opportunities for future growth in response to growing consumer demand for sustainably sourced fish and seafood.



Introduction

Welcome to the first edition of the MSC UK and Ireland Market Report which showcases the leadership of the UK and Irish markets in sustainable seafood, across our many strong partnerships and sectors.

Growing consumer awareness of the pressures overfishing puts on fish populations and our oceans has led to an increasing demand for certified sustainable seafood products. Results from a consumer survey, conducted by independent insights consultancy GlobeScan¹, revealed that 72% of UK consumers recognise the importance of only consuming fish and seafood that comes from sustainable sources, and 83% are willing to take action to protect fish and seafood in the future.

Customers and diners want to be able to buy and eat their fish and seafood with a clear conscience; in fact, more than half of UK seafood shoppers (52%) have made changes to the way they choose and buy seafood in the last year, with 1 in 5 switching to a brand or product which says it helps the oceans or fish. Over the past year, British and Irish consumers have spent more on MSC certified products than ever before.

In this report, we will outline how MSC certified businesses continue to expand their selection of certified sustainable products to meet the needs of their customers as well as offer a deeper dive into specific sectors that are expanding, or in some cases declining.

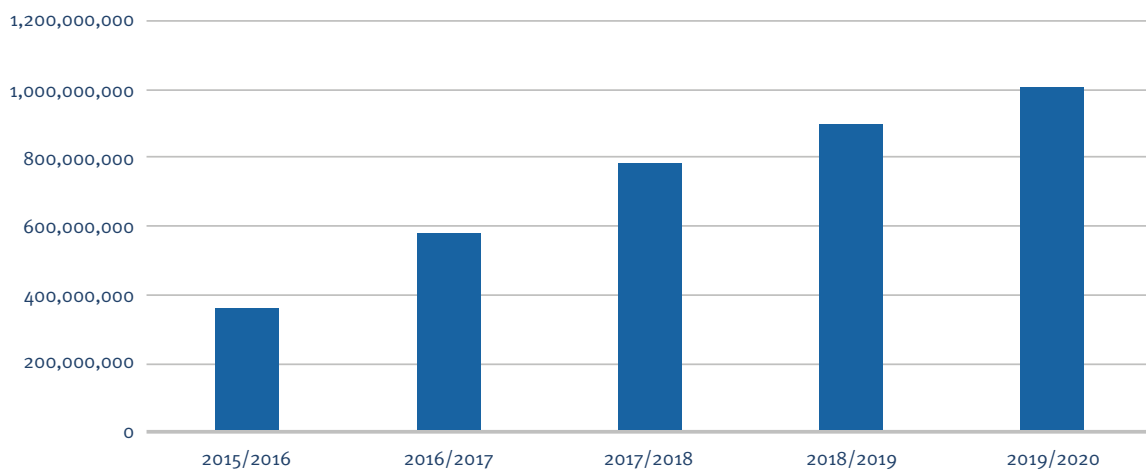
We hope that you enjoy this very first edition. If you have any questions or queries for your key contact at MSC, or if you would like to make an enquiry, you can find our contact details listed at the end.

Note on data: The data used in this report is provided to the MSC quarterly, semesterly or annually, by businesses using the ecolabel on products and menus. Each product or menu item is registered and reported based on the market in which it is sold. This report includes data from the following regions: the United Kingdom, Ireland, and UK/Ireland (where the same product is sold into both markets). All data presented is from the aforementioned regions unless otherwise specified.

¹This consumer research survey was conducted by GlobeScan on behalf of the MSC. In the UK, a representative sample of 1,313 consumers across the country were surveyed, of which, 1,046 identified themselves as seafood consumers.

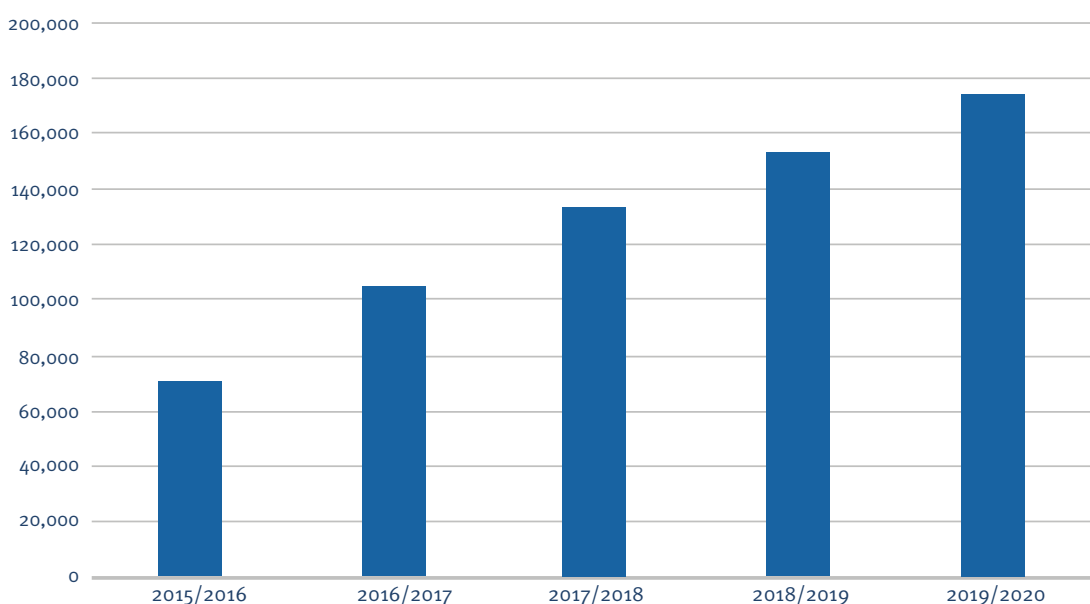
Market Overview

This last decade has seen incredible growth in MSC certified seafood consumption in the UK and Ireland, increasing more than tenfold between 2009 and 2019. British and Irish consumers have an ever-expanding array of sustainably caught fish and seafood products to choose from, across many sub-categories and sectors. In 2019, for the very first time, consumer spend on MSC certified seafood products in the UK and Ireland exceeded £1bn, increasing by 12% from 2018 to £1.12bn. In 2020, consumer spend on certified sustainable MSC fish and seafood in the UK and Ireland has grown a further 16%, to £1.3 billion.



Graph 1. MSC Product Cost-Value (£) in the UK/Irish Market²

As the sales of MSC labelled products have grown, so too has the volume, which surpassed 174,000 tonnes in 2019/20, and is now approaching 180,000 (mt).



Graph 2. Volume of MSC Labelled Product (tonnes) Sold in UK/Ireland

²Data collected on the cost-value of consumer-facing MSC registered products demonstrates strong growth over the past five years in the UK/Irish market (see Graph 1). A 30% mark-up is applied to these cost-value figures to estimate consumer spend.

This growth in MSC labelled product sales has been driven by increased engagement with the MSC programme across UK and Irish supply chains. Between January 2015 and January 2020, the number of businesses in the UK and Ireland certified to MSC's Chain of Custody Standard increased from 230 to 300.

Supplying more MSC labelled products into the UK and Irish market has been made possible by an increasing number of certified source fisheries, both in the UK and Ireland and across the globe. These fisheries represent an ever-expanding diversity of species, which is reflected in the range of sustainable seafood options now available to consumers; in the last 5 years the number of species sold bearing the blue ecolabel increased from 33 to 47, while the number of certified consumer-facing products doubled from 807 to 1629.

In the UK and Ireland, there are more than 20 certified fisheries in the MSC programme, catching 13 different species of fish including haddock, plaice, coley, sardines and hake; and shellfish such as scallops, crab, cockles, clams and mussels. Many of these are sourced by retailers, in particular haddock, mussels, sardines, coley, plaice and hake, with new product launches of Poole Harbour clams and cockles just this year.

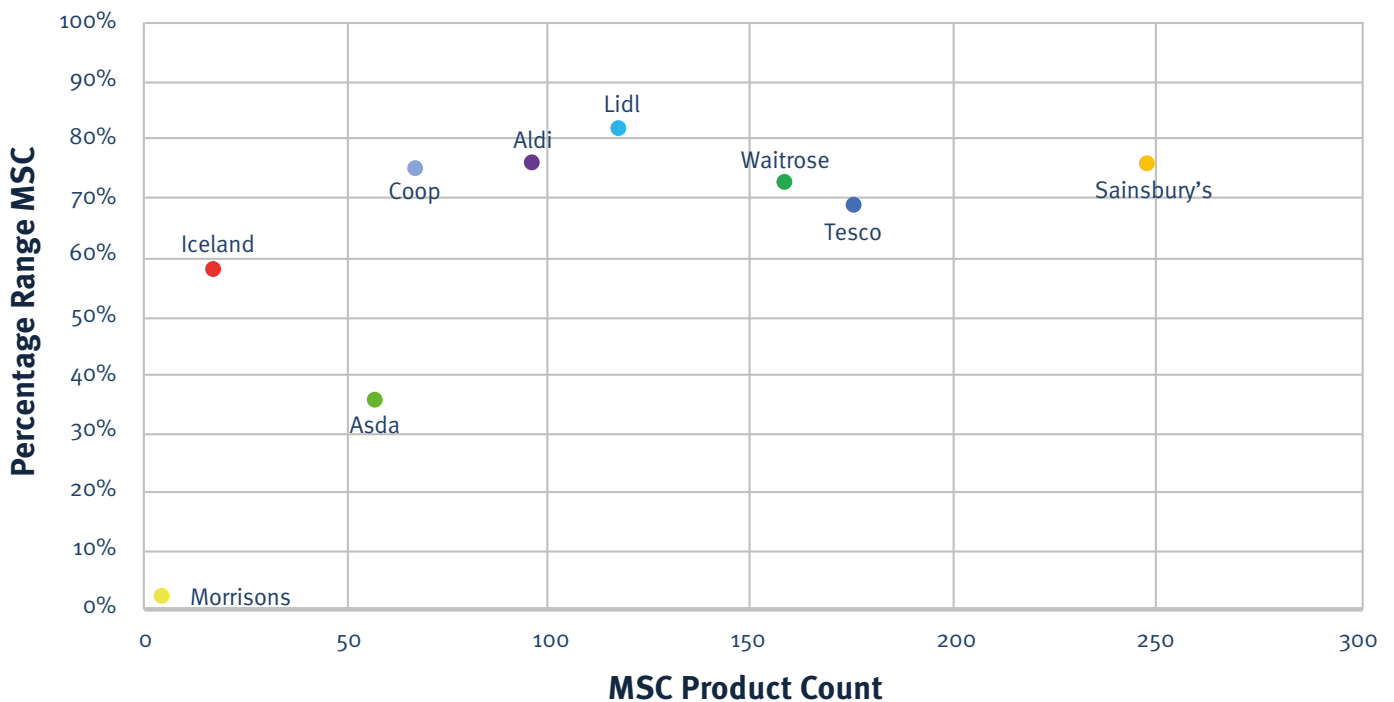
Despite this progress, gaps remain, particularly in tuna and sardines, both of which have limited label coverage in the preserved category. While there has been considerable growth in the availability of MSC certified tuna from an increasing number of fisheries, the conversion of this improved availability of labelled products for consumers remains scarce (see Focus on Tuna section below). The Cornish sardine fishery remains the only European pilchard (*Sardina pilchardus*) fishery certified to the MSC Standard. Although retailers in mainland Europe have sourced canned products from the fishery, so far the same pattern has not been seen in the UK and Ireland.

Future pipeline opportunities for labelled products are squid, nephrops (scampi) and crab. **Project UK**, a collaboration between the supply chain and fisheries to drive fisheries improvements, plays a critical role in assisting fisheries towards a status where entering an MSC assessment could be viable. This, in turn, could improve the availability of other species in the UK and Irish market.



UK Retail

In 2019/20, MSC labelled products accounted for over a third of all UK fish and seafood retail sales, including product from farmed sources, according to benchmarking against [Seafish data](#)³. Responding to growing consumer demand for sustainably sourced fish and seafood, UK retailers collectively doubled the number of certified own-brand products available to shoppers between 2015/16 and 2019/20. Last year, there were over one thousand MSC labelled products available across all ten leading retailers (see Graph 3) and own-brand labelled product sales topped 110,000 tonnes, representing nearly 63% of all sales across all sectors.



*Total wild range of seafood could not be determined for Marks & Spencer, who had a total MSC product count of 24 in FY 19-20

Graph 3. UK MSC Retail Landscape

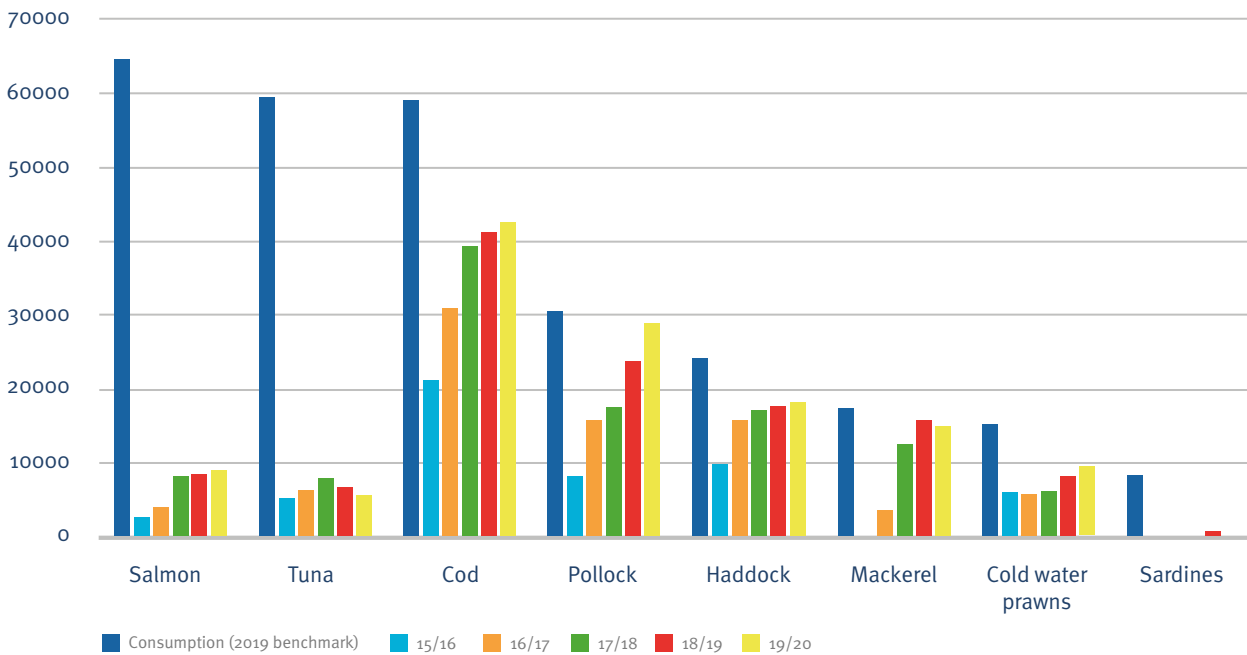
Sainsbury's, winner of MSC UK Supermarket of the Year 2020, offered the highest number of MSC certified products across all retailers in the UK last year, while Aldi sold the largest volume (metric tonnes) of labelled product. Lidl, MSC Mid-Size Store Retailer of the Year 2020, led retailers with the highest percentage of its wild range of seafood MSC certified at 82%, followed by Aldi and Sainsbury's at 76% in second place and Coop at 75% in third. The top 6 MSC Retailers in the UK were confirmed to be selling around 70% or higher of their range of wild fish and seafood products with the MSC label. These were: Aldi, Coop, Lidl, Waitrose, Tesco and Sainsbury's.

The MSC UK Awards 2020 also saw Iceland scoop Newcomer of the Year, following a blue revolution at the frozen food specialist. Iceland was honoured for investing heavily in expanding its range of MSC labelled products last year, increasing the percentage of its wild MSC seafood product from 34% to 58% since 2019.

³Seafish. Market Insight Factsheet: Seafood in multiple retail (2019) <https://www.seafish.org/document/?id=23a04ee2-5293-4c99-8881-a14e960e7dfb>

Label Coverage by Species⁴

The strong growth in MSC labelled products available in UK retail has been more pronounced for certain species compared to others. Using Seafish data⁵ on seafood sales in retail (2019) as a baseline and comparing it to MSC volumes sold, an estimated 72% of all cod and 76% of all haddock eaten at home in the UK carries the blue fish ecolabel (see Graph 4). Label coverage of other white fish, particularly pollock, is also high.



Graph 4. MSC Coverage of Top Species in UK Retail by Volume of MSC Labelled Product sold (tonnes), compared to Seafish benchmarks

While there has been growth in sales of MSC labelled salmon, there is a limit on the number of products that are eligible to bear the ecolabel because the majority sold in retail come from farmed sources. There has been a decline in certified sustainable tuna products in the UK market, despite a growth in certified fisheries and increases in labelled product elsewhere in Europe (see section on Focus on Tuna pg. 15). The initial impact of the suspension of all certified mackerel fisheries in March 2019 can already be seen in the decline in sales volume between 2018/19 and 2019/20 (above). However, the full effect will only be seen by consumers in the coming year, as businesses continue to sell the remains of their current supply of certified product. Availability of MSC labelled product is already scarce for both canned and pre-pack chilled mackerel products.

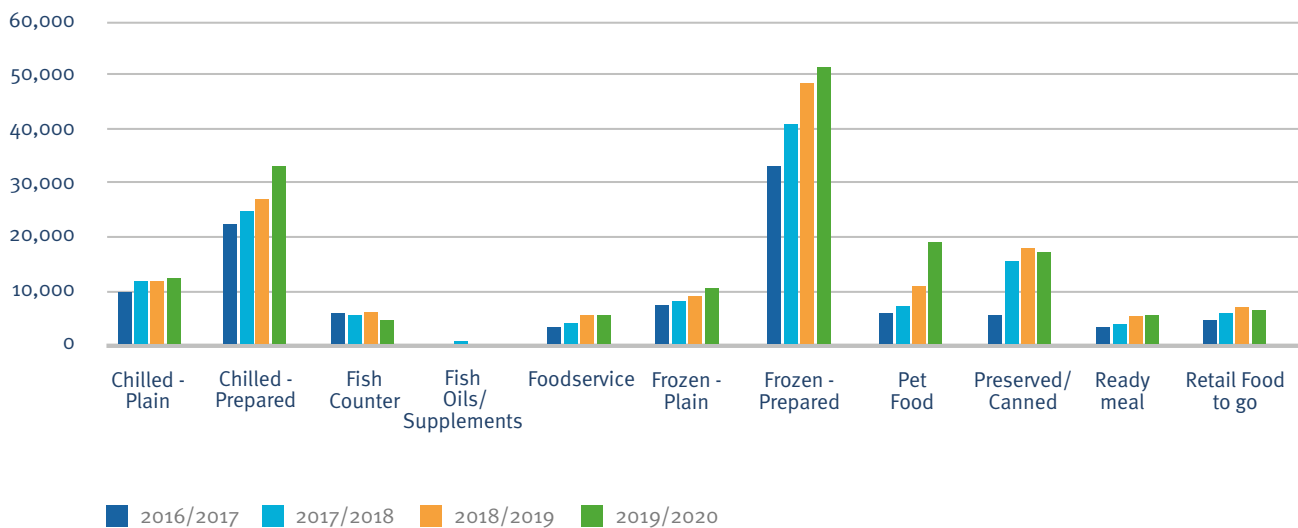


⁴Note: Seafood consumption in retail data was provided by non-departmental public body Seafish specifically for the UK market. Label coverage by species analysis was therefore estimated specifically for the UK market, Ireland was not included in this case

⁵Seafish. Market Insight Factsheet: Seafood in multiple retail (2019) <https://www.seafish.org/document/?id=d7954b16-74de-42ed-92b6-fa96dc75b268>

Label Coverage by Product Category

The growth in MSC product sales has not been uniform across different categories (see Graph 5). Chilled-prepared, frozen-prepared and pet food have all grown consistently over the past years, while sales of MSC labelled fish counter and preserved products have declined slightly, reflecting the lack of progress in tuna, suspension of mackerel and shifts in approach to counters for some major retailers. Although the impact of the Covid-19 pandemic may have affected sales of MSC products in the final quarter of 2019/20, it is worth noting that the graph below will look noticeably different in 2020/21, when the full impact becomes evident, and after next year's data set is analysed. We look forward to providing these insights in the updated UK and Ireland Market Report next year.



Graph 5. UK/Irish Market by Category (Volume in Tonnes)

Fish Counters

Over the past year, several UK retailers have announced the closure of a number of their in-store fish counters. The impact of Covid-19 this year was profound in certain areas of the seafood supply chain, including supermarket fish counters where some retailers took the decision to close or limit this offer. The effect of both can already be seen in the dip in sales of MSC product on fish counters (see Graph 5).

Despite this, there have been some bright spots. Across the retailers with counters open during the 2019/20 financial year (Waitrose, Tesco, Sainsbury's, Whole Foods and Selfridges) UK consumers were given the choice of 16 different MSC certified species, including various white fish and shellfish, as well as more niche species like octopus, sablefish, golden redfish and Chilean seabass. There has been strong demand for Cornish sardines at supermarket fish counters this season according to Waitrose, [citing sales up 128%](#)⁶, with Tesco and Sainsbury's also offering sardines on their fresh counters, when open.

⁶Grocery Trader. October 12, 2020. <https://grocerytrader.co.uk/waitrose-sales-showcase-british-seafood-revival/>

Partner in focus: Waitrose Clams and Cockles

Waitrose, winner of the MSC UK Fish Counter of the Year 2020, became the first major UK supermarket chain to sell MSC certified British clams, which are now available on counters across 150 of its stores. The move to sell the shellfish provided a lifeline for specialist supplier the Dorset Shellfish Company and the small-scale fishing community based in Poole Harbour. The company works with some of the top restaurants in the UK and had seen trade dwindle following the coronavirus-led collapse in demand from the foodservice and hospitality sectors.

The only major retailer in the UK to source this particular variety of clams, Waitrose continues its responsible sourcing strategy to sell the widest range of British and MSC certified seafood of any supermarket on its counters, with 12 species available according to the MSC's Fish Counter of the Year Award judging process.

In stocking these new shellfish items from Poole Harbour, Waitrose became the first large national retailer to offer fresh sustainable live clams on their fish counters, with the blue MSC label. The stores have reportedly been selling over double the projected volumes and have rolled out live cockles from the same fishery as well.

Chilled-Prepared & Frozen-Prepared

Sales of MSC labelled chilled and frozen-prepared fish and seafood have seen the strongest growth across product categories since last year, with 12% and 14% increases respectively. In both product categories, sales were three times higher than they were five years ago (see Graph 5). In 2019/20, these two categories alone accounted for 48.6% of the total volume of MSC certified product sales in the UK and Irish markets. Although cod, haddock and pollock account for nearly 80% of sales in these two categories, 28 different species were sold last year across these prepared categories and sales of both prepared yellowfin sole and pink salmon have more than tripled since 2015/16. UK fisheries have also featured heavily, with 22 different Scottish mussel products available to consumers last year. Earlier in 2020, Iceland also launched a new range of certified Irish mussel products.

While breaded, battered and smoked fish have been longstanding staples in the chilled-prepared and frozen-prepared categories, over the past five years there has been considerable growth in the range of MSC labelled fishcakes. With cod, haddock, salmon, prawn, crab and hake varieties all on offer, UK and Irish consumer spend on MSC labelled fishcakes surpassed £70 million for the first time last year.

**MSC labelled
chilled-prepared
product sales
grew by**

12%

over the past year



**MSC labelled
frozen-prepared
product sales
grew by**

14%

over the past year



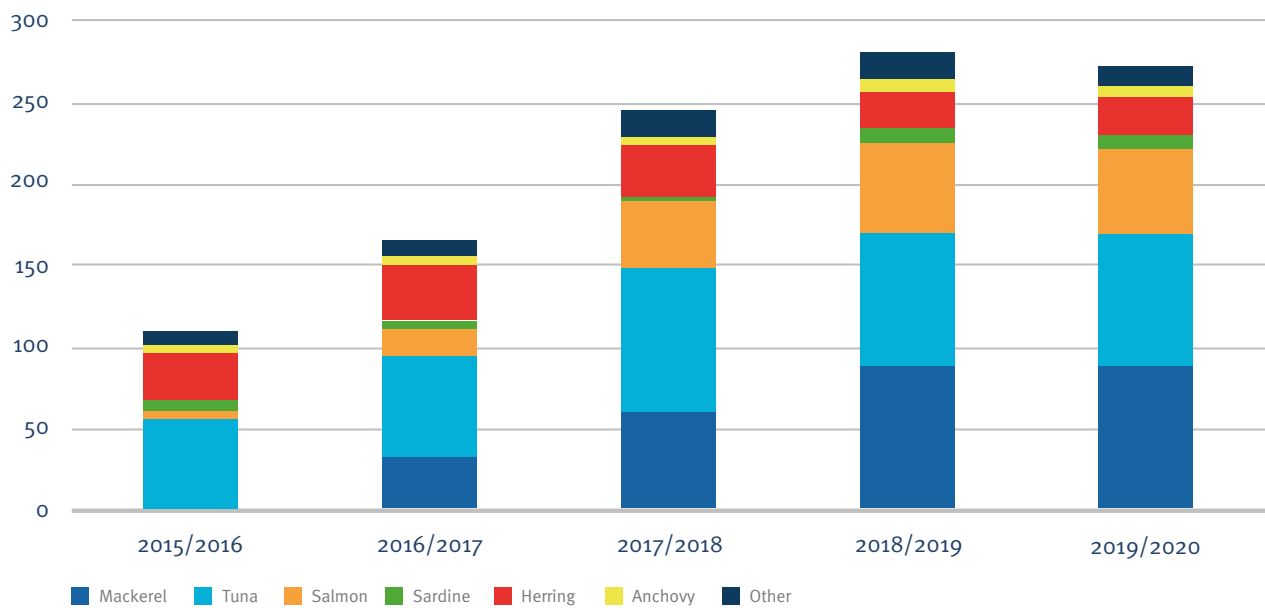
Partner in Focus: Birds Eye

Since becoming a founding member of the MSC in 1997, Birds Eye has committed to continuously increase the amount of MSC certified fish that it sources for its frozen fish products. From classic fish fingers to fish cakes, today 100% of the Birds Eye product range portfolio carries the blue MSC label. This milestone, achieved in 2019, has made Birds Eye the biggest brand in the UK for certified sustainable seafood. The family favourite has also scooped Frozen Brand of the Year at the MSC UK awards every year since the awards began, demonstrating its commitment to providing customers with certified sustainable frozen seafood products across the entire range.

Preserved/Canned

After several years of consistent growth, the volume of MSC labelled preserved product sold in the UK and Ireland peaked at just over 18,000 tonnes in 2018/19 and has since started to decline (see Graph 5). While the growth was largely driven by increased labelling on tuna, salmon and mackerel, the number of certified skipjack tuna products in the market has declined since 2017/18.

The suspension of all Northeast Atlantic mackerel fisheries in March 2019, which account for over 50% of MSC preserved sales by volume, will lead to further retraction in this category next year, limiting consumer choices for certified sustainable seafood in the canned aisle.



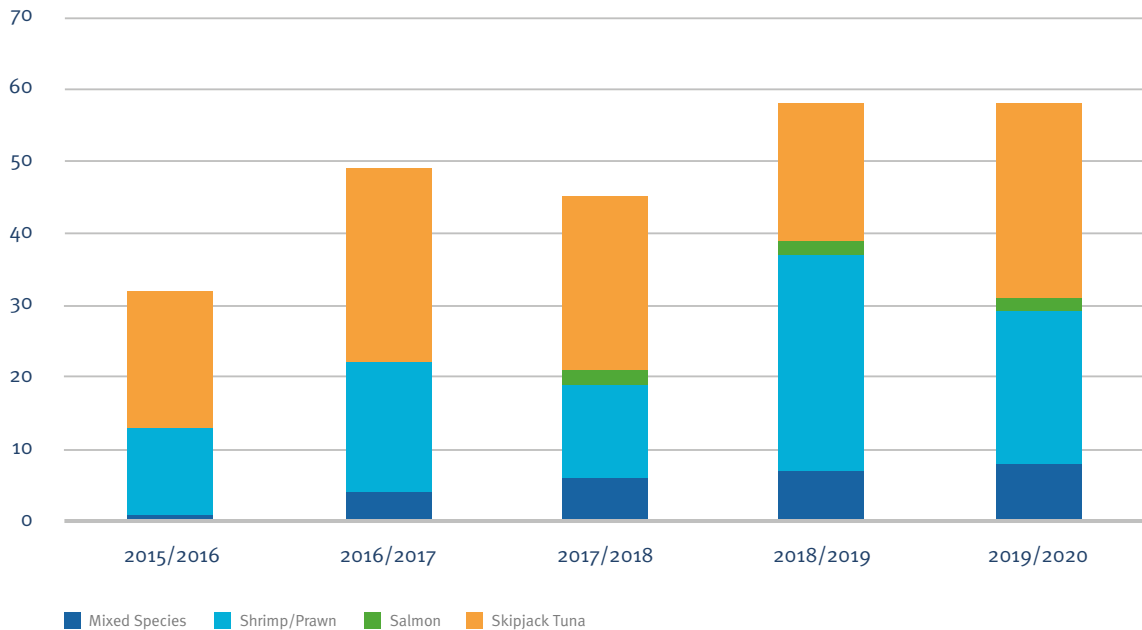
Graph 6. MSC Labeled Preserved Product Count by Species in the UK/Ireland

Currently, Waitrose is the only British supermarket to sell 100% of their own-brand tuna cans with the MSC ecolabel, while the artisanal brand The Pilchard Works remains the only company to offer MSC labelled canned sardine products from the Cornish sardine fishery. Label coverage on both species lags behind that in several European markets. Sales of canned Cornish sardines in Switzerland and the Netherlands were a combined fifteen times higher than that of tinned labelled product in the UK in 2019/20. After some major retailers and big brands switched their tuna lines to MSC last year, labelled product sales in Germany, Switzerland and Netherlands all surpassed that of the UK (see section on Focus on Tuna).



Retail Food to Go

From sushi selections to sandwiches and salads, availability of MSC certified retail food to go products grew steadily between 2015/16 and 2018/19. Over the period, the number of products bearing the MSC blue ecolabel at Aldi, Coop, Lidl, Sainsbury’s, Tesco and Waitrose, increased from 32 to 58. During the first semester of 2019/20 it appeared the volume of these products would keep pace with that of the previous year (see Graph 5).



Graph 7. MSC Labeled Retail Food to Go Product Count by Species

However, when the Covid-19 pandemic hit in early 2020 and businesses and offices were forced to close, there was a noticeable impact on sales of lunchtime staples carrying the MSC ecolabel, such as tuna sandwiches and prawn salads. While the long-term effects remain to be seen, the pandemic continues to pose a risk to the retail food to go category owing to major alterations in the way workforces are currently able to operate.



Watch this space: Ready meals that use a mix of farmed and wild-caught seafood are only eligible to apply an ecolabel to the front of pack if all components are certified to either the MSC or ASC Standards. In such cases, both labels may be applied side-by-side. Last year, four of these co-labelled products were available to British consumers:

- Birds Eye King Prawn & Risotto Croquettes
- Waitrose King Prawn, Mussel and Clam Tagliatelle
- Waitrose Clam, King Prawn, Coley and Mussel Cassoulet
- ALDI King Prawn and Pollock Masala

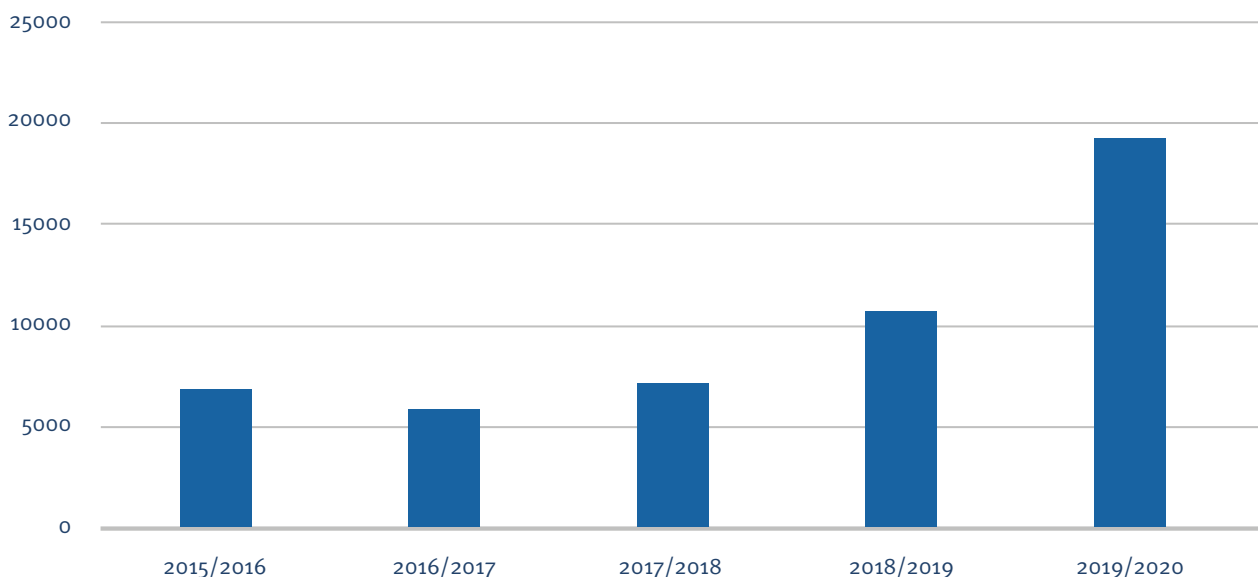


While these products are a small percentage of the 11,000 tonnes of co-labelled product sold globally, with a growing number of farms certified as responsible by the ASC and with our shared Chain of Custody, there is increasing opportunity for co-labelled MSC/ASC products in the UK and Irish markets.

Pet food

Consumers are increasingly looking for products that are good for their pets and the ocean too. With the ever-growing popularity of pets as an extension to the family, owners are paying more attention to the food they give them and are looking at both the quality, and sustainability, of the ingredients. Retailers and brands have huge scope and responsibility in providing sustainably sourced pet food to meet the growing demands of conscious pet owners.

MSC labelled pet food products are becoming increasingly popular in UK households, as sales continue to increase. MSC pet food products have more than doubled in the UK in the last 5 years with the number of products bearing the MSC ecolabel in the UK and Ireland increasing by 70%. There is significant opportunity for labelling of pet food in the UK and Irish market, for both high street supermarkets as well as brands, particularly for dog food, which has relatively limited label coverage compared to cat food. Fish is widely known for its health benefits for humans and it offers many of the same benefits for cats and dogs. As the pet food industry has seen a growing demand from consumers for sustainably sourced products, the MSC label can be used to put greater emphasis on the environmental credentials of these products.



Graph 8. UK and Ireland Pet Food Product Growth (Volume in Tonnes)

As Mid-Size Store Retailer of the Year for the fifth time running, Lidl offers the largest range of MSC certified pet food out of any UK supermarket, with seven MSC cat food products, including species such as salmon, pollock and cod.

MARS Petcare have launched MSC labelled products in the UK as part of the company's commitment to use only sustainably sourced fish in all products by 2020. The Sheba and Whiskas brands, which sit within the MARS portfolio, offer a range of MSC labelled products using sustainably sourced fish. Sales of labelled Sheba and Whiskas products account for the majority of labelled petfood sales in the UK and Ireland.



Watch this space: Fish oil for your cat, MSC labelled protein bars for your dog? There is growing opportunity to label pet food of all kinds, and just like food for humans, ensuring the ingredients are from sustainable sources is becoming a greater concern for consumers in the UK and Ireland.

Supplements

Since 2014, there has been a 200% increase in the availability of MSC certified raw material for reduction, where the fish catch is used to produce fishmeal or fish oil. From krill fisheries in the Antarctic to herring fisheries in the Irish Sea, the supply of certified sustainable material for the supplements industry is greater than ever before. Between 2014 and 2019, the number of MSC certified Omega 3 products available worldwide more than tripled. In early 2019 Orkla Health announced that all of their Möllers brand cod oil products would carry the blue ecolabel, delivering over 5 million bottles of the product to consumers around the world over the course of the year.

In the UK and Ireland, consumer spend on MSC labelled health supplements has more than doubled in the past five years, passing £6.5 million⁷ last year alone. Since 2018, 100% of Tesco's own brand fish oil supplements have been certified sustainable while Holland and Barret, Healthspan and Naturalife all offer MSC labelled krill oil supplements. Wiley's Finest has also offered MSC labelled Alaskan fish oil in the UK and Ireland for several years, and at the end of 2019, Amazon launched its first own brand product with an MSC ecolabel: Amfit Sustainable Fish Oil capsules.



Watch this space: The growing number of reduction fisheries certified to the MSC Standard is opening up new product development opportunities. Might we see an MSC certified marine collagen product enter the UK market in the near future?

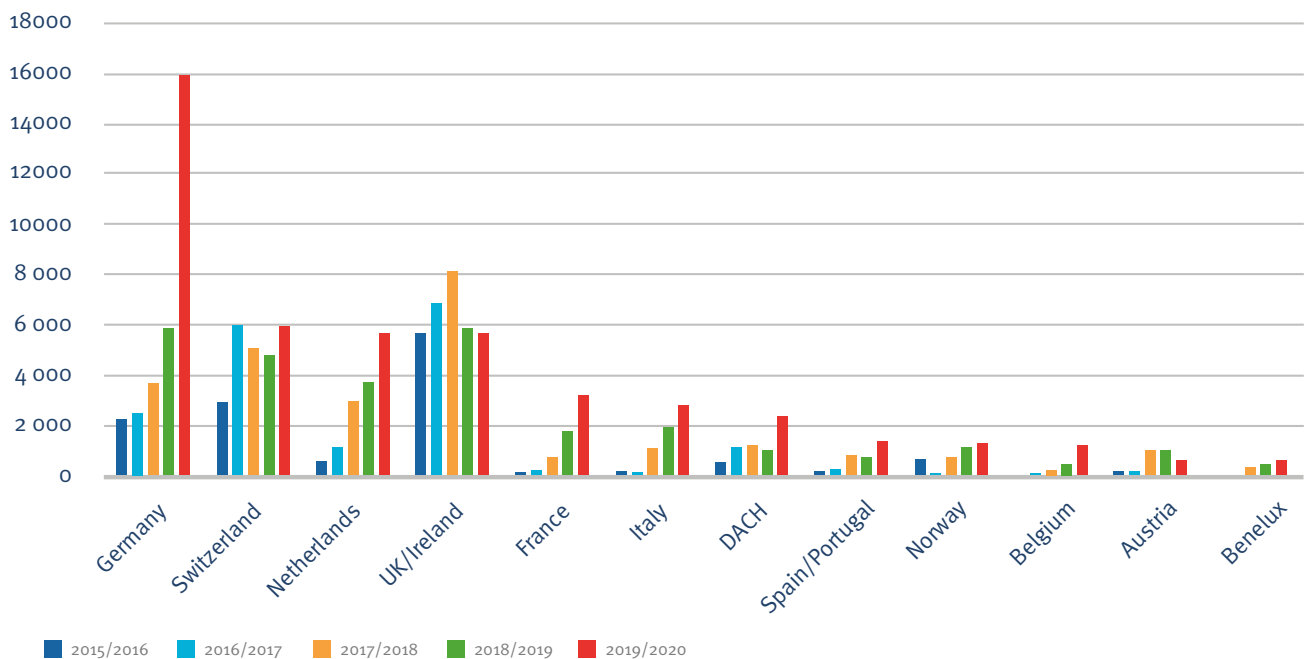


⁷Data is collected on the cost-value of consumer-facing MSC and total spend by consumers is calculated by applying a 30% mark-up to that cost-value.

Focus on Tuna

Historically, the UK had been a high performing market with regards to MSC labelled tuna volumes. But in recent years, there has been a decline in certified sustainable tuna products in the UK market, despite some 25% of global tuna catch is now certified with 11% currently in assessment, following the successful transition of several major Fishery Improvement Projects (FIPs).

The UK and Ireland lags behind Australia and was recently overtaken by Germany, Switzerland and the Netherlands in terms of availability to conscious consumers, where previously it was the global market leader (see Graph 9).



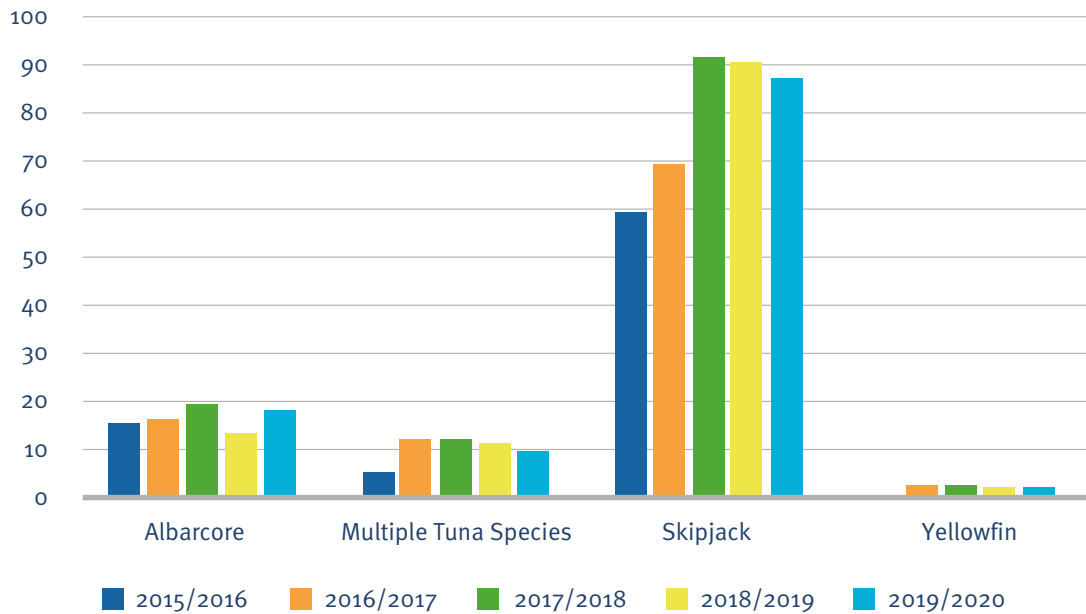
Graph 9. MSC Tuna Sales in Europe by Volume (tonnes)⁸

In March 2020 German retailer Edeka announced that it was switching its entire private label tuna range to MSC certified product sourced from the [PNA fishery](#). There have also been notable commitments made to sustainable tuna sourcing across the Atlantic; Walmart announced that as of July 2020 it is moving to source all of its U.S. stores' Great Value canned tuna as either MSC certified or from a time-bound Fishery Improvement Project (FIP) actively working toward certification and Bumble Bee announced plans to source 100% of its light meat tuna from MSC certified fisheries by 2022.



⁸Data on MSC labelled tuna sales by volume is presented for the UK and Ireland as a combined market, however, other regions with multiple distribution countries such as DACH (Germany, Austria, Switzerland) and Benelux (Belgium, Netherlands, Luxembourg) were kept separate

Between 2017/18 and 2019/20, the volume of MSC labelled tuna sold in the UK and Ireland decreased from 8,173 tonnes to 5,662 tonnes while the number of labelled products dropped from 124 to 115 (including 5 pet food products). Waitrose is the only retailer to label 100% of their canned tuna. It launched the UK’s first MSC labelled albacore on a fish counter last year. Lidl and Whitbread remain the only businesses to offer certified yellowfin to their shoppers and diners, while Sainsbury’s maintains the highest number of MSC labelled tuna products of any retailer or brand in 2019/20.



Graph 10. MSC Labelled Tuna Products in the UK/Ireland by Species⁹

Despite a recent dip in the number of labelled tuna products in the UK and Ireland, the global supply is improving with 25% of the global tuna catch now certified and another 11% currently in assessment. With less than 10% of the 59,500 tonnes of tuna purchased in UK retail (Seafish data¹⁰) bearing the MSC blue fish, and a growing availability of certified supply, there are more and more opportunities for labelling across species and product formats, to suit the variety of purchasing policies out there.



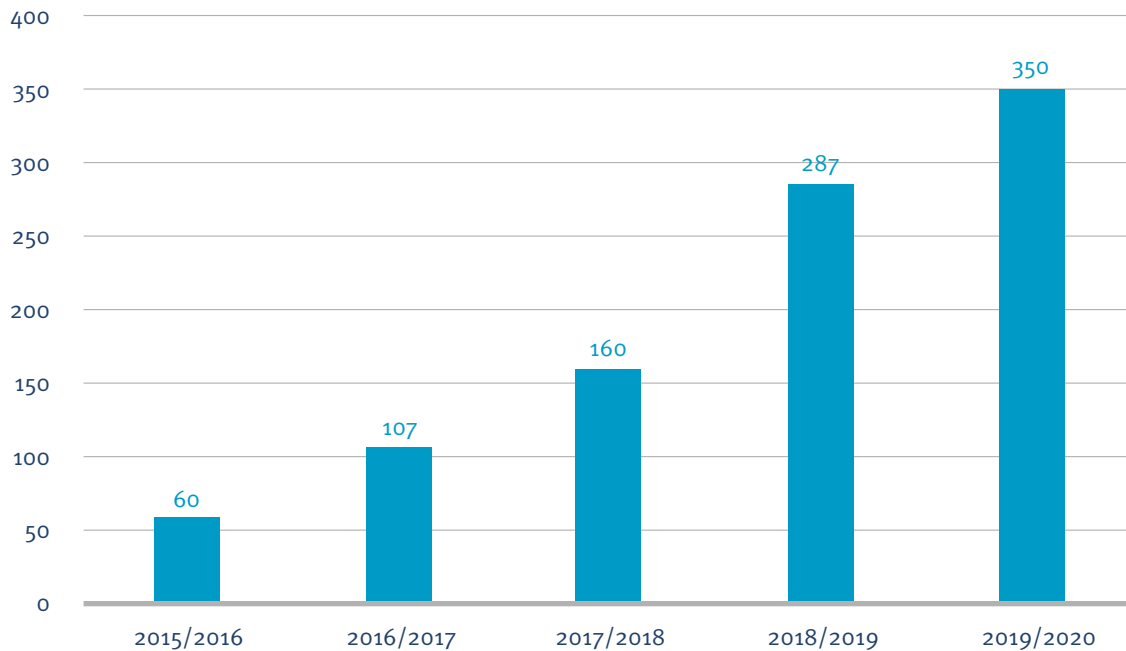
Watch this space: In 2019, the MSC UK and Ireland team developed the first edition of our Sustainable Tuna Handbook with input from major tuna producers and brands from around the country. In July 2020, the MSC released a global edition of this Handbook which offers a comprehensive summary of the state of global tuna stocks, the issues surrounding its sustainable harvest, global market demand and certified sustainable tuna fisheries. Look out for further updates to this Handbook next year.

⁹Mixed or multiple species includes products which may contain multiple species, such as pet food, pates and pastes

¹⁰Seafish. Market Insight Factsheet: Seafood in multiple retail (2019) <https://www.seafish.org/document/?id=23a04ee2-5293-4c99-8881-a14e960e7dfb>

Focus on Ireland

The Irish market has seen exceptional progress and engagement with the MSC programme over the last five years. The number of certified Chain of Custody holders in Ireland grew from 11 to 31 between January 2015 and January 2020, with the number of products on sale to Irish consumers increasing nearly six-fold (see Graph 11).



Graph 11. MSC Labelled Products Sold in Ireland

In 2019/20, Tesco, Aldi and Lidl Ireland branded products accounted for 54% of all those sold with the MSC blue fish. Cork-based Keohane Seafoods, one of Ireland's largest seafood processors and fresh and frozen suppliers, also obtained MSC Chain of Custody certification in 2019 and has since launched several own-brand labelled products.

Irish fisheries have also made great progress in the past year. Bord Iascaigh Mhara (B.I.M), the Irish state agency responsible for developing the Irish seafood industry, holds three MSC mussel certificates. The Ireland bottom grown mussel fishery became MSC certified in 2013, alongside its Northern Ireland counterpart. The third fishery, certified in July 2019, is for Ireland rope grown mussel fishery. Combined collection and cultivation from these fisheries is over 40,000 metric tonnes of mussels each year, a true success story for the shellfish industry in Ireland and the reason B.I.M. were awarded MSC's Ocean Hero Award at this year's MSC UK Awards.



Focus on Luxury

UK shoppers sometimes find it difficult to venture beyond the ‘big five’ - salmon, tuna, cod, prawns and haddock - but with sustainable, luxury favourites like lobster, scallops and caviar all on sale carrying the MSC ecolabel, it’s an ideal time for consumers to broaden their horizons. As the demand and interest for indulgent items on a high street budget has peaked, so too has retailer and brand product offerings, making it much easier for consumers to be a bit more adventurous with their sustainable seafood suppers.

Customers wanting to add a bit of luxury to their shopping basket have been able to do so with Iceland, Waitrose, Lidl, Tesco and Asda all offering whole cooked lobster. This has given home cooks access to pre-cooked lobsters meaning customers only need to defrost and serve. We always see a peak in these luxury MSC options before Christmas.

Sales of scallops have doubled over the last 5 years, with Atlantic and Patagonian scallops proving to be the most popular. In both frozen and fresh formats, UK shoppers can take high end items and cook them in the comfort of their home, thanks to a wide selection of plain and prepared options.

Wild smoked salmon also remains prevalent on shelves at Waitrose and from brands like Leap, providing an alternative to the usual smoked salmon produced from farmed sources.

There are a huge variety of sustainable luxury fish and seafood products available on the high street, and with even lumpfish caviar available, by John West, consumers can choose sustainable options for those special occasions.

Focus on Small-Scale Fisheries

In 2019, MSC’s [Making Waves](#)¹¹ report reviewed the collective impact of small-scale fisheries in the MSC programme across the globe. It identified 62 small-scale certified fisheries, defined as such based upon vessel length, gear type and fishing method, as well as on-board processing capabilities. Together they represent 16% of all MSC certified fisheries and span 22 different countries, including a number in the UK: Cornish sardines, Poole Harbour clam and cockles, SSMO Shetland Inshore brown crab and scallop, Dee Estuary cockles and Burry inlet cockles.

In 2019/20, nearly 4,300 tonnes of labelled product from 8 different MSC certified small-scale fisheries were sold in the UK and Ireland. In two UK firsts, Whole Foods introduced octopus from Australia and Waitrose added clams and cockles from Poole Harbour to their fish counters during the past year.

Cornish sardines have also been a staple on the Tesco, Sainsbury’s and Waitrose fish counters for the past four years and are available in canned format under The Pilchard Works brand. Falfish also launched own-brand butterfly sardine fillets from the fishery last year. Other shelf-stable products from small-scale fisheries include a range of canned Alaskan salmon and lumpfish roe from Greenland.

16%

of MSC certified fisheries are small-scale



4,300 tonnes

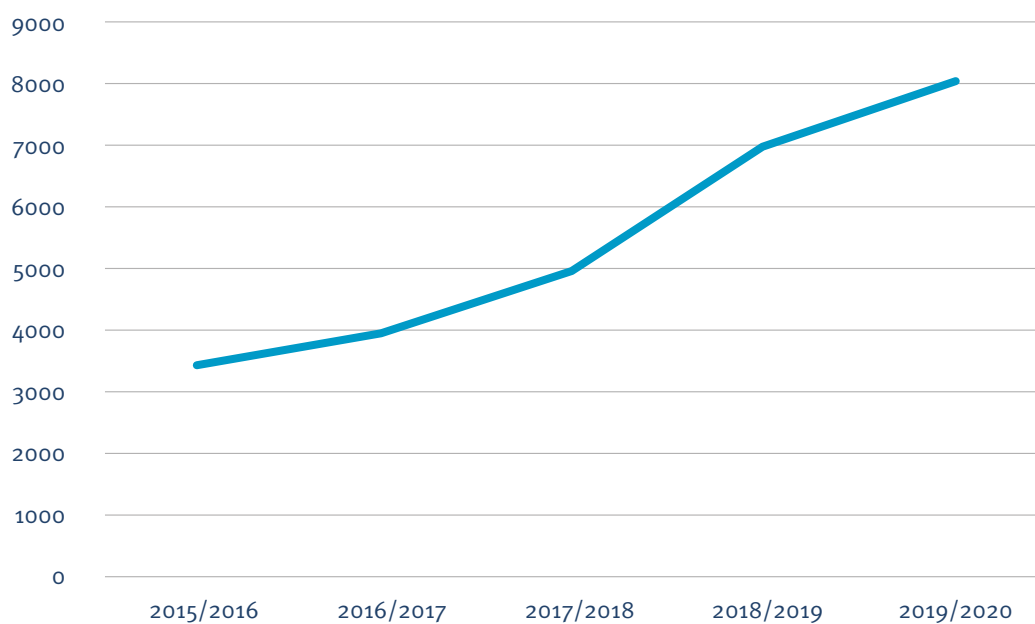
of labelled product from small-scale fisheries sold in UK/Ireland in 2019/20



¹¹Report available at: <https://www.msc.org/docs/default-source/default-document-library/what-we-are-doing/msc-small-scale-fisheries-report-2019.pdf>

Foodservice

The MSC label is increasingly popular in the UK and Ireland foodservice sector, as more businesses achieve MSC Chain of Custody certification for their menus. Using the MSC ecolabel next to fish and seafood dishes allows these committed businesses to confidently and credibly inform their customers that they are making the sustainable choice when dining out. The volume of certified seafood sold peaked at just over 7,000 tonnes in 2019/20 equating to over 47,652,941 portions of fish¹², with species like hoki, cod, pollock, mussels, hake, prawns, sprats, scallops, plaice, monkfish and even ling being labelled as MSC on menus across the UK and Ireland. High street establishments like McDonalds and Wahaca, local fish and chip shops, and national hotel chains Premier Inn and Hilton, continue to demonstrate that full supply chain traceability and seafood sustainability can be delivered at scale in restaurants across the UK and Ireland.



Graph 12. Volume of MSC Labeled Products Sold Foodservice in the UK/Ireland (tonnes)

Watch this space: With growing availability of MSC certified tuna, there will be more opportunities for quick service restaurants, such as sushi and sandwich chains, to label their menu offerings. In October 2020, parent-company Kelly Deli successfully certified its Sushi Daily kiosks across over 260 stores within retailers France. Will we see more MSC labelled sushi and tuna sandwiches in UK foodservice?



Partner in focus: JD Wetherspoon

JD Wetherspoon has been MSC-certified since 2018 and is the largest pub chain in the UK to use the MSC ecolabel on its menu, demonstrating the company's commitment to preserving our oceans. Fish and chips are one of the nation's best loved pub meals and **6 million fish and chip meals**¹² are served by the chain every year. JD Wetherspoon claims to be the biggest fish and chip shop every Friday, since launching their 'Fish Friday' in 2013. Customers can enjoy their fish supper at their local Wetherspoon with a clear conscience, knowing that the cod and haddock they are enjoying is certified sustainable.

¹² The number of portions was estimated using 170g/6 ounces as a standard portion size

¹³Hospitality and Catering News. October 2018. <https://www.hospitalityandcateringnews.com/2018/10/jd-wetherspoon-largest-pub-chain-uk-earn-blue-fish-label/>

Partner in focus: Lussmanns Sustainable Fish & Grill Restaurants

In November 2014, [Lussmanns](#) became the first small restaurant group outside of London to use the MSC ecolabel on their menus. Their aim? To bring sustainability to the high street. It is owner Andrei Lussmanns' long-standing commitment to serving sustainable seafood that keeps him winning big. Having been awarded MSC Menu of the Year at the MSC UK awards in 2019 and 2020, Lussmanns continues to make sustainable dining accessible to all.

And, in April 2019, every fish and seafood item on the Lussmanns menu was sourced from an MSC certified fishery, resulting in a 100% MSC ecolabelled menu. The menu included nine dishes in total with the first MSC monkfish and ling on offer to diners in the UK. Other species to feature include plaice, Manx kipper, cod cheeks and hake. Lussmanns has worked tirelessly with its supplier Stickleback, another MSC Award winner in 2020, to ensure it is a market leader in sustainable fish and seafood restaurant dining, and as a result, a worthy leader in the industry. By using the blue fish ecolabel on all of its dishes, Lussmanns ensures everybody can play a part in securing a healthy future for our oceans.

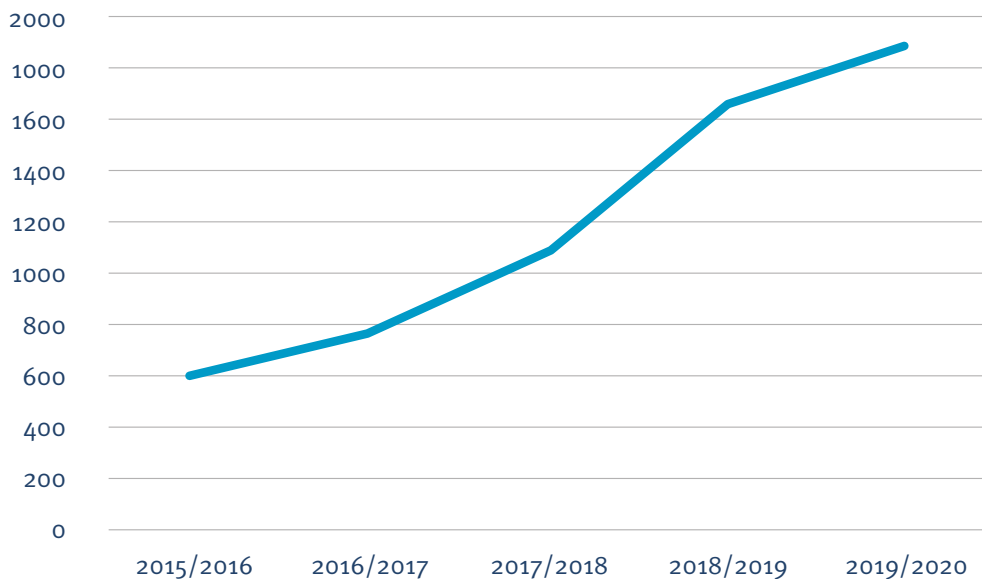


Fish and Chips

Fish and chips are as popular as ever in both the United Kingdom and Ireland. More than 167 million servings are enjoyed from chip shops every year across the UK, and this has a genuine impact down through the supply chain and onto our shared fish stocks. However you enjoy your chips, doused in salt and vinegar, smothered with mushy peas or dipped in tartar sauce, more consumers than ever are demanding that they are served with a side of sustainable fish. In fact, a study conducted by Globescan on behalf of the MSC in 2018 found that chippy diners choose sustainability over price when dining out¹⁴.

Fish and chip shops are the backbone of the UK takeaway sector and make a huge contribution to the overall takeaway market. In the UK and Ireland, the MSC’s iconic blue fish ecolabel was found in over 120 fish and chip shops as of April 2020. When thinking about the fish frying industry and fish as a core component, it is no longer possible to ignore the sustainability of the fish being used and the standards that customers now expect from their favourite chippy. Without fish, there are no fish and chips. And with many fish and chips businesses relying on regular customers in a competitive fast-food sector, going that extra mile on sustainability helps make those businesses stand out. Since 2015, a staggering 11,105,882 portions¹⁵ of MSC certified fish and chips have been sold with the blue MSC label. Fish and chips represent 23% of the MSC total foodservice market, in volumes terms (metric tonnes).

They say variety is the spice of life, but that doesn’t seem to be true when it comes to fish and chips. Look inside the wrapper and you’re almost guaranteed to find haddock or cod. However, MSC certified chippies are serving up a greater variety of species to customers these days. Cornish hake, Poole Harbour clams and Scottish mussels, to name but a few, can all now be found on the menus of our chippies around the UK and Ireland.



Graph 13. Volume of Certified Fish sold at MSC Fish and Chip shops (in tonnes)

¹⁴The survey was conducted by research agency Globescan, using reliable national consumer research panels to recruit respondents. Fieldwork was undertaken between 12th January and 10th March 2018. Total sample size was 1,315 and are representative of all GB adults (aged 18+).

¹⁵The number of portions was estimated using 170g/6 ounces as a standard portion size

Partner in Focus: National Federation of Fish Friers (NFFF)

NFFF is a trade organisation representing the fish and chip industry. First established in 1913, throughout its long history the NFFF has worked towards protecting and promoting the interests of the UK's fish friers. They are a national organisation that can speak and act on behalf of fish friers, and the views of the NFFF are sought throughout the catering and associated industries, as well as by local and central government agencies and authorities.

The NFFF has identified sustainability as a key business area the fish frying industry can embrace, both to improve business practices and to safeguard the future of the industry, while protecting fish stocks and their environment. The MSC work closely with the NFFF, who facilitate MSC certification among their membership, reducing barriers to entry for shops who want to work with the MSC programme.

Partner in Focus: Pete Fraser

Pete Fraser, owner of award-winning Harbour Lights and Fraser's Fish and Chips in Cornwall, was named Foodservice Champion at MSC UK's Annual Awards 2020. Pete believes a major part of his business growth has resulted from taking environmentally-friendly fish buying decisions early on, having been certified since 2010. Both of Pete's businesses clearly inform customers about the sustainable credentials of their menu, including the journey of fish from catch to plate. Responsible sourcing, including promoting MSC certified species, is key to their business ethos and the team will always endeavour to have at least three MSC certified fish on the menu. Fraser's Fish and Chips also often host sustainability workshops with their neighbouring primary schools.



Universities and Education

Now more than ever, students are some of the most environmentally conscious consumers around. And with 22 MSC certified Universities in the UK and Ireland, educational institutions are leading the way for a sustainable seafood future, helping students make choices that have a positive impact on the world's ocean.

Partner in Focus: The University Caterers Organisation (TUCO)

Back in 2013, TUCO began offering its members a fast-track way to put MSC certified fish on the menu, by setting up an MSC Group Chain of Custody certificate in the UK. With 8 members now within the group, the system makes MSC certification simpler, quicker and more affordable for members, many of whom want to serve fish that is sustainably sourced. By providing access to the scheme, TUCO have opened the MSC programme to hundreds of thousands of students who eat in university cafeterias and restaurants every day. With students forming the next generation of informed consumers, they have enormous power to support sustainable fishing practices and to help transform the fish and seafood market into a sustainable one.

Partner in Focus: Durham University

Durham University scooped University of the Year at the Marine Stewardship Council's UK Awards 2020 for the third time. The university's commitment to the MSC programme, spanning the last decade, has meant thousands of students have been able to eat their fish and seafood suppers, knowing that they are from certified sustainable fisheries. Choosing the MSC blue fish label ensures fish stocks are protected for future generations, and with so many dishes served, Durham were deserving winners of MSC University of the Year 2020.

According to MSC-commissioned research by Globescan in 2020, awareness levels of the ecolabel are significantly higher among 18-34 year olds (52% of those surveyed) compared to 44% among all UK consumers.

MSC certified contract caterers like Compass Group UK & Ireland, WSH, Sodexo, Aramark, and the AiP Group, also play an important role in bringing over 20 different certified sustainable fish and seafood species to students from primary schools to universities across the UK and Ireland.



Looking Forward: 2021 outlook

The Covid-19 pandemic has and continues to challenge communities and businesses across the globe and will undoubtedly have a lasting impact well into the future in the UK and Ireland. It has disrupted international trade of seafood and led to additional uncertainty about the future, as the UK fishing industry prepares for the post-EU era. Despite this, the UK and Irish fishing industry has proven to be resourceful and resilient. Businesses across the supply chain have also adapted, developing online sales channels and delivering direct to home to address our changing environment, and rationalising ranges at a time of heightened and unpredictable demand.

Consumers have also had to change the way they shop and this will likely continue to affect how consumers purchase their fish and seafood. Online retail platforms and recipe box businesses have grown in popularity, reaching new groups of customers around the country. With consumer demand for seafood remaining strong, and sustainability still a high priority for the UK and Irish consumer, we are committed to supporting our partners as they explore new ways of bringing MSC products and ingredients into homes and restaurants.

As the world begins to face the daunting task of rebuilding communities and economies, we have an incredible opportunity to invest in sustainability. Recovery plans can be made that both revitalise sectors of society that have been most affected and incentivise stewardship and proper management of our natural resources. Recognising and rewarding efforts to protect oceans and safeguard seafood supplies for the future is the essence of our work here at the MSC. Over the past year, the MSC UK and Ireland team has taken steps to understand the impacts of certification beyond those made on the water. Research, conducted by New Economics Foundation (NEF) on behalf of the MSC, on the Cornish hake and sardine fisheries, determined that there were socio-economic benefits for both following certification. The final report, [MSC Certification in the UK – Motivations and Market Benefits¹⁶](#), is available on our website and is the start of an ongoing body of work to better understand how certification affects coastal communities. With an ongoing pandemic, there are still many big challenges ahead for the communities and businesses we work with. However, the response of the seafood industry to our new and changing reality has been truly impressive, a testament to the resiliency of sustainable fisheries and supply chains.



¹⁶Report is available on the MSC website at: https://fishery-certification-benefits-uk.msc.org/?_ga=2.267671689.661507035.1606739421-628465187.1604999677

Share with friends and colleagues

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All data in this report is correct as of 1 December 2020, unless otherwise stated.
The reporting year is 1 April 2019 to 31 March 2020.

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WESTERN AUSTRALIA'S MSC CERTIFIED FISHERIES

- 1 Western Rocklobster
- 2 Mackerel Icefish
- 3 Heard Island & McDonald Islands Toothfish
- 4 Exmouth Gulf Prawn
- 5 Shark Bay Prawn

- Western Rocklobster
- South Sea Pearls
- Prawns
- Scallops
- Abalone
- Finfish
- Swordfish/Tuna
- Patagonian Toothfish/ Mackerel Icefish
- Southern & Tropical Rocklobster
- Shark
- Crab



SENSATIONAL SEAFOOD IS SYNONYMOUS WITH WESTERN AUSTRALIA

Enjoying the ocean's bounty is one of life's simple pleasures. Being confident that it's sustainably harvested enhances the appreciation of seafood.

To provide this assurance, Western Australia is rolling out a visionary initiative to offer every commercial fishery the opportunity to be independently certified against the Marine Stewardship Council (MSC) criteria for sustainable fishing.

The MSC is the global gold standard for seafood sustainability and in the near future, a wide range of WA's seafood will carry the MSC's blue tick eco-label. WA's aquaculture sector is offered a similar opportunity through the Aquaculture Stewardship Council (ASC).

MSC certification will give fishermen, seafood companies, chefs and seafood retailers a credible way to communicate their commitment to supplying environmentally sustainable seafood, and confirm the State's reputation as one of the world leaders in fisheries management.

This long-term plan is the result of a partnership between the State Government (which has provided a \$14.5m fund to facilitate MSC certification), WAFIC (the peak body representing professional fishing, pearling and aquaculture) and Recfishwest (the body representing recreational fishers).

As part of this plan all 47 WA fisheries have now been pre-assessed against the MSC sustainability standard. This has created a unique benchmark providing benefits for strengthening the management of all WA fisheries. There are now nine WA fisheries engaged in the MSC program and more to come.

THE WESTERN AUSTRALIAN FISHING INDUSTRY COUNCIL (WAFIC) IS PROUD TO BE SHOWCASING WA'S SENSATIONAL MSC-CERTIFIED SEAFOOD AT THE 2015 MARGARET RIVER GOURMET ESCAPE. ENJOY.



WA's MSC CERTIFIED FISHERIES

A fishery that is MSC certified has passed the world's most rigorous, scientific standard for sustainability and has the right to market its seafood under the MSC ecolabel.

WESTERN ROCK LOBSTER

WA's Western Rock Lobster fishery was the first in the world to gain MSC certification in 2000 and is celebrating 15 years of continuous certification. Western rock lobster is harvested under an annual quota and by pots in the waters between Shark Bay and Augusta. It's Australia's most valuable single species wild fishery, generating more than \$400m in export income, primarily from Chinese markets.

Western Rock Lobster Council www.wrlc.com.au

Margaret River Gourmet Escape official supplier: Geraldton Fishermen's Cooperative www.broloslobster.com

Background image: Abrohlos Islands



PATAGONIAN TOOTHFISH

The Glacier 51 Toothfish story includes overcoming pirates plundering the fishery and a journey from a species once considered under threat through to achieving MSC certification. The USA's acclaimed Monterey Bay Aquarium lists this Australian fish as "Best Choice". Austral Fisheries harvests Glacier51 Toothfish and Mackerel Icefish, in Commonwealth managed fisheries, around Heard and Macquarie Islands in Australia's sub-Antarctic region.

Margaret River Gourmet Escape official supplier: Austral Fisheries: www.glacier51toothfish.com.au

Images: Glacier 51 near Heard Island and Glacier51 Toothfish

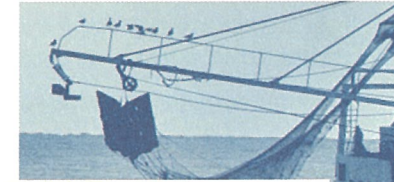


EXMOUTH GULF PRAWNS

The Exmouth Wild-caught Western King and Brown Tiger prawns gained MSC certification in October this year. The late Michael Kailis, and his wife Dr Patricia Kailis, pioneered the Exmouth Gulf prawn fishery in the early 1960's. Today, their sons George and Alex lead the company. Exmouth prawns are marketed under the Exmouth Wild brand.

Margaret River Gourmet Escape official supplier: MG Kailis Group www.kailis.com.au

Images: Exmouth Gulf and Exmouth Wild Western King prawns



SHARK BAY PRAWNS

Located off WA's Gascoyne coast, the Shark Bay Prawn fishery harvests prawns in an area that has been World Heritage listed for more than 20 years. The biggest prawn fishery in WA, it has seven licence holders harvesting primarily MSC-certified Western King and Brown Tiger prawns marketed under the Shark Bay Wild brand.

Margaret River Gourmet Escape official supplier: All Shark Bay prawn producers are listed at www.sharkbayprawns.com.au

Images: Shark Bay and Shark Bay Wild Brown Tiger prawns

WA FISHERIES IN MSC FULL ASSESSMENT

In MSC full assessment, a team of independent auditors is contracted to undertake a highly detailed examination of each fishery across the three MSC principles

- Sustainable fish stocks,
- Minimising environmental impact; and
- Effective management

The assessment process takes around 12 months, is fully transparent and provides opportunities for stakeholder input. Information on each fishery going through full assessment is published on the MSC website. Visit "Track a Fishery" www.msc.org

PEEL-HARVEY BLUE SWIMMER CRAB

In a world first, the recreational and commercial fishing sectors have worked collaboratively to enter the Peel-Harvey Blue Swimmer Crab fishery into MSC full assessment. Mandurah, just a one-hour drive from Perth, is a favourite spot to catch a feed of crabs for locals and holidaymakers. A small group of professional fishermen take great pride in selling their catch direct to local residents, visitors and restaurants, and to the Perth market. MSC certification expected June 2016.



PEEL-HARVEY SEA MULLET

The Mandurah Sea mullet is one of the most reasonably priced fish on the WA market, and is now appearing on leading restaurant menus. Certification expected March 2016

*Margaret River Gourmet Escape official supplier:
Bellbuoy Seafoods on behalf of the
Mandurah Licenced Fishermen's Association*

Background images: Peel-Harvey Estuary, near Mandurah



CRYSTAL CRAB

The local Crystal Crab is a species unique to WA and is harvested in waters stretching from Augusta to the Northern Territory Border. The West Coast Deep Sea Crab catch is limited by annual quota, is caught at depths of more than 600m, and delivered live to both domestic and international markets. MSC certification expected March 2016.

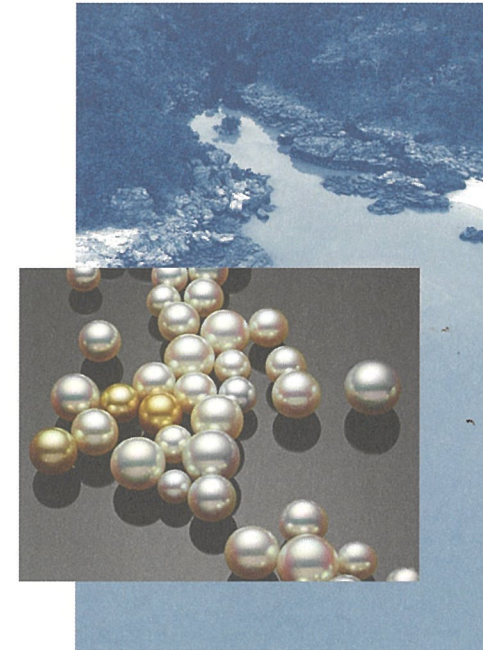
*Margaret River Gourmet Escape official supplier:
Chaceon Pty Ltd www.chaceon.com.au
Background image: Indian Ocean*

PEARLING

In another world first, WA and the Northern Territory's Pearl Oyster fisheries have entered MSC full assessment. It is hoped, that by Christmas 2016, environmentally conscious fashion aficionados will be able to buy their first MSC-certified Australian South Sea Pearl. Other products of this fishery include pearl meat and the mother-of-pearl shell.

*Margaret River Gourmet Escape official
supplier of pearl meat:
Paspaley www.paspaley.com*

Background image: Coastline close to Broome



Many more fisheries will enter the MSC program in the coming years. Three that have declared they will move into MSC full assessment within the next six months are:

ABALONE

Greenlip, Brownlip and Roe's Abalone
Margaret River Gourmet Escape official supplier: Lucky Bay Seafoods www.abalone.com.au on behalf of the WA Abalone Industry Association

KIMBERLEY TRAP FISHERY

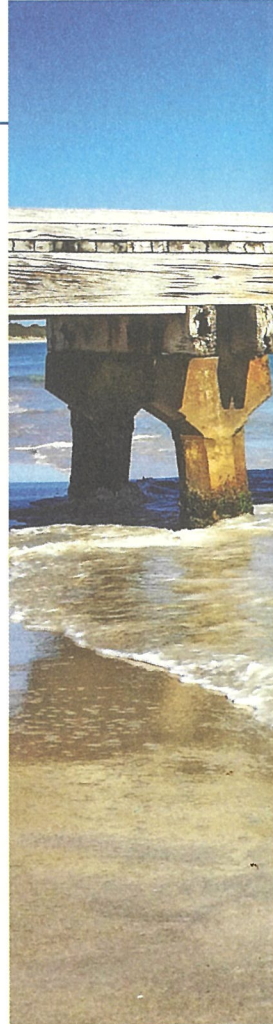
Red Emperor, Rankin cod, Goldband snapper, Saddletail snapper
Margaret River Gourmet Escape official supplier: Old Brown Dog Fishing Company www.oldbrowndog.com.au

OCTOPUS

Margaret River Gourmet Escape official supplier: Fremantle Octopus Company www.fremantleoctopus.com.au

FOR FURTHER INFORMATION:

WA's MSC seafood future: www.wamsc.com.au
Western Australian Fishing Industry Council: www.wafic.org.au
Marine Stewardship Council: www.msc.org
Department of Fisheries: www.fish.gov.au
Fisheries Research and Development Corporation: www.frdc.com.au
Recfishwest: www.recfishwest.org.au
Recipes: www.fishfiles.com.au



Department of Fisheries



WESTERN AUSTRALIAN FISHING INDUSTRY COUNCIL



References

Chaffee C., Leadbitter D., and Aalders E. (2008). Seafood evaluation, certification, and consumer information. In: Phillips B., Ward T., and Chaffee (eds). Seafood labeling: principles and practice. Wiley-Blackwell. pp 4-13.

Government of Western Australia (2022). Press release - Celebrate the festive season with WA's freshest rock lobster. Available at: <https://www.mediastatements.wa.gov.au/Pages/McGowan/2022/12/Celebrate-the-festive-season-with-WA%E2%80%99s-freshest-rock-lobster--.aspx> Accessed 15 March 2023.

MRAG (2009). Review of fish sustainability information schemes. Report prepared for the Fish Sustainability Information Group. 180 pp.

MSC (2016). Press release – John West Australia to offer world's largest range of sustainable tuna. Available at <https://www.msc.org/media-centre/press-releases/press-release/john-west-australia-to-offer-world-s-largest-range-of-sustainable-tuna>. Accessed 15 March 2023.

MSC (2020). MSC UK and Ireland Market Report 2020. Available at: https://www.msc.org/docs/default-source/uk-files/marketreport_2020_interactive.pdf. Accessed 15 March 2023.

MSC (2023). Data available upon request.

Piddocke T., Ashby C., Hartmann K., Hesp A., Hone P., Klemke J., Mayfield S., Roelofs A., Saunders T., Stewart J., Wise B., and Woodhams J. (eds) (2021). Status of Australian fish stocks reports 2020. Fisheries Research and Development Corporation, Canberra.

RFA (2023). Rare Foods Australia founder Brad Adams named sustainable fishing hero. Available at: <https://rarefoodsaustralia.com.au/rare-foods-australia-founder-brad-adams-named-sustainable-fishing-hero/>. Accessed 20 March 2023.

Sutton M. and Wimpee L. (2008). Towards sustainable seafood: The evolution of a conservation movement. In: Ward T.J. and Phillips, B (eds). Seafood labeling: principles and practice. Wiley-Blackwell. pp 403-415.

UK ROC Group (2015). Available at; <http://www.myrocgroupp.co.uk>. Accessed May 2015; site inactive.

Washington S. and Ababouch L. (2011). Private Standards and certification in fisheries and aquaculture: current practice and emerging issues. FAO Technical Paper 553. 182 pp.

Wolf, M. J., Emerson, J. W., Esty, D. C., de Sherbinin, A., Wendling, Z. A., et al. (2022). 2022 Environmental Performance Index. New Haven, CT: Yale Center for Environmental Law & Policy. epi.yale.edu

World Bank (2023). Blue Economy. Available at: <https://www.worldbank.org/en/topic/oceans-fisheries-and-coastal-economies>. Accessed 7 April 2023.