Advancing Regional Australia through Innovation and Research

Submission to the Independent Expert Panel for the Strategic Examination of R&D

1. Executive Summary

Regional Australia is a vital driver of the national economy, contributing significantly to agriculture, mining, renewable energy, advanced manufacturing, and emerging industries, including those based on natural capital. Regional Australia is also crucial to addressing Australia's National Science and Research Priorities[1] and challenges whether it be transition to net zero, thriving communities, Aboriginal and Torres Strait Islander knowledge, protection and restoration of Australia's environment, and national security and resilience. However, beyond commodity-based Agriculture RD&E programs, regional investment in innovation remains underdeveloped, limiting the full social, economic, cultural and sustainability potential of Regional Australia.

This submission presents a framework for enhancing regional Australia's R&D capability and commercialization through targeted government investment and public-private partnerships. To unlock the full potential of regional Australia, we recommend:

1. **Establishing a National Regional Innovation Fund** to build infrastructure and research networks.
2. **Introducing a Regional Innovation Tax Incentive** to stimulate private sector R&D outside metro areas.
3. **Increased collaboration by CRCs with a regional focus** to boost applied research in key industries.
4. **Creating a Regional Innovation Venture Fund** to commercialize regional R&D.
5. **Supporting global R&D collaboration** to connect regional innovations to international markets.

2. The Case for Regional R&D Growth

2.1 Potential of Regional Innovation

Regional Australia is home to world-leading primary industries, concentrations of renewable energy investment, some advanced manufacturing sites, a wealth of Traditional Knowledge, and much of our precious natural environment. Yet, they are all challenged by limited access to place-based applied research capability, IP and research impact support, and global expertise and markets.

---

[1] https://www.industry.gov.au/publications/national-science-and-research-priorities-2024

Increased R&D investment in regional areas will:

- Boost productivity and competitiveness in regionally focused sectors (Ag and Food Tech, Clean Energy, Mining Tech, remote MedTech, NatureTech).
- Scale the unique innovation capacity of regional Australia in Indigenous Enterprise and Cultural Economy, Nature Repair, Environmental Services, Disaster Preparedness, Water Management, Transport and Remote Service Provision.
- Create high-value jobs, attracting and retaining skilled workers in regional areas.
- Strengthen supply chains by fostering innovation and reducing reliance on metro-based research hubs.
- Lead to increased economic diversity, complexity and prosperity.
- Take the pressure off our capital cities by decentralising population and reducing demand on infrastructure and housing.
- Improve the health, diversity, social cohesion and well-being of regional (and remote) communities, including our most disadvantaged.

2.2 Barriers to Regional R&D Growth

Despite strong potential and need, innovation in regional Australia faces:

- **Limited R&D funding distribution**, with government grants typically concentrated in capital city-based universities.
- **Insufficient digital, physical and institutional infrastructure**, hampering collaboration between research institutions and industry.
- **Weak commercialization pathways**, preventing regional businesses from scaling innovation into global markets.
- **Difficulties in attracting and retaining researchers,** stymying ability of regional innovation to reach a critical mass and endure.

3. A National Strategy for Regional R&D & Innovation

A structured, long-term approach is required to accelerate regional R&D and innovation. This submission proposes a five-year roadmap with key funding mechanisms and policy actions.

Strengthening R&D Capacity in Regional Australia

To bridge the gaps in regional R&D and drive innovation across regional Australia, a multi-faceted approach is needed, focusing on investment, collaboration, talent retention, and commercialization.

Support and build on existing **regional R&D innovation hubs** co-located with universities, TAFEs, and industry anchored with specialised R&D expertise that is aligned with regional

place-based innovation opportunities. The *Mallee Regional Innovation Centre*[2] is an example of a successful existing regional innovation hub.

Expand **industry–research partnerships** by incentivising regional businesses to collaborate with universities and scale-up existing research partnerships including Cooperative Research Centres (CRCs) and the Regional Universities Network (RUN) oriented towards regional research priorities and challenges.

Attract and retain **R&D talent** by offering competitive regional Post-Doctorate fellowships, PhD scholarships and internships, undergraduate placements and academic sabbaticals, all linked to local industry and R&D priorities and connected through cohort programs.

Strengthen **digital & physical infrastructure** by improving regional internet and data-sharing capabilities and investing in regional prototyping and testing facilities for agriculture and food technology, biotechnology, remote medical services, nature protection and renewable energy.

Unlock **funding & commercialization pathways by** expanding government R&D grants targeted at regional businesses and encouraging regional venture capital and angel investment networks.

Support **Indigenous-Led R&D & Enterprise by** funding indigenous innovation hubs and supporting the role of traditional knowledge in natural resource management R&D.

3.1 Policy & Investment Framework

To realise these regional R&D opportunities, we propose the following initiatives[3]:

National Regional Innovation Fund (NRIF) (estimated cost is $100m/year for ten hubs strategically located to maximise impact)

- **Purpose:** Establish digital infrastructure and a national network of connected regional innovation hubs anchored with support for post-doctorate researchers and PhD students. These would be a mix of new strategically located hubs and expansion of existing regional research hubs to leverage existing infrastructure.
- **Implementation:** Co-funding model with state governments and industry partners.

Regional Innovation Tax Incentive (RITI) (estimated cost is $350m/year in reduced tax revenue, based on 10% of current R&D Tax Incentive cost)

- **Purpose:** Encourage R&D activity outside metro areas through tax deductions and payroll tax relief.

[2] See https://eng.unimelb.edu.au/mric

[3] Proposed costs are indicative and there should be detailed costings analyses before finalising any of these policy and investment initiatives.

- **Implementation:** Increase the existing R&D Tax Incentive offset rates for R&D expenditure by industry in regional locations, where investments fund partnerships with university or government research organisations.

Increased collaboration by regionally-focussed Cooperative Research Centres (CRCs) (estimated cost is $50m/year)

- **Purpose:** Scale existing research partnerships between regional industries and research.
- **Implementation:** Grant Program to fund R&D projects involving two or more CRCs focused on regional innovation including Ag and Food Tech, Renewables, Mining Tech, Advanced Manufacturing, Nature Repair, Circular Economy and Indigenous Enterprise.

Regional Innovation Venture Fund (RIVF) (no net impact to government budget)

- **Purpose:** Support commercialization of regional R&D and attract global investment.
- **Implementation:** Government seed funding with venture capital and industry co-investment.

Regional R&D Export Acceleration Fund (Estimated cost is $20m/year)

- **Purpose:** Connect regional innovations with global markets and international R&D networks.
- **Implementation:** Grants for export market development and international research partnerships.

5. Global Best Practices & Application to Australia

Successful regional innovation models worldwide provide key lessons for Australia:

- **Silicon Savannah (Kenya):** Digital connectivity & mobile R&D solutions → *Expand high-speed internet to regional R&D hubs.*
- **AgriFood Valley (Netherlands):** AgTech innovation clusters → *Develop specialized research hubs for regional industries.*
- **Ontario Advanced Manufacturing Supercluster (Canada):** Public-private R&D investment → *Launch a co-funded Regional Innovation Venture Fund.*
- **Fraunhofer Institutes (Germany):** Applied research for industry → *Expand industry-led CRCs and commercialization pathways.*

6. Conclusion

Investing in regional R&D will drive regional economic resilience, job creation, and industry transformation, ensuring that Australia's regions become global leaders in applied research and innovation. Well-targeted regional R&D programs will also leverage the unique potential of regional Australia to deliver on Australia's National Priorities and grand challenges related

to energy transition, closing-the-gap, disaster preparedness, economic diversification, national security, water security, and environmental conservation.

We urge the Commonwealth Government to prioritize regional innovation as a key pillar of the national R&D strategy.