

Australian Government

Department of Industry, Science and Resources

Food and Beverage Manufacturing in Australia

Submission to the House of Representatives Standing Committee on Industry, Science and Resources

May 2024

Introduction

The Department of Industry, Science and Resources (the Department) welcomes the opportunity to make a submission to the House of Representatives Standing Committee on Industry, Science and Resources as part of its inquiry into Food and Beverage Manufacturing in Australia.

The Australian Government is rebuilding Australian manufacturing and creating the conditions for the industries of tomorrow. On 11 April 2024, the Prime Minister announced the Government's Future Made in Australia ambition. Central to this is greater onshore value-adding through manufacturing, which will diversify Australia's economy and improve our sovereign capabilities. The government is committed to a sustainable and innovative food and beverage manufacturing sector that creates jobs, secures our future prosperity, and makes Australia globally competitive.

The Australian food and beverage manufacturing sector plays a key role in the agricultural production supply chain, exports, food security and the local economies of regional Australia. Value-adding to agriculture production has also been identified as a priority area by the Australian Government across a range of manufacturing initiatives. This submission outlines the importance of the food and beverage manufacturing sector and how the Australian Government supports the sector. The Department provides advice to the Minister for Industry and Science on food and beverage manufacturing and delivers relevant initiatives and programs as outlined in <u>Attachment A</u>.

Sector Overview: Adding Value to Australian Agricultural Production

Australia has an international reputation for producing safe, high-quality clean and green agricultural products.¹ The food and beverage manufacturing sector² plays a critical role in the transformation of agricultural produce into foods and beverages that flow through the food supply chain to domestic and international consumers. While industry composition varies within food and beverage manufacturing subsectors, overall, the sector comprises 87 per cent small to medium size enterprises³ and generated approximately \$31.8 billion in gross value-added in 2022-23.⁴

The sector takes high-quality agricultural products and processes these into new high-value products or adds value, which often incorporates a variety of beneficial characteristics. This includes increased shelf-life, convenience, transportability, enhanced nutrition, and allergen free foods, underpinning food and beverage value chains. As demonstrated through the pandemic, food and beverage manufacturing supports Australia's and our region's food security.

The food and beverage manufacturing sector includes ten subsectors.⁵ This illustrates a highly diverse industry including, for example: processing of meat, dairy, fruit and vegetables, grains and cereals, seafood and sugar; confectionary manufacturing and the production of alcoholic and non-alcoholic beverages. The diversity of products ranges from minimally processed seafood and

³ Australian Bureau of Statistics Counts of Australian Businesses, including Entries and Exits, June 2023

¹ Australian National Audit Office, Food Standards Australia New Zealand, <u>https://www.anao.gov.au/work/performance-audit/food-standards-australia-new-zealand</u>: Australia's international and domestic reputation for producing high quality food is supported by a 2008 international study that ranked Australia fourth in the world for food safety performance. ² Note that the Australian and New Zealand Standard Industrial Classification (ANZSIC) system categorises beverages and other product manufacturing and food product manufacturing as distinct categories. Note that 'Wine and Other Alcoholic Beverage Manufacturing' is included within the various beverage manufacturing sector categories. Wine sits within the portfolio of the Department of Agriculture, Fisheries and Forestry.

⁴ Australian Bureau of Statistics, Gross Value Added, 2022-23

⁵ Australian Bureau of Statistics, Australian and New Zealand Standard Industrial Classification

frozen vegetables to highly transformed goods such as baby formula, ready-made meals and baked goods, beer and whisky, fermented foods and chocolate bars.

Innovation trends and new technologies, both locally and internationally

As a consumer facing industry, the range of innovation related activities undertaken across the sector are diverse. They include:

- New food and beverage manufacturing technologies.
- Process efficiencies.
- New product development including novel ingredients.
- Reformulation and product extension.
- Packaging solutions.
- Innovation of marketing and business models and testing of consumer insights.

The Australian food and beverage manufacturing sector is also adapting to challenges on multiple fronts. These include:

- Technology disruption and its implications for data, automation and the workforce.
- Global supply chain and trade disruptions are requiring more nimble business systems.
- Rising energy costs, concentration of market power and inflation are squeezing margins.
- Changing climatic conditions and sustainability concerns are increasing demands of businesses.
- Changes to consumer preferences.

Current trends and opportunities for onshore innovation or potential export of new products include:

- **Biotechnology**: CSIRO has identified precision fermentation and cultivated meat as growth opportunities.⁶ With increased infrastructure, to allow for commercially viable scaled production, the use of precision fermentation for food applications has the potential to supply diversified protein into the global food system. Australia is also well-positioned to be a leading producer of cultivated meat, which is an emerging source of protein enabled by innovative research and development.
- **Premium and niche products:** alternative proteins, Indigenous and native foods, personalised nutrition, food fortification and 'free-from' foods.
- Smart technologies: increasing efficiency and productivity through greater uptake of robotics, automation, AI, space-based positioning, data driven decision making, smart factories, use of drones and autonomous vehicles, and post-harvest quality assessment technology.
- **Traceability and provenance:** use of technology and supply chain digitisation to verify and promote trusted brands including made in Australia, provide protection against food fraud, verification of sustainability and other social credentials (for example, biosecurity).
- **Circular Economy:** upcycling food byproduct nutrients, waste to energy, sustainable packaging, supplements, feed additives, improved cold chain and sensor technologies to reduce waste.

⁶ CSIRO, Protein Roadmap for unlocking technology-led growth opportunities for Australia, 2022

Adoption of digital technologies and process automation is a key opportunity across industry. Adoption is varied across the food and beverage manufacturing subsectors, and across businesses of varying sizes. The extent to which new technologies are adopted is influenced by economic and business specific factors including the availability of capital. Overall, the sector and its workforce stand to benefit from the productivity gains these technologies offer and the consequent demand for workforce skills and upskilling. For example, the onset of the pandemic saw food and beverage manufacturing businesses, in particular small and medium enterprises (SMEs), accelerate their move to an online presence and uptake of ecommerce capabilities and inventory systems.

The adoption of AI could see the creation of 150,000 new jobs and contribute more than \$200 billion to the Australia economy by 2030.^{7.} Estimates also suggest that Generative AI alone could contribute between \$2 billion and \$5 billion annually to the Australian Manufacturing sector.^{8.} AI has the potential to uplift and transform the food and beverage manufacturing sector specifically through increased operational efficiency and quality control, more tailored marketing and customer experiences, and enhanced product innovation through large data analysis.⁹ The Australian Government is committed to ensuring AI technologies are safe to use and adopt, which is essential to build public trust and harness the economic benefits. The Government is supporting Australian small to medium enterprises adopting AI technologies through the AI Adopt program, further information on AI Adopt is at <u>Attachment A</u>.

Ways to support new and emerging products and industries, including premium and niche products, new proteins and Indigenous foods

Australian state and territory governments provide a trusted and robust regulatory system, including food safety. This contributes to Australian food and beverage products being trusted and sought-after worldwide,¹⁰ which strongly positions Australia to market new and emerging products, where products may be under more scrutiny from customers. The Australian Government also supports the food and beverage sector development through the CSIRO, and a range of programs and sources of funding listed at <u>Attachment A</u>, including the Cooperative Research Centres, National Reconstruction Fund, the Industry Growth Program, and the AusIndustry Business Outreach service.

The bush food industry, according to the latest available market research from the University of Sydney, was worth \$81.5 million in the 2019-2020 financial year, with the potential to double by 2025.¹¹ There are opportunities for Indigenous businesses to pursue in the food and beverage manufacturing sector, alongside those in agriculture through growing native foods (for example Kakadu plums or Tasmanian pepper-berries), for commercial purposes.

⁷ Mangan, J. (2024). Australia's AI Imperative: The economic impact of artificial intelligence and what's needed to further its growth. Kingston AI Group

⁸ Hajkowicz SA (2024), Artificial Intelligence foundation models, CSIRO

⁹ Rabobank Australia, AI set to transform the food sector on multiple levels,

https://www.foodprocessing.com.au/content/processing/article/ai-set-to-transform-the-food-sector-on-multiple-levels-1001820021

¹⁰ Modernising the Food Standards Australia New Zealand Act 1991 Impact Analysis 25 January 2024:

^{&#}x27;...[T]he last 30 years has seen ... greater food safety maturity within such organisations, borne in part from an understanding that a reputation for safety and quality is a competitive edge.' (pages 12-13).

^{&#}x27;Stakeholders consulted to date have spoken extensively about the value of FSANZ, and its contribution to ensuring food safety as part of its broader role in supporting population health and creating a strong reputation for Australia and New Zealand's food.' (page 20).

¹¹ Australian Financial Review, November 4, 2022, Bush food industry worth \$80m but could double by 2025: study: <u>https://www.afr.com/companies/agriculture/bush-food-industry-worth-80m-but-could-double-by-2025-study-20221104-</u> <u>p5bvn3#:~:text=The%20bush%20food%20industry%2C%20according,potential%20to%20double%20by%202025</u>.

Opportunities across both domestic and export markets for Australian manufactured products, including shifting consumer trends

Australia's world-leading safe, clean and green reputation enables its food and beverage manufacturers to earn premium prices in domestic and international markets. The industry has a strong commitment to quality and sustainability and is well positioned to service export markets and growing consumer demand in Asia. There are significant opportunities for Australian businesses to service the 'global consuming class', which has been estimated to be growing by 164 million people between 2019 and 2030.¹²

As a net exporter of food, Australia's agricultural production in tandem with the food and beverage manufacturing industry supports domestic consumption – with over 60 per cent of product across Australian and New Zealand Standard Industrial Classification (ANZSIC) subsectors meeting domestic consumption in 2021-22 (Table 1). Domestic consumers also benefit from access to a wide variety of imported food and beverage products.

A strong and diverse food and beverage manufacturing capability enhances Australia's food security and supports food security in other countries through providing physical access to food and making food more economically accessible. Value-added food and beverage manufacturing also provides diversified economic benefits for producers and manufacturers, including processing agricultural inputs into higher value goods.¹³

Food and Beverage Manufacturing in Australia

¹² Food Innovation Australia, Capturing the prize: The A\$200 billion opportunity in 2030 for the Australian food and agribusiness sector, commissioned by Food Innovation Australia Limited, <u>https://www.fial.com.au/sharing-knowledge/capturing-the-prize</u>, 2020

¹³ Understanding customer trust, CSIRO, 2022, <u>https://www.csiro.au/en/about/challenges-missions/Trusted-Agrifood-Exports/Customer-trust</u>.

[&]quot;CSIRO's work in agriculture and food is solving the greatest challenges through innovative science and technology to build a profitable, productive, trusted, and sustainable agrifood and fibre sector for the future." (page 2); "Likewise, streamlining the regulatory and compliance landscape domestically, along with overseas regulatory and compliance requirements may support exporters to access foreign markets." (page 41).

	Total production (\$m)	Domestic consumption (% of total production) ^b
Meat and Meat Product Manufacturing	38,887	66.4
Seafood Processing	1,493	79.5
Dairy Product Manufacturing	15,580	79.1
Fruit and Vegetable Processing	5,745	60.1
Oil and Fat Manufacturing	2,515	71.5
Grain Mill and Cereal Product Manufacturing	6,655	77.0
Bakery Product Manufacturing	9,184	94.7
Sugar and Confectionery Manufacturing	10,748	78.5
Other Food Product Manufacturing	14,510	86.4
Beverage Manufacturing ^a	17,751	86.2
Total	123,068	77.0

Table 1 – Domestic Production and Consumption of Food and Beverage Sector Products, 2021-22

^a Beverage manufacturing includes beverages and tobacco. This cannot be further split due to data limitations.
 ^b Exports provided in Table 1 are from ABS International Trade in Goods (recommended source for goods export figures).
 Domestic consumption is calculated using figures consistent with the ABS Input Output framework, which slightly differ.

In 2022-23 the value of food and beverage manufacturing sector exports was almost \$36 billion.¹⁴ This has increased by 31.8 per cent since 2016-17. The largest subsectors with import and export information are in table 2 below:

	Export (\$m)	Import (\$m)	Net Export (\$m)
Meat and Meat Product Manufacturing	18,623	1,098	17,524
Seafood Processing	600	2,281	- 1,681
Dairy Product Manufacturing	3,302	2,167	1,135
Fruit and Vegetable Processing	3,662	3,609	54
Oil and Fat Manufacturing	816	1,783	- 967
Grain Mill and Cereal Product Manufacturing	2,828	1,667	1,162
Bakery Product Manufacturing	210	1,343	- 1,133
Sugar and Confectionery Manufacturing	569	1,486	- 916
Other Food Product Manufacturing	2,798	4,565	- 1,767
Beverage Manufacturing*	2,580	3,388	- 808
Total	35,989	23,387	12,603

Table 2– Food and Beverage Sector Exports and Imports, 2022-23

*Beverage Manufacturing totals include approximately \$2.0bn in wine exports and \$1.1bn of wine imports. Wine policy is a portfolio responsibility of the Department of Agriculture, Fisheries and Forestry.

Significant export markets include China (\$6.5 billion, 18 per cent of total sector exports), the United States (\$5.4 billion, 15 per cent of total sector exports), Japan (\$3.7 billion, 11 per cent of total sector exports), the Republic of Korea (\$3.3 billion, 9% of total sector exports) and New Zealand (\$1.9 billion, 4 per cent of total sector exports).¹⁵ Austrade assists eligible Australian businesses to

¹⁴ Australian Bureau of Statistics, Trade Portal (ABS custom data), 2022-23.

¹⁵ Australian Bureau of Statistics, Trade Portal (ABS custom data), 2022-23.

expand into overseas markets through trades services such as assessing market potential, developing export strategies and finding valuable contacts overseas.¹⁶

Approaches to circular economy, waste reduction and decarbonising, including packaging and food waste

In October 2022, all Australian environment ministers committed to work with the private sector to design out waste and pollution, keep materials in use and foster markets to achieve a circular economy. The Australian Government is developing a new National Circular Economy policy Framework (Framework) that will guide and meaningfully focus efforts across the economy.

In February 2023, the Australian Government established the Circular Economy Ministerial Advisory Group. The Advisory Group provides advice to the Government on opportunities and challenges associated with Australia's transition to a more materials efficient circular economy – including manufacturing in the food system.¹⁷ The Advisory Group discussed the food system at its April 2024 meeting. They noted that manufacturing agri-derived and novel food products presents economic and environmental opportunities for Australia. They also focused on how to maximise circularity in food, aiming to use more for human consumption and less for energy and composting.

A decarbonised food supply chain is expected to be a competitive necessity in the future for both export and domestic suppliers. Circular economy principles can enable process improvement and cost savings for the sector. Coordinated change is needed across the whole supply chain given the reciprocal nature of circular practices. This requires such things as changes to packaging design and composition, improved traceability of food waste for it to be used as an input to other product manufacture, and pooling of waste for energy generation.

Actions to reduce packaging and food waste are being taken by all governments, industry and the not-for-profit sector under Australia's National Waste Policy Action Plan.¹⁸ Agreed by all governments, the Plan implements Australia's *National Waste Policy: Less waste, more resources* that sets a sustainable path for the management of Australia's waste and resource recovery efforts. Circular economy principles are central to the policy. Waste avoidance is also a priority, followed by recycling and then energy recovery where there are no higher value uses available. In response to a request by Australia's environment Ministers in late 2022, the Australian Government is working with all levels of government and with industry to strengthen the Action Plan towards the 2030 targets.

In Australia, 7.6 million tonnes of food is wasted across the supply and consumption chain each year, costing the economy about \$36.6 billion annually and equivalent to 298 kg per person. About 34% of this waste occurs at the household level, 31% at the manufacturing level, 25% at the primary production level, and 10% at the hospitality and food service level.¹⁹ The report highlights opportunities in comprehensive national food waste data, more research and innovation on food

¹⁶ Further information about Austrade's trade services is available at<u>https://www.austrade.gov.au/en/how-we-can-help-you/australian-exporters.</u>

¹⁷ More information on the Circular Economy Ministerial Advisory Group is available on the website of the Department of Climate Change, Energy, the Environment and Water <u>https://www.dcceew.gov.au/environment/protection/circular-economy/ministerial-advisory-group</u>

 ¹⁸ Department of Climate Change, Energy, the Environment and Water, National Waste Policy Action Plan, <u>https://www.dcceew.gov.au/environment/protection/waste/publications/national-waste-policy-action-plan</u>
 ¹⁹ Food Innovation Australia, Reducing Australia's Food Waste by half by 2030, <u>http://www.fial.com.au/sharing-knowledge/food-waste</u>

waste prevention and valorisation for high-value products and greater collaboration along the value chain.

This points to a key area for innovation through greater utilisation of waste streams and waste reduction, and sustainability practices including lowering emissions. Manufacturers can sometimes use circular economy or sustainability initiatives to charge a premium or increase product differentiation, noting this is dependent on consumer demand for more sustainable products in that segment, and for public companies where there is pressure from shareholders for better Environmental, Social and Governance (ESG).

The CSIRO has flagged circular economy opportunities in their national protein roadmap to reduce food waste in meat processing "...turning lesser cuts of red meat into value-added protein powders and nutraceuticals".²⁰ The CSIRO's Food Systems Roadmap (2023) also includes "minimising waste and improving circularity" as one of its five key priority areas and outlines a number of opportunities that can contribute to this, including the opportunity for Australian businesses to transform waste into value-added products (novel by-product innovation).²¹ Other examples of adoption of circular principles include Mars Australia using recycled paper wrappers, Bacardi-Martini Australia removing plastic pourers from bottles and Bega Group utilising 100 per cent recycled bottles for flavoured milk.

The Australian Food Pact, delivered by End Food Waste Australia (EFWA) with support from the Australian Government, seeks the voluntary participation of food businesses across the supply chain to reduce their food waste. EFWA is also delivering a number of sector action plans to target food waste in hotspot sectors, including dairy and bread and bakery. These initiatives support delivery of the 2017 National Food Waste Strategy which establishes a framework for action by governments, industry and community towards halving Australia's food waste by 2030.

There are also opportunities in the waste to energy area (biogas and cogeneration) as a regional solution where there is a suitable mix and scale of waste available. An example for food and beverage manufacturers is Barwon Water at Colac²² where power generation from waste utilises municipal waste, dairy processing waste (Bulla) and waste streams from regional farming (Australian Lamb Company).

Multiple businesses have reported to AusIndustry Regional Managers (which sit within the Department of Industry, Science and Resources) that they are currently pursuing ways to utilise food waste to generate energy or additional streams of business. This includes using fruit waste from local gardens in gin, turning urchin shells and waste into fertiliser, developing a blood processing line to turn abattoir waste into a saleable product and implementing biodigesters to process organic abattoir by-products to generate renewable energy.

The Australian Government is developing a net zero plan which will outline how transitioning to a net-zero economy can be achieved. A dedicated Industrial Sector Plan will be one of six sectoral decarbonisation plans, covering all major sectors of the Australian economy. The plan will interact closely with the pathways provided in all other sectoral plans, including a sector plan for Agriculture and Land.

²⁰ CSIRO, Australia's Protein Roadmap, <u>https://www.csiro.au/en/work-with-us/services/consultancy-strategic-advice-services/csiro-futures/agriculture-and-food/australias-protein-roadmap</u>

²¹ CSIRO, Roadmap to reshape Australia's food systems, <u>https://www.csiro.au/en/news/all/articles/2023/june/food-systems-roadmap</u>

²² Barwon Water, Renewable Organics Networks,<u>https://www.barwonwater.vic.gov.au/about-us/major-projects/renewable-organics-networks</u>.

The development of the Industrial Sector Plan, informed by close consultation, will provide an opportunity to explore pathways to further reduce emissions in manufacturing, and the key barriers to industry's ongoing decarbonisation efforts. The food and beverage manufacturing industry is already exploring opportunities to decarbonise, including optimising energy consumption, process heat generation and recapture, reuse of materials, and upgrading to more energy efficient equipment and processes, and electrification.

How the research sector can help to grow this ecosystem

In 2021-22 almost \$600 million of research and development expenditure offset claims were made for food and beverage manufacturing under the Research and Development Tax Incentive. The largest subsectors are identified in table 3 below:

Research and Development Tax Incentive Claims, Financial Year 2021-22					
ANZSIC Category	*Total R&DTI Registration Count	*Total Sum of R&D Expenditure			
C - Manufacturing					
111 - Meat and Meat Product Manufacturing	35	\$153,212,840			
112 - Seafood Processing	Suppressed	Suppressed			
113 - Dairy Product Manufacturing	50	\$53,758,411			
114 - Fruit and Vegetable Processing	25	\$19,400,718			
115 - Oil and Fat Manufacturing	Suppressed	Suppressed			
116 - Grain Mill and Cereal Product Manufacturing	15	\$7,048,819			
117 - Bakery Product Manufacturing	34	\$35,206,162			
118 - Sugar and Confectionery Manufacturing	18	\$10,190,343			
119 - Other Food Product Manufacturing	240	\$247,566,926			
121 - Beverage Manufacturing	165	\$61,246,597			
> 1211 - Soft Drink, Cordial and Syrup Manufacturing	31	\$8,322,292			
> 1212 - Beer Manufacturing	75	\$36,484,697			
> 1213 - Spirit Manufacturing	31	\$6,200,952			
> 1214 - Wine and Other Alcoholic Beverage Manufacturing*	28	\$10,238,656			
Total	596	\$598,757,690			
Due to privacy and confidentiality issues, some of the data on certain subsectors are suppressed. * Wine policy is a portfolio responsibility of the Department of Agriculture, Fisheries and Forestry					

Table 3: Food and Beverage Manufacturing Industry RDTI Claims, 2021-22

The Government also supports research through funding Cooperative Research Centres, which are discussed further at <u>Attachment A</u>, as well as through Australia's Economic Accelerator (AEA) which is a stage-gated funding program being led by the Department of Education. The AEA operates as a priority-driven grant program to support projects aligned with national research priorities with high commercial opportunity. Funding is available to universities, and applicants will partner with industry.²³

²³ Further information on Australia's Economic Accelerator is available on the Department of Education's website at https://www.aea.gov.au/

Future workforce and skills needs

Food and beverage manufacturing is the largest employing sector within manufacturing, with 237,000 employees, representing 25.9 per cent of all manufacturing jobs.²⁴ Given the dependence on agricultural production, the sector has a particularly important role as a regional employer, with 48.2 per cent of meat and meat product manufacturing subsector, 45.4 per cent of beverage manufacturing and 47.1 per cent of sugar and confectionary manufacturing employees located outside of greater capital cities.²⁵

Under the new National Skills Agreement (the Agreement), the Government is investing up to \$12.6 billion over 5 years to strengthen the vocational education and training sector. The Agreement commenced on 1 January 2024 and aims to address national workforce priorities including supporting the net zero transformation; developing Australia's sovereign capability and food security; and ensuring Australia's digital and technology capability. The Department of Employment and Workplace Relations is the lead agency on skills issues.

Mechanisms for the Australian Government to support further innovation and sustainable growth in the sector

To remain competitive and productive, Australia's food and beverage manufacturing industry will need to embrace emerging technology, advanced manufacturing and develop new and novel foods. The \$113.6 million Local Industry Grants (LIG) have helped local industry to secure and support new jobs and strengthen key domestic manufacturing capabilities in regional areas. Several food enterprises have received funding under the LIG, such as the \$17.2 million funding for a pilot Food Manufacturing Innovation Hub in New South Wales.²⁶

Further Australian Government initiatives which support innovative research, future investments and innovative companies in the sector include the Research and Development Tax Incentive, Cooperative Research Centre program, National Reconstruction Fund and Industry Growth Program. <u>Attachment A</u> provides further detail on programs that fall within the Department's policy responsibility.

²⁴ Australian Bureau of Statistics Labour Force, Australia, February 2024

²⁵ Australian Bureau of Statistics Labour Force, Australia, February 2024

²⁶ <u>https://www.minister.industry.gov.au/ministers/husic/media-releases/backing-regional-industry-and-delivering-secure-jobs-future</u>

Attachment A

Australian Government Support for Food and Beverage Manufacturing within DISR portfolio

The Department of Industry, Science and Resources' role

The portfolio supports businesses and industries by reducing barriers to productivity, influencing the design of appropriate regulatory frameworks and providing targeted investment and services.

The Department provides advice to the Minister for Industry and Science on food and beverage manufacturing industry policy. This includes liaising regularly with sector stakeholders and peak bodies, to ensure that food and beverage manufacturing issues, data and industry intelligence are contributed to relevant policy forums, such as: food safety and labelling regulation, free trade agreement negotiations, circular economy, net zero industry transition and innovation and industry policy.

The Department also has policy responsibility for the Country-of-Origin Food Labelling Information Standard 2016, under the Australian Consumer Law, with compliance the responsibility of the Australian Competition and Consumer Commission (ACCC) and State and Territory fair trading departments. The National Measurement Institute also has trade measurement regulatory responsibilities that relate to the food and beverage sector, and its role is discussed in more detail below.

Given the close relationship between agricultural production and food and beverage manufacturing, the Department works in close collaboration with the Department of Agriculture, Fisheries and Forestry, which is responsible for agricultural, pastoral and food industries, as well as wine policy.

Industry Growth Program

The Government supports eligible small to medium enterprises and startups to commercialise their ideas and grow their businesses through the Industry Growth Program. The program supports innovative SMEs undertaking commercialisation or growth projects that will build Australian capabilities in one or more of the seven priority areas of the Australian economy, including value-add in the agriculture, forestry and fisheries sectors.

The support provided by the program has 2 core elements:

(1) Advisory Services by a national network of expert business growth and commercialisation advisers, and with specialised sectoral advice to be provided by contracted not-for-profit Industry Partner Organisations; tailored advice to support commercialisation and growth projects;

(2) the opportunity to apply for matched grant funding opportunities between \$50,000 and \$5 million.

National Reconstruction Fund

The \$15 billion National Reconstruction Fund (NRF) is the cornerstone of the Government's industry transformation strategy aimed at diversifying and transforming Australian industry. Under the NRF, finance will be provided to eligible businesses through a range of finance options including debt and

equity for projects that diversify and transform Australia's industry and economy across seven Government-identified priority areas. The Government issued Investment Mandate also outlines target investment levels including \$500 million for value-adding in agriculture, forestry, fisheries, food and fibre. The NRF is administered by the NRF Corporation, an independent financier that operates at arm's length from government.

Research and Development Tax Incentive

The Research and Development Tax Incentive (R&DTI) helps companies innovate and grow by offsetting some of the costs of eligible research and development (R&D). R&DTI aims to boost competitiveness and improve productivity across the Australian economy by:

- encouraging industry to conduct R&D that may not otherwise have been conducted
- improving the incentive for smaller firms to undertake R&D
- providing business with more predictable, less complex support.

National Measurement Institute

The National Measurement Institute (NMI) works closely with the Australian food and beverage sector on a range of metrology capabilities and services, predominately around food safety, nutrition and labelling, supporting research and good governance. NMI provides expert advice and services to thousands of stakeholders annually as well as supporting regulatory compliance for both the domestic and export markets. NMI is routinely engaged in important research projects with regulatory bodies like FSANZ. NMI is also doing emerging work with the sector on measurements in new and novel areas, including protecting food provenance and preventing fraud and improved methods to accurately capture nutrients such as vitamin D and amino acids.²⁷

Supply Chain Resilience

Through the Office of Supply Chain Resilience, the Department works to improve resilience to critical supply chain vulnerabilities that could impact Australia's national interest, including our economic stability, national security, and the safety and well-being of Australians. The Department engages directly with targeted sectors to understand Australia's supply chain risks. These business insights can provide early warning signs of disruptions to critical supply chains. The Department also hosts a regular supply chain roundtable with peak bodies across key manufacturing and services sectors, including food production.

Cooperative Research Centres

Cooperative Research Centres (CRC) grants provide funding for medium to long-term, industry-led research collaborations to solve industry identified problems. Over \$100 million of funding is being provided to the food and beverage sector under CRC grants, such as through the Fight Food Waste, Future Food Systems and Food Agility CRCs.²⁸

Eligible businesses can apply for support under the Cooperative Research Centres Projects (CRC-P) grants. CRC-P grants provide funding for short-term research collaborations; food and beverage sector companies can access these to develop new technologies, products, processes, and services. Funding supports industry-led research projects, offering matched funding of between \$100,000 and

 ²⁷ Further information on the National Measurement Institute's role in the food sector is available on the Department's website https://www.industry.gov.au/national-measurement-institute/about-national-measurement-institute/food-sector
 ²⁸ Further information on the CRCs is available on the Department's website <a href="https://business.gov.au/grants-and-programs/cooperative-research-centres-crc-grants/current-cooperative-research-centres-crc-grants/c

\$3 million. CRC-P Grants already support food and beverage businesses, such as the \$1.8 million awarded to a collaboration led by GrainCorp for a project titled Australian manufacturing of alternative protein ingredients.²⁹

Industry Innovation and Science Australia

SMEs play a key role in Australia's economy but face unique challenges in seizing the opportunities presented by the transition to lower emissions. The Minister for Industry and Science provided Industry Innovation and Science Australia (IISA) with a Statement of Expectations in 2022 that requested advice on the emissions reduction challenge facing SMEs.³⁰

IISA is an independent statutory board tasked with advising the Australian Government on innovation, science and research matters, including:

- promoting investment in industry and Australia's innovation, science and research system,
- monitoring innovation programs through their committees, including ongoing projects under programs which are now closed to applications.

The outcomes of the IISA's work on the SME emissions reduction challenge will be relevant to all SMEs, including those across the food and beverage manufacturing sector.

AusIndustry Business Outreach service

AusIndustry operates a network of Regional Managers across the country who are connected to their local regions, communities and industries. Regional Managers provide impartial, trusted guidance, tailored to local businesses. Regional Managers will take time to listen and understand business needs and identify government support mechanisms to enable growth opportunities. They nurture partnerships and networks, provide connections, and help businesses navigate local, state and Commonwealth government. More than 80 per cent of all businesses in Australia are within 60km of an AusIndustry Regional Manager, which is particularly important for the food and beverage manufacturing sector given its regional base.

AusIndustry provides a valuable support to industry, allowing it to access and understand government support and services. It is also a source of key insights from businesses and industry organisations. On the ground information is a critical source of intelligence to inform policy development, input to policy forums and advice to government. Examples of recent insights include:

- **Reported growth in emerging, niche and Indigenous food products.** AusIndustry notes developing market opportunities for First Nations owned bush tucker and distillery businesses. Other novel products and technologies being used by Australian food and beverage SMEs include artificial dairy ice cream and cellular agriculture, where animal-based products are produced from cell cultures rather than animals themselves.
- New technology is being used to diversify or enhance businesses' offerings and "bring next generation thinking into traditional industries". For example, a brewery stated they use artificial intelligence to produce beer tailored to their customers' personal preferences. Meanwhile, a protein supplement business has developed an AI-powered platform to deliver personalised health support and rewards to their members.

 ²⁹ Outcomes of round 15 of the CRC-P Grants are available on the Department's website <u>https://business.gov.au/grants-and-programs/cooperative-research-centres-projects-crcp-grants/crc-projects-selection-round-outcomes</u>
 ³⁰ For further information please see the Department's website <u>https://www.industry.gov.au/publications/statement-expectations-and-intent-industry-innovation-and-science-australia</u>

AI Adopt program

The AI Adopt program will establish up to five AI Adoption Centres aimed at supporting Australian small to medium enterprises (SMEs) to adopt AI technologies to elevate and power their businesses to better compete in international and interstate markets. The National AI Centre and the Responsible AI Network (RAIN) is assisting Australian industry to uplift their adoption of responsible AI. RAIN is an innovative whole of ecosystem network that brings together government, industry, and the community to provide tools to deliver AI responsibly.