RDC Knowledge Transfer and Commercialisation Guide

Principles for delivering maximum return to levy payers and Australian tax payers

This document provides guiding principles for Knowledge Transfer (KT), including commercialisation, for the adoption of R&D investment within the Australian agriculture's Research and Development Corporation context.

































Knowledge Transfer and Commercialisation

Australian Research and Development Corporations (RDCs) invest in research and development (R&D), extension, adoption and in some cases marketing, on behalf of the Australian Government and their respective Australian agricultural industries.

Knowledge Transfer and Commercialisation of R&D findings, innovations, new technologies and services is at the heart of Australia's economic and social future, enabling industry's growth and competitiveness. Innovation benefits all sectors of the industry and community through improved industry profitability; adoption of environmentally sustainable practices; agricultural products that contribute to society's health and wellbeing; meaningful and productive employment; and regional development opportunities.

Working in collaboration with the Australian Government and the agriculture, fisheries and forestry sectors, RDCs seek to collaborate with primary producers, research organisations, companies, innovators, entrepreneurs and other relevant stakeholders within their supply chains to deliver solutions that contribute to Australian producer profitability, sustainability and global competitiveness.

RDCs' investment priorities and outcomes are set out in their Strategic Plans, which align with the Australian Government's Science and Research Priorities and its Rural Research, Development and Extension Priorities. RDCs will also align to the priorities of the National Agricultural Innovation Policy Statement, supporting the Innovation Hubs, growAG and Agricultural Innovation Australia (AIA). The RDC commercialisation focus is directed towards fostering and accelerating adoption of new knowledge, innovations, technologies and services to drive positive change for Australia and the agricultural industry, rather than financial return to the RDC.

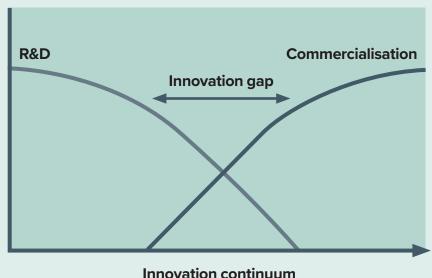
RDCs recognise the importance of maximising the benefits of investments for Australian producers, agribusinesses and regional communities, ensuring that appropriate mechanisms are in place to identify, protect, develop, promote and seek adoption of the research outcomes and intellectual property (IP) arising from these. This document outlines the guidance for the management of technology commercialisation.



Innovation Gap

One of the greatest challenges facing innovation generally is successfully bridging the 'innovation gap'. This gap represents the need for capacity and resources to facilitate the transition and translation from R&D outputs to products and services for commercialisation and adoption by industry.

These guiding principles define the requirements for RDCs to consistently bridge the innovation gap to maximise the return on R&D investment, by facilitating the transition and translation of R&D outputs to new technologies and services for commercialisation and adoption.



Guiding Principles

The objectives of these principles are to maximise opportunities and benefits of R&D for Australian agricultural industries and the broader Australian community. To achieve this, RDCs act according to the following principles:

Invest in impactful innovation

- RDCs invest in a balanced portfolio
 of projects focused on industry
 impact and adoption, primarily
 to ensure the maximum benefit is
 accrued by levy holders. Investment
 in commercialisation should focus on
 the most efficient and sustainable
 pathway to primarily enable
 technology access by levy payers.
- Research investment should consider knowledge transfer pathways to adoption and impact early, to ensure that R&D outputs are consistent with the primary objectives and optimal pathways for adoption.
- 3. The RDC should ensure that appropriate knowledge transfer and commercialisation resources (qualified and experienced staff, external expertise and/or funding) and systems including intellectual property (IP) management plans, policies and organisational support, are in place to protect IP and manage knowledge transfer, particularly the commercialisation pathway for adoption.

Intellectual property

- 4. Intellectual property ownership and rights of project outputs should be covered off contractually and generally structured to primarily support adoption by levy payers towards achieving maximum industry impact, whilst mitigating risks to the industry, the RDCs and Australia
- 5. IP registration should only be considered when it is required to assist with leveraging adoption, as a defensive measure, as required to maintain quality control of the outcomes, or when brand protection is considered valuable or necessary. A central, pro-actively managed register of registered IP should be maintained.

Dissemination of published works

6. Publications from research funding are encouraged to be **made available via open access.** This enables learned outcomes to be utilised and built upon by others. Creative Commons licensing facilitates the use and adaption of copyrighted material by others.

7. Copyrighted material should acknowledge authors and creators (when known) in a clear and reasonably prominent manner. Moral Rights waivers for copyrighted material are often incorporated into contracts, which assists RDC's to fulfill their obligations under their Commonwealth Statutory Funding Agreement.

Commercialisation path to market

- 8. Commercialisation of technologies should primarily focus on providing the strongest benefits and impact to Australia and the industry served, rather than royalty income.
- RDCs will encourage private sector investment and collaboration in the commercialisation of project outputs wherever appropriate, generating ongoing commercialisation income (including royalties), for reinvestment into further impact generating innovation activities

- 10. RDCs should seek to accelerate the adoption of novel technologies and services by selecting the most appropriate commercialisation pathway, which could include a collaboration, licence, assignment, joint venture or start-up company. Where IP is licensed, minimum performance requirements/targets will be included to ensure that commercial delivery obligations are established and met
- 11. Australian public commercialisation marketplaces and innovation platforms such as growAG and evokeAG will be supported and leveraged for amplification of innovation and identification of collaborative and commercial partners. These platforms, hubs and marketplaces can also be used to validate and/or develop ideation and approaches to R&D.

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Partnering for commercialisation success

- 12. As applicable, the **value propositions** to multiple organisations, touch points and actors along the delivery pipeline, as well as the end user, should be understood. Pitches for support, should be structured to create interesting, insightful, persuasive short stories, that can be easily comprehended and translated by the receiver to match their value proposition requirements.
- 13. When negotiating project participation and commercial terms of engagement, RDCs should seek to **build sustainable collaborative partnerships** with commercial partners, both to assist with the strong adoption of the IP and to assist in creating an ongoing relationship for the commercialisation for future technology opportunities.
- 14. When applicable, RDCs should utilise uncomplicated commercialisation models and straightforward agreements commensurate to the technology and market, to facilitate the smooth and efficient commercialisation of IP and new technologies.

- 15. Often RDCs will implement systems to ensure due diligence and risk management principles are applied to commercialisation activities, in accordance with the RDCs' risk appetite.
- Appropriate exit strategies are determined as soon as a RDCs' ongoing involvement is no longer desirable or required to maintain industry benefit.
- 17. Where RDCs generate a commercial return on exploitation of intellectual property (via licensing, royalties, divestment, equity vehicles and other commercial arrangements) this will not be to the detriment of ensuring industry benefits and advantages are maintained.
- 18. Income generated from commercialisation should be expended on projects or activities that are consistent with the objectives of RDCs as defined by their Constitution.

Commercialising overseas

- 19. Consideration may be given to commercialisation of intellectual property outside of Australia when:
- no major disadvantage to the Australian industry is evident; and
- it may enhance the industry's competitive position; and/or
- global benefits from the international collaboration or commercialisation are evident; and/or
- it is necessary to underpin the capability and viability of the commercialisation or RDC strategy.

Risk management

20. Often systems are implemented to ensure due diligence and risk management principles can be applied to establish basic freedom to operate in relation to IP creation, management and commercialisation activities undertaken.

Impact

Impact is the good that research can make in the world

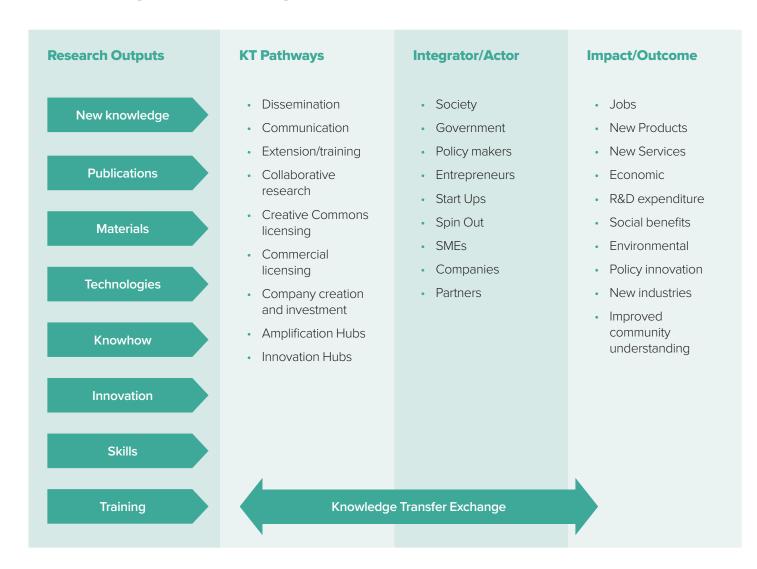
21. What will success look like? RDCs should consider the potential impact from research outputs and consider ways to measure actual impact from adoption by including reporting requirements on adoption figures in contracts and referencing in published materials.

Knowledge Transfer and Commercialisation, **RDC context**

Knowledge Transfer is the process of transferring scientific findings from one organisation to another for the purpose of further development and adoption, via multiple pathways including commercialisation, dissemination and education. Commercialisation is the process of bringing new products or services to market for adoption by the community, through commercial channels.

The main knowledge transfer pathways are outlined below:

RDC Knowledge Transfer Exchange Model



Attachment 1

Definitions

Creative Commons licensing

is an internationally recognised system of licensing terms that can efficiently be applied to enable dissemination, use, adaption and adoption of copyright material at no cost to the user.

Intellectual Property (IP)

is intangible property (as opposed to physical assets) that attracts rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

Common Forms of IP

| IP Туре | Description | Registration required? | Duration of protection |
|-----------------------------|---|--|--|
| Copyright | For original material in literary (including publications, reports, manuals and other documents), artistic, dramatic or musical works, including videos, films, photos, broadcasts, logos, multimedia, algorithms and computer programs | Not when created in Australia, however, other countries differ | Varies depending on the nature of the work, who created it and where it was created |
| Circuit layout rights | For the 3-dimensional configuration of electronic circuits in integrated circuit products or layout designs | No | Up to 20 years |
| Know-how / trade secrets | Including confidential know-how and other valuable proprietary information | No | Indefinite, provided the obligation is not breached |
| Designs | For the shape or appearance of manufactured goods (excluding function) | Yes | Up to 10 years |
| Moral rights | For rights of integrity of and attribution relating to authorship, including editing rights of copyrighted material | No | Varies depending on the nature of the work |
| Patents | Protection for new and inventive products, processes, devices or substances | Yes | Up to 20 years |
| Plant breeder's rights | Protection for new plant varieties | Yes | Up to 20 years (25 years for trees and vines) |
| Trade marks | For registered marks: words, logos, symbols, pictures, sounds, smells or a combination of these, to distinguish goods and services of one trader from those of another | Yes | Terms of 10 years – but indefinite on payment renewal every 10 years |

In Australia, most forms of IP are regulated under statutory regimes including the *Circuit Layouts Act 1989, Copyright Act 1968, Designs Act 2003, Patents Act 1990, Plant Breeders Rights Act 1994* and the *Trade Marks Act 1995*

Resources

Get connected. The following support associations provide tools, training and/or professional accreditation:

Knowledge Commercialisation Australasia (KCA)



techtransfer.org.au

Registered Technology Transfer Professional (RTTP)



techtransfer.org.au/rttp

Australian Centre for Intellectual Property in Agriculture



acipa.edu.au

Australian Copyright Council



copyright.org.au

Licensing Executives Society (LESANZ) membership also provides access to LES International resources and Certified **Licensing Professional**



lesanz.org.au

AUSBIO, for those animal & human biology applications



ausbio.com.au

Biotechnology Innovation Organization (BIO), world's largest association and collaboration of biotechnology applications



bio.org

AUTM, US based over 3100 international technology transfer professionals and good resources/training



autm.net

Praxis Aurial. UK



praxisauril.org.uk

References:

Australian Government Intellectual Property Manual



infrastructure.gov.au/media-centre/ publications/australian-governmentintellectual-property-manual

Biotechnology Intellectual Property Manual



dl-manual.com/doc/biotechnologyintellectual-property-managementmanual-8wo1e00geev5

Business Model Canvas, to assist with mapping out knowledge transfer, adoption (including commercialisation) pathway. This canvas is available for use and adaption under creative commons licensing



strategyzer.com/canvas/businessmodel-canvas

Creative Commons Australia



creativecommons.org.au

Intellectual Property for Horticulture: An Overview, HAL ACIPA



acipa.edu.au/pdfs/intellectualproperty-for-horticulture-an-overview. pdf

IP Australia



ipaustralia.gov.au/understanding-ip

Fast Track Impact



fasttrackimpact.com/books

WIPO



wipo.int/portal/en/index.html

Disclaimer: This document contains general principles for knowledge transfer and commercialisation.

These Guiding Principles may need to be adapted for different RDCs strategic focus and organisational structure.