

# The future we need to plan for

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CSIRO WEALTH FROM OCEANS FLAGSHIP  
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# Thinking about the future

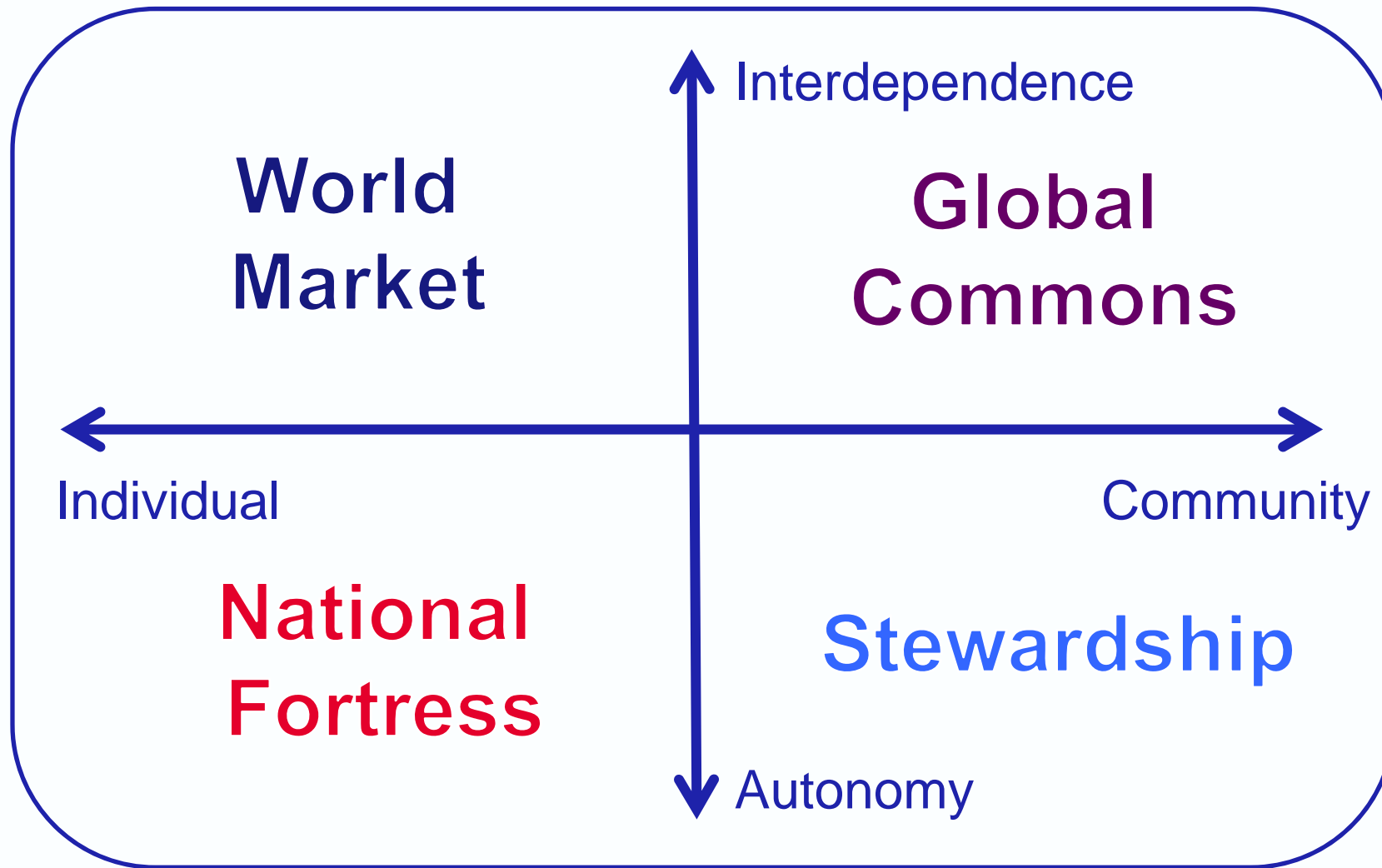
“Predictions are difficult, especially about the future”

- So why do it?
- Strategic planning
- Planning to be flexible and adaptive

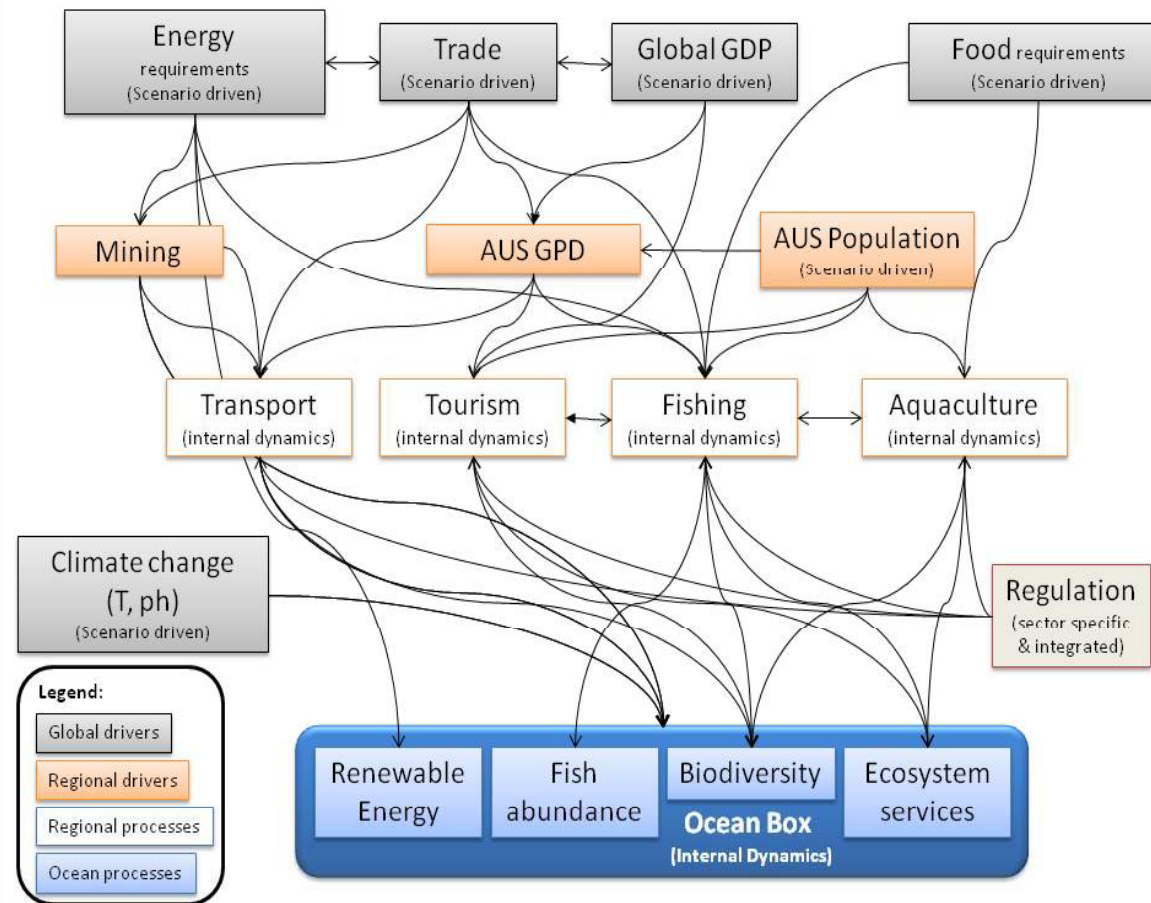
# Modes of thinking

- Extrapolating from the present
  - More of the same or continuing trends
- Developing scenarios
- Modelling the future

# 2D Future Global Driver Space



# An oceans model



# Ocean futures project

- CSIRO strategic project
- Multiple sectors
  - Fisheries
  - Aquaculture
  - Tourism
  - Mining
  - Oil and gas
  - Transport
  - Renewable energy
  - Conservation

# Ocean futures workshop

- Industry, government, academia
- Sectors
  - Fisheries
  - Tourism
  - Transport
  - Coasts
  - Conservation

# Australia's marine industries

**Marine industry value**

**\$44 billion**

(AIMS Index of Marine Industry 2010)

Offshore oil & gas exploration  
and extraction

\$24.2bn



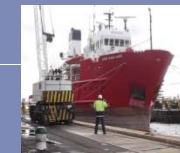
Marine tourism & recreational  
activities

\$11.1bn



Ship building, repair,  
maintenance services &  
infrastructure

\$6.4bn



Commercial fishing &  
aquaculture

\$2.3bn



**Agriculture value**

**\$41.8 billion**





# The approach

- Past, present and future
- Indicators, trends, drivers
- Leading to qualitative models (quantitative later)
  
- Trial run
- Enthusiastic participation
- Follow up with sector specific workshops

# Fisheries

- Commercial, (recreational), ((indigenous))
- Key issues and drivers:
  - Demand: population, affluence, health, trade
  - Supply: utilization, productivity, climate
  - Economics: price, fuel (energy), labour, capital
  - Social: license, marketing, certification
  - Governance: cost, access, regulation, incentives
    - Future standards

# Threats and opportunities

## Near term

- How the current drivers play out
- Some partly controllable
- Maintaining flexibility in institutions

## Longer term

- Unified sector?
- Increase value and production?
- Changing the brand and image?
- Competition for access and space?

# Role for R&D

- Smaller government (reduced capacity)
- Consolidation of capability
- Rethink focus?
  - Integrative approaches
  - New technologies and tools
  - Ocean observation and shared costs

# Thank you

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