Australian Chicken Meat Industry Sustainability Framework





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FOREWORD FROM THE ACMF CEO

The industry is proud to deliver the inaugural Australian Chicken Meat Industry Sustainability Framework, the first chicken meat sector framework in the world to include clear measurable sustainability metrics and targets. The Framework is an initiative delivered by AgriFutures Australia and the Australian Chicken Meat Federation as a component of the AgriFutures Chicken Meat Program.



This is a pivotal framework that showcases how far the industry has come in its journey to become one of Australia's most environmentally sustainable, most cost-effective and most consumed land-based animal proteins. It also demonstrates how the sector will support Australian agriculture's transition to a lower-carbon future and continue to strongly support Australia's food security and economic resilience.

The role of the Framework is to articulate the significant sustainability achievements and investments of the industry over past decades, and how they have positively set the sector's sustainability trajectory and positioning, as well as monitor, measure and report industry performance against sustainability priorities going forward.

The Framework will also assist the industry to better understand opportunities, challenges, impacts and areas for improvement. Importantly, it is underpinned by metrics and targets that will enable demonstration of sustainability credentials.

While the Framework captures and reflects the positioning of the industry and the diversity of participants within the supply chain, it provides guidance for companies to set their own goals and targets that are appropriate to their businesses and sustainability ambitions — this is very exciting as over time, we are likely to see companies set stretch targets that promote industry growth and innovation in the sustainability space.

The Framework was developed by AgriFutures Australia and the Australian Chicken Meat Federation in consultation with key stakeholders, including the principal participants in the chicken meat supply chain; service providers; certification bodies; and customers.

I thank those involved in its creation, including the expert working group members who provided guidance on how best to measure our sustainability performance. I also thank all stakeholders for their contributions and perspectives. Their role has been fundamental to the Framework's development and their continued involvement will be essential to the industry's ongoing success.

This will be a living document, subject to review and refinement. We are committed to continual improvement and engagement with our stakeholders to ensure the industry remains strong and important, both for its participants and the Australian public.

Dr Mary Wu Chief Executive Officer Australian Chicken Meat Federation

FOREWORD FROM THE AGRIFUTURES MD

I am delighted to share with you the Australian Chicken Meat Industry Sustainability *Framework*, which showcases the industry's commitment to environmental sustainability, food security and economic resilience. The Framework is the result of a collaborative effort between the Australian **Chicken Meat Federation** (ACMF), AgriFutures Australia and levy payers who participated in the ACMF Sustainability Steering Group.

The depth and breadth of the Framework reflects a strong commitment to industry-led research and innovation. We're proud to have contributed to this united effort, involving all segments of the industry, which sets a clear pathway for future performance monitoring, measurement and reporting against sustainability priorities.



It is increasingly imperative for individual industries, and the agriculture sector more broadly, to lead and communicate achievements and aspirations, while also committing to measurable targets and metrics to address environmental stewardship and social responsibility. Sustainability frameworks for agricultural industries have proven to be highly valuable tools in responding to producer, processor and consumer expectations, confirming an industry's commitments. I believe this Framework will also prove its value.

I congratulate the industry for its leadership, for proactively demonstrating the ongoing sustainability credentials of the industry, and for committing to becoming one of Australia's most environmentally sustainable, cost-effective and consumed proteins. I thank all contributors and encourage ongoing active stakeholder engagement across the opportunities and challenges that lie ahead.

AgriFutures Australia looks forward to continuing our partnership with the industry to help it realise its sustainability goals and grow its long-term prosperity.

Men Hour

John Harvey Managing Director AgriFutures Australia



¹ FRAMEWORK SNAPSHOT



VISION

A thriving Australian chicken meat industry that strives to improve the wellbeing of people, community, animals and the natural environment.

PRINCIPLES

Adaptability Engagement Relevance Resilience Responsibility

THEMES

CHICKENS



Animal husbandry Animal welfare Antimicrobial stewardship Biosecurity

PLANET



Climate resilience Carbon and the environment Feedstock Sustainable packaging Waste and circular economy Water management

PEOPLE



Community engagement and contribution Diversity and inclusion Health, safety and wellbeing Job creation Talent attraction, retention and training

FOOD SECURITY AND ECONOMIC RESILIENCE



Australian production and consumption Financial value creation Research, development and innovation Food safety



1.1 CHICKEN MEAT INDUSTRY SUSTAINABILITY FRAMEWORK ON A PAGE

Table 1. Themes and priorities of the Australian Chicken Meat Industry Sustainability Framework.

Theme	Priority
	Animal husbandry: Optimise animal care to improve health, wellbeing, feed efficiency and resilience.
CHICKENS	Animal welfare: Maintain strong and practical welfare standards for our chickens from hatching to processing.
CHICKENS	Antimicrobial stewardship: Responsible use of antibiotics to minimise the risk of antimicrobial resistance.
	Biosecurity: Prevention and management of biosecurity risks at all points of the supply chain.
	Climate resilience: Adapting to climate change and building resilience to climate-related risks.
PLANET	Carbon and the environment: Net zero by 2050 in line with Australian Government targets and mandates.
/	Feedstock: Maintain responsible sourcing related to feedstocks, including soybean meal.
	Sustainable packaging: Utilise sustainable packaging for chicken meat products where possible.
	Waste and circular economy: Minimise waste to landfill and encourage material reuse and recycling.
	Water management: Commitment to sustainable water stewardship initiatives.
	Community engagement: Support local organisations and community investment.
	Diversity and inclusion: Provide an inclusive workplace for people from a diverse range of backgrounds and with a diversity of identities and experiences.
PEOPLE	Health, safety and wellbeing: Promote high standards of safety and wellbeing across the workplace.
	Job creation: Continue to provide employment opportunities in urban and regional areas.
	Talent attraction, retention and training: Attract and retain a skilled workforce that meets the needs of the industry.
	Australian production and consumption: Maximise the value and affordability of chicken meat in the Australian domestic market, and provide consumers with a reliable, consistent and ongoing supply of quality and nutritious food.
FOOD	Food safety: Maintain the highest-possible standards of food safety throughout the supply chain.
SECURITY AND ECONOMIC RESILIENCE	Financial value creation: Increase the financial contribution of the chicken meat industry to the local and national economy.
	Research, development and innovation: Boost industry innovation and productivity efficiencies.

² CHICKEN MEAT INDUSTRY BACKGROUND

2.1 OVERVIEW

The history of the Australian chicken meat industry dates back to the mid-1950s. Over the decades, the industry has evolved from small-scale backyard operations to highly sophisticated, vertically integrated supply chains. At that time, approximately three million chickens were produced annually for meat consumption in Australia, compared to more than 700 million today and growing.

The chicken meat industry has worked hard to continuously improve its sustainability performance. Through careful nutrition management, processing technology innovation and investment, and highly sophisticated selective breeding programs, Australian chicken meat production is more efficient than ever. Feed conversion rates have significantly improved, making chicken meat one of the most efficient conversions of feed into protein.

Today, the care, effort and dedication of the industry and its people are apparent in the growing consumer demand for poultry. Chicken meat is Australia's most frequently eaten meat-based protein, with annual consumption averaging 50 kg per person.¹ Due to its affordability, versatility, nutrition and taste, 68 per cent of Australians eat chicken meat as part of a meal at least twice a week.² The industry also contributes significantly to the domestic economy, with an estimated gross volume of production of 1.5 billion kilograms and real gross value of production of \$3.9 billion in 2024-2025,³ and an estimated retail value of more than \$8 billion.⁴ Additionally, the domestic chicken meat industry provides jobs for more than 58,000 full-time employees,⁵ many in rural and regional communities.

With the lowest environmental footprint of all land-based meats,⁶ and as the most cost-effective form of meat protein, chicken meat plays an important role in sustainable food supply, food security and national nutrition.



Figure 1. Key meat chicken production areas in Australia.

2.2 INDUSTRY HIGHLIGHTS

~50 kg annual per capita consumption of chicken meat. ¹	68 per cent of Australians eat chicken at least twice a week. ²
\$3.9 billion estimated gross value of production. ³	\$8 billion-plus estimated retail value to the Australian economy. ⁴
Employs 58,000-plus people, many in rural and regional areas. ⁵	The lowest environmental footprint of all land-based, mainstream meats. ⁶

- ¹ ABARES. (2024). Agricultural commodities: March quarter 2024 Outlook tables.
- https://www.agriculture.gov.au/abares/research-topics/agricultural-outlook/data#agricultural-commodities ² Umberger, W. J. and Malek, L. (2021). *Market insights for Australia's chicken meat industry*. AgriFutures Australia.
- https://agrifutures.com.au/product/market-insights-for-australias-chicken-meat-industry/
- ³ ABARES. (2024). Agricultural Commodities Report: March quarter 2024. https://doi.org/10.25814/byyh-ne21
- ⁴ IBIS World. (2023). Poultry Processing in Australia Market Size, Industry Analysis, Trends and Forecasts. https://www.ibisworld.com/au/industry/poultry-processing/9/
- ⁵ RMCG and BDO EconSearch (2020). *Economic contribution of the Australian chicken meat industry*. AgriFutures Australia. https://agrifutures.com.au/product/economic-contribution-of-the-australian-chicken-meat-industry/
- ⁶ Copley, M. and Wiedemann, S. (2023). Environmental impacts of the Australian poultry industry. I. Chicken meat production. *Animal Production Science*, 63(5), 489-504. https://doi.org/10.1071/AN22230

^{3.} OPERATING ENVIRONMENT

The Australian Chicken Meat Industry Sustainability Framework is an initiative delivered by AgriFutures Australia as a component of the AgriFutures Chicken Meat Program. The Program aims to grow the long-term prosperity of the Australian chicken meat industry through research, development and extension (RD&E) that increases knowledge and understanding that fosters an innovative, adaptive and valuable chicken meat industry in Australia.

The program invests in targeted, high-impact RD&E as guided by the <u>AgriFutures</u> <u>Chicken Meat Program RD&E Plan 2022-2027</u> to optimise flock performance, efficiency and industry productivity. Continuous improvement and ongoing RD&E are required to enable chicken meat to retain its position as the most affordable and popular meat on the domestic market.

3.1 MARKET TRENDS

The global production of meat doubled in the 30 years from 1988 to 2018. By 2050, global meat consumption is projected to reach between 460 million and 570 million tons. In 2021, about 132.3 million tons of poultry meat were consumed worldwide, making it the most consumed type of meat globally.⁷

Population growth is also anticipated to increase, with CSIRO estimating the global population will reach 9.7 billion by 2050. As a result, it predicts up to 70 per cent more food will be required on a global scale, with a particular emphasis on protein source.

Australia's annual consumption of meat is approximately 100 kg per capita. In 2022-2023, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) estimated that Australians increased consumption of chicken meat to 50.1 kg on average per person.⁸ This represents nearly half of all meat consumed. Based on ABARES data, chicken meat consumption is expected to continue to rise, being forecast to reach 52 kg annual per capita consumption by 2030. Combined with population growth in Australia, it is expected that demand for chicken meat will remain strong and growing for decades to come.

However, despite the growth in meat consumption, there is interest among some consumer groups in plant-based and alternative diets based on environmental sustainability, animal welfare or other considerations (whether real or perceived). This dynamic landscape emphasises the need for the industry to adapt and diversify to meet evolving consumer demands, to ensure we continue to offer a sustainable, nutritious, cost-effective and readily available protein source.

3.2 UN SUSTAINABLE DEVELOPMENT GOALS

The United Nations Sustainable Development Goals (UN SDGs) were developed in 2015 as a call to action by all countries to address global sustainability issues, including climate change, population growth, water scarcity, responsible consumption and rewarding work.

The UN SDGs consist of 17 goals, 169 targets and 232 unique indicators. National governments, including Australia, are expected to contribute to and report on all 17 goals through the UN process. The Australian chicken meat industry supports Australia's contribution towards achievement of the UN SDGs, with the sector having the potential to contribute towards many of the goals, particularly in responsible production and consumption (SDG 12) and climate action (SDG 13).

3.3 ALIGNMENT WITH OTHER SUSTAINABILITY FRAMEWORKS

The Australian Chicken Meat Industry Sustainability Framework has strong alignment with other industry/government sustainability frameworks where practical, demonstrating a degree of consistency among those common priority areas, ultimately contributing to our shared sustainability goals. It is important, however, to acknowledge the unique characteristics of our industry. Our framework is meticulously crafted to advance sustainability within the Australian chicken meat industry by emphasising the adoption of impactful practices. These practices are carefully selected to ensure a lasting positive impact on the industry's long-term sustainability goals.

⁷ The World Counts. (2020). World Consumption of Meat. https://www.theworldcounts.com/challenges/consumption/foods-and-beverages/world-consumption-of-meat

⁸ ABARES. (2024). Agricultural commodities: March quarter 2024 – Outlook tables.

https://www.agriculture.gov.au/abares/research-topics/agricultural-outlook/data#agricultural-commodities

ABOUT THE FRAMEWORK

The Australian Chicken Meat Industry Sustainability Framework was developed to recognise the significant sustainability credentials of the industry, provide a pathway to an even more sustainable future, and better understand the key opportunities, challenges and impacts across areas such as animal welfare, the environment, people and the community, and food security and economic resilience.

WHAT THE FRAMEWORK WILL DO

The Framework will illustrate the industry's sustainability priorities and measure performance against them. This allows for alignment with community and other stakeholder expectations on areas where the industry has the largest impacts.

The Framework will support continuous improvement across the industry and help facilitate continued access to markets and capital for Australian chicken meat businesses by demonstrating the industry's performance and practices.

WHAT THE FRAMEWORK CONTAINS

The Framework includes the following elements:

- **Definitions** how sustainability is defined by the Australian chicken meat industry
- **Principles** to guide development, decision making and implementation of the Framework
- Themes four overarching pillars
- **Priorities** specific sustainability matters identified by industry and stakeholders
- **Targets** time-bound performance objectives to support sustainability priorities
- Metrics data reflecting action and performance on sustainability priorities

WHO BENEFITS FROM THE FRAMEWORK

The Framework helps communicate the benefits of sustainable chicken meat production to different stakeholders by:

- providing industry participants with a unified point of reference on industry sustainability achievements and future direction
- providing customers and consumers with greater understanding and awareness of product and industry sustainability credentials.

^{5.} **PRINCIPLES**

Principles that will guide the implementation and continual development of the *Australian Chicken Meat Industry Sustainability Framework* are shown in Figure 2.

RESPONSIBILITY

Responsibility is a cornerstone for the industry, as it assumes accountability for its material sustainability impacts, performance and operations.

RELEVANCE

Maintaining a continual focus on what is important to our customers, the community and other stakeholders is critical for the industry.

AUSTRALIAN CHICKEN MEAT INDUSTRY SUSTAINABILITY FRAMEWORK

ENGAGEMENT

The industry is dedicated to 'telling its story' and engaging in ongoing dialogue with external and internal stakeholders, to manage impacts and facilitate the exchange of expertise and knowledge.

RESILIENCE

The industry will continue to incorporate risk assessments and management strategies, so that it can withstand unforeseen challenges.

ADAPTABILITY

The industry is committed to embracing forthcoming trends and regulatory shifts, promoting the assessment and analysis of industry dynamics.

Figure 2. Principles of the Australian Chicken Meat Industry Sustainability Framework.

^{6.} SCOPE AND BOUNDARY

6.1 BOUNDARY

The boundary indicates the portion of the value chain where the Framework will focus. It defines the areas where data is readily available to measure, monitor and report performance and progress, and where the industry has more control. Given that most chicken meat produced in Australia is consumed domestically, our framework targets Australian operations, organisations and practices. This includes breeding farms, hatcheries, feed milling, production farms, processing plants and the product outputs.



6.2 SCOPE

The role of the Framework is to measure and report industry performance against sustainability priorities. The scope details the Framework's primary function and design.

The Framework seeks to:

- Identify opportunities, challenges and impacts of chicken meat production
- Inform planning, management and evaluation of activities at an industry level
- Assist chicken meat businesses in meeting their own sustainability commitments
- Inform investors through provision of clear industry performance metrics
- Continue to foster constructive relationships with stakeholders.

The Framework does not seek to:

- Act as an accreditation, assurance or certification system
- Endorse prescriptive management practices and measurement systems at an individual business level
- Create mandatory reporting requirements and burden for the Australian chicken meat industry.



⁷ FRAMEWORK DEVELOPMENT

7.1 MATERIALITY ASSESSMENT

In 2022, the Australian chicken meat industry tasked AgriFutures Australia with commissioning and managing the industry's first materiality assessment. The materiality assessment was a foundational piece that highlighted the topics, issues, risks and opportunities that are of greatest importance to the industry and its stakeholders.

The assessment involved a review of strategic documents, an international comparison and

a megatrends analysis. This was followed by a series of interviews with internal and external stakeholders to gather views on the industry's environmental, economic and social impacts.

The materiality assessment was crucial to the development of this Framework, being used as a tool to inform the sustainability priorities. For further details on this assessment, please see the Appendix.

7.2 OUR STAKEHOLDERS

Engagement with our stakeholders along the chicken meat industry value chain has been essential to the development and implementation of the Framework, and is crucial to ensuring it remains robust and relevant. Our stakeholder engagement (Figure 3) focused on businesses throughout the supply chain that are heavily involved in the production or distribution of chicken meat, financiers, those contributing supply chain inputs such as genetics and feed, as well as welfare accreditation providers and retailers. We also engaged with representative organisations throughout the broader poultry and processing industries. The industry is committed to maintaining this engagement in future reiterations of the Framework.

Stakeholder engagement provides direct input and validation, ensuring that the Framework is measuring, reporting and addressing the sustainability risks and opportunities most relevant to the industry and the community.

The Framework development process engaged a wide range of individuals and companies who are invested in and/or are affected by the chicken meat industry, including chicken meat supply chain participants, government agencies, customers, service providers, certification bodies, industry peak bodies, affiliated organisation and researchers.

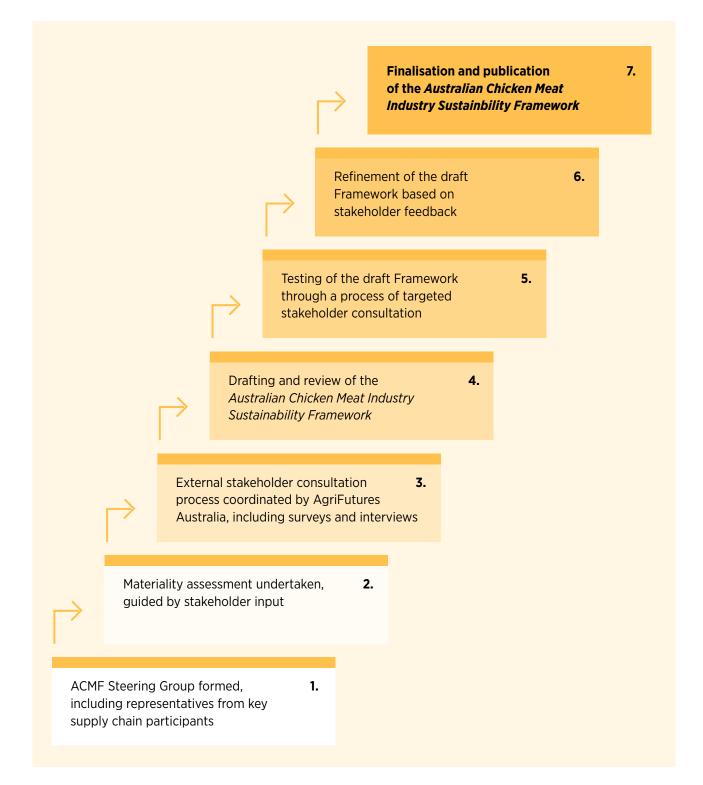


Figure 3. Stakeholder engagement and consultation process.



[®] FRAMEWORK THEMES

V

CHICKENS

We are committed to implementing industry best practice approaches to animal welfare across the industry, in areas such as genetics, nutrition, transport, physical environment, health and behaviour.



PLANET

We are committed to minimising our impact on the natural environment, with the aim of reducing greenhouse gas emissions to net zero by 2050, being adaptable and resilient in the face of climate change, and implementing industry stewardship programs.

PEOPLE

We are committed to fostering a healthy, diverse and safe space for our industry workers that promotes growth and retention within the workforce while the surrounding community maintains confidence and support for businesses.



FOOD SECURITY AND ECONOMIC RESILIENCE

We are committed to the ongoing growth and financial resilience of the chicken meat industry to provide the Australian community with a reliable, nutritious, safe and high-quality food source.

8.1 CHICKENS



The health and welfare of the meat chickens is a paramount priority for the Australian chicken meat industry. Meat chickens are farmed in a wide range of geographical locations across Australia, from the tropics of far north Queensland through to the temperate climates of Tasmania, and using diverse production systems, from enclosed barns through to outdoor free-range. As such, the care and husbandry requirements for meat chickens are specifically and precisely tailored according to the farming region and the type of production system.

What is consistent across all the diverse regions and production systems, however, is the industry's unwavering commitment to upholding the highest standards in chicken meat production:

- Chicken meat is the one of the only livestock industries in Australia to consistently meet and exceed the Australian Standard for animal welfare. The Australian chicken meat industry is a standout leader in adopting voluntary third-party accredited animal welfare programs (e.g. more than 90 per cent industry uptake of the RSPCA Approved Farming Scheme), which are independently assessed against rigorous standards.
- The industry is at the forefront of husbandry best practices, being a very early adopter of antimicrobial stewardship practices (commencing in the 1980s and continuously refined), as well as investing in strong biosecurity practices and systems.

The following sections provide further details on these programs, as well as the Sustainability Framework requirements.

Chicken welfare

The welfare of chickens throughout the supply chain is of critical importance to the Australian chicken meat industry. The industry is committed to implementing best practice approaches to animal welfare across the sector in the five domains, including nutrition, physical environment, health, behaviour and experiences.

Meat chickens in Australia are derived from elite pedigree stock, which have been specially selected by expert international genetics companies over many decades for a range of positive welfare traits, such as strong physical conformation, healthy body systems and ability to achieve their potential growth.

Meat chickens are housed in controlled environments where they are comfortable and are cared for by experienced industry personnel who understand their needs and behaviours. The birds have access to nutritious and carefully selected feed and clean water, and are able to express their natural behaviours, such as scratching, dust bathing and wing flapping. The Australian requirements for the housing and management of meat chickens are prescribed in Australian Government-regulated standards, as well as Model Codes of Practice. Additionally, approximately 92 per cent of Australia's meat chickens are currently grown under an independently assessed thirdparty animal welfare accreditation scheme, such as the RSPCA Approved Farming Scheme and/ or Free Range Egg and Poultry Australia (FREPA) standards.

These schemes require verified and ongoing compliance with hundreds of specified conditions to obtain and maintain accreditation, and exist solely to improve farm animal welfare. They are detailed and focus on providing good housing conditions for animals (whether indoor, outdoor or a combination of both).

The prescribed regulations and third-party accreditation schemes also extend from farming through to processing of meat chickens. Australian processing establishments comply with a stringent set of animal welfare requirements to support the humane processing of meat chickens. These requirements are subject to constant internal monitoring programs, as well as regular external assessment and audit processes. The third-party accreditation schemes also require all persons responsible for the management and/or handling of birds to be appropriately trained and competent in a range of tasks as related to animal welfare throughout the supply chain (on farm, during catching, during transport and at the processing establishment).

Welfare performance metrics

Percentage of meat chickens that are certified by an accredited third-party animal welfare program.

Number of people completing animal welfare training (within the past two years).

Welfare performance target

More than 95 per cent of meat chickens are certified by an accredited third-party animal welfare program by 2030.

Chicken health

The Australian chicken meat industry is committed to ensuring chickens are free from disease and are as healthy as possible. To look after chickens' health and wellbeing, and to manage disease, poultry veterinarians and experienced poultry managers use a variety of tools, including farm hygiene, vaccination programs, flock surveillance and monitoring, as well as prompt disease diagnosis and treatment.

Effective biosecurity practices are the mainstay to ensure chickens remain free of disease. Australia's geographic isolation from the rest of the world and strict quarantine arrangements have assisted in keeping most serious poultry diseases, such as highly pathogenic avian influenza, out of Australian flocks amid an international deterioration in animal/bird health. The industry continues to be vigilant in its management of biosecurity risks so that favourable flock health status is maintained.

The industry works closely with various levels of government in a range of national and state jurisdictional systems for biosecurity surveillance and preparedness. Further, the industry has developed a comprehensive suite of educational tools and resources to assist supply chain participants to continue adopting best practice biosecurity. The industry also invests in research and development (R&D) to enable it to stay at the forefront of biosecurity, such as the development of digital systems to conduct biosecurity risk assessments with the ability to influence real-life behavioural and practice change.

Contrary to popular belief, Australian meat chickens are not administered hormones or antibiotics for growth promotion purposes. This is especially important as, increasingly, there is growing public health and consumer awareness and interest in how chicken meat is produced, and its impact on the global fight against antimicrobial resistance (where the efficacy of antimicrobials declines). Antimicrobials are only ever used in the industry under strict veterinary oversight, and only as required, for animal health and welfare purposes.

The industry is a proud global leader in antimicrobial stewardship in livestock production industries and championing the responsible and prudent use of antimicrobials. It was the first livestock sector in Australia to adopt formal antimicrobial stewardship practices, commencing in 1980s with the publication of veterinary prescription guidelines, and these have been reviewed and refined over time into a formal antimicrobial stewardship program. Antibiotics that have been determined by the Australian Strategic and Technical Advisory Group on Antimicrobial Resistance as highly important, or by the World Health Organization (WHO) as critically important for use in human medicine, are not typically used in meat chicken production in Australia.

Only medicines assessed and approved by the national regulator of veterinary products (the Australian Pesticides and Veterinary Medicines Authority) are permitted for use in poultry.

The industry also routinely participates in the Australian Government's National Residue Survey, which provides verification of the effectiveness of Australia's legislated control of use programs for agriculture and veterinary chemicals. Australian chicken meat has had an outstanding track record, with 100 per cent compliance under the government residue sampling program over many decades (i.e. no antibiotics exceeding government prescribed levels, known as maximum residue limits, have been detected).

Chicken health and biosecurity performance metrics

Percentage of meat chicken grower properties and producers covered by a documented biosecurity plan.

Total levy amount (\$) invested in biosecurity-related activities.

Percentage of industry with veterinary oversight for the application of antibiotic prescriptions.

Percentage of compliance with antibiotic maximum residue limits (MRLs).

Chicken health and biosecurity performance targets

100 per cent of meat chicken grower properties and producers covered by a documented biosecurity plan by 2030.

Maintain 100 per cent veterinary oversight for the application of antibiotics prescriptions.

8.2 PLANET



Climate change, resource use and resilient food production are key challenges facing the Australian community. Despite being one of the most sustainable land-based livestock industries in Australia, the chicken meat industry understands that it has a role to play in minimising impacts on the environment without compromising food security. Industry representatives across the value chain are continually working to improve performance and reduce carbon emissions, invest in circular economy solutions, and enable responsible water and land management practices.

Carbon and the environment

In line with the Australian Government's commitment to transition to a net zero economy by 2050 and other national environmental priorities, the chicken meat industry is actively taking steps to reduce greenhouse gas (GHG) emissions, increase adoption of renewable energy technologies and reduce the utilisation of energy produced from fossil fuels across the supply chain.

Chicken meat is a naturally lowcarbon-footprint animal protein, producing 3.8 kg CO_2 -e/kg carcase weight (CW) including land use (LU) and direct land use change (dLUC), with 77-79 per cent of this being attributable to livestock feed inputs.⁹

The emissions and other impacts associated with the production of cereal grains and other ingredients in chicken feed are responsible for a significant proportion of the indirect environmental impacts of chicken production, and in particular its GHG emissions. While the impacts associated with growing feed inputs are not directly in the control of the Australian chicken meat industry, the industry is actively collaborating with supply chain stakeholders to maximise the efficient and sustainable utilisation of available feed inputs.

Firstly, the industry is actively reducing its carbon footprint through advancements in feed conversion ratio (FCR). FCR is an indicator of how efficiently an animal can convert a kilogram of feed into a kilogram of meat. FCR in chicken meat production is very low relative to other livestock species (meaning meat chickens are one of the most efficient landbased animal converters of feed), and the industry has continued to improve, progressing from an FCR of 2.5 to 1.5 over the past 30 years. This is equivalent to more than 1 billion kg less feed required per year, with resultant GHG reductions associated with growing the feed inputs, transport and feed milling. Further, a study by Wiedemann *et al.* identified that a 0.1 improvement in FCR resulted in a 3-4.5 per cent decrease in GHG through downstream impacts from manure emissions.¹⁰

Secondly, the industry's GHG emissions reduction focus is in relation to the formulation of chicken feed. The Australian chicken meat industry is continuing to invest in R&D to optimise dietary formulations to have low environmental impact while also being cost-effective. Funded by AgriFutures Australia and led by The University of Queensland's (UQ) Centre for Nutrition and Food Sciences, the *Sustainable*

⁹ Copley, M. and Wiedemann, S. (2023). Environmental impacts of the Australian poultry industry. I. Chicken meat production. *Animal Production Science*, 63(5), 489-504. https://doi.org/10.1071/AN22230

¹⁰ Wiedemann, S., McGahan, E. and Murphy, C. (2017). Resource use and environmental impacts from Australian chicken meat production. Journal of Cleaner Production, 140(2), 675-684. https://doi.org/10.1016/i.jclepro.2016.06.086

¹¹ AgriFutures Australia. (n.d.). Chicken Nutrition, Gut Health and Environment. https://agrifutures.com.au/chicken-nutrition-gut-environment/

Precision Feeding in Broiler Chickens in Australia¹¹ project, which commenced in 2023, is a world-first global collaboration of 11 Australian and international universities, the Queensland Department of Agriculture and Fisheries (QDAF), and nine research organisations and project sponsors.

In coming years, the project will investigate how chicken meat producers can use nutrition to optimise gut health, animal welfare and GHG emissions, including by implementing innovative feed formulations that decrease the industry's reliance on soybean meal, as well as adapting nutritional principles to improve environmental impact.

Thirdly, in addition to FCR improvements over time and the dietary formulation of chicken feed, the Australian chicken meat industry continues to review diet sourcing — in particular the use of imported soybean meal in the Australian market. The industry is cognisant of international regulatory changes, including the European Union Deforestation Regulation (EUDR), which recognises soy as a driver of global deforestation. Such regulatory changes will likely have direct and indirect impacts on the global availability and price of soy.

Despite the unprecedented nature of these regulatory changes and the potential unforeseen impacts on global soy sourcing, the industry is committed to ongoing collaboration with value chain stakeholders on the longerterm sourcing and utilisation of deforestation-free soybean meal in Australian meat chicken dietary formulations.

Outside of feed-related GHG emissions, the Australian chicken meat industry continues to invest in and implement significant capital infrastructure and equipment to reduce scope 1 and 2 emissions and bolster renewable energy generation capacity, such as the widespread installation of solar panels; establishment of biogas capture systems; processing equipment efficiencies; and refrigeration and transport system upgrades.

Recognising the significance of addressing scope 3 emissions, we are committed to understanding and mitigating their impact as part of our ongoing sustainability efforts. However, there are currently uncertainties that could impact future reporting, such as calculation methodologies, policies, regulations and reporting requirements, which will evolve and be refined over time. While chicken meat has the lowest environmental footprint of all land-based mainstream proteins in Australia, we acknowledge that its production can still impact nature and biodiversity. We support responsible practices that minimise environmental impacts and promote biodiversity conservation, and are committed to a culture of ongoing review with respect to global and domestic developments on nature and biodiversity.

Carbon and the environment industry performance metrics

Absolute scope 1 and 2 emissions^{*} (tonnes of CO_2 equivalent).

Emissions intensity (kg CO₂-e per kg carcase weight).

Percentage of net deforestationfree^ soybean meal.

Carbon and the environment industry performance target

Aim for net zero greenhouse gas emissions by 2050.

^{*} At the time of development of the Australian Chicken Meat Industry Sustainability Framework, Australia's National Greenhouse and Energy Reporting Act does not require companies to report their scope 3 emissions. Note that scope 3 emissions disclosure is likely to be required in future should mandatory climate-related financial disclosure be introduced through legislation.

[^] Based on available supply chain verification information or certification programs.

Resource use and circularity

The chicken meat industry is committed to investing in circular economy solutions, reducing waste generation and sustainably managing water. The industry is conciously pursuing innovative pathways and technologies to minimise its overall waste levels throughout the supply chain. For example:

- In farming, used bedding following chicken grow-out may be re-purposed in composts or in organic fertiliser for a range of applications, such as in horticulture, viticulture, broadacre farming, pasture production and turf production.
- In processing, advanced protein recovery systems during processing enable up to 30 per cent of materials not utilised as meat or meat products to be efficiently converted during coproduct production into valuable products, such as pet food and aquaculture feed, which results in minimal (if any) wastage.
- In primary and further processing, the industry is exploring sustainable packaging options as an approach to waste reduction. Many chicken meat producers are signatories to the Australian Packaging Covenant Organisation (APCO), a notfor-profit organisation leading the development of a circular economy for packaging in Australia, and are working to improve recyclability and increase recycled content in product packaging.
- The industry's processors are working towards a zero-wasteto-landfill goal, implementing innovative practices and technologies to minimise waste generation and maximise recycling and reuse efforts.
 Through ongoing investment in sustainable solutions, processors are driving towards a future where waste diversion and circular economy principles are at the forefront of operations.

Resource use and circularity industry performance metrics

Percentage of total primary and further processing waste recycled, reused or diverted from landfill.

Total waste to landfill generated at primary and further processing (kg per tonne output).

Recycled content included in packaging.

Percentage of packaging recyclable or compostable.

Percentage of businesses signed up to Australian Packaging Covenant Organisation (APCO) packaging targets.

Resource use and circularity industry performance target

100 per cent of businesses signed up to Australian Packaging Covenant Organisation (APCO) packaging targets achieve a rating of 'Advanced' or 'Leading'.



Water management

Australian research¹² has shown that compared to other Australian agricultural commodities, chicken meat production is highly water efficient, and delivers more economic and nutritional value per kilolitre of water than other meat and horticultural products. Through a detailed and robust life cycle assessment, the chicken meat industry has estimated that chicken meat production has a comparatively low water usage, consuming 20.5-23.2 L/kg CW,¹³ exclusive of water associated with feed production. Measures to improve water use efficiency in feed production are anticipated to be included in other industries' sustainability plans.

Despite its positive scorecard for water efficiency, the Australian chicken meat industry is far from complacent about water security. The possibility of future water scarcity due to climate change and increased competition for the resource means Australian chicken meat supply chain participants are actively undertaking water stewardship initiatives along the industry's supply chain.

The industry's water stewardship initiatives include investments into new approaches and technologies, such as utilising water-efficient cooling methods on farm, through to upgrading processing facilities and equipment to improve water efficency and increase water reuse.

Water management industry performance metrics

Water use intensity (kL/tonne of carcase weight).

Percentage of industry/ production with water stewardship initiatives.



¹² AgriFutures Australia. (2021). Future proofing water security for Australia's chicken meat industry.

https://agrifutures.com.au/news/future-proofing-water-security-for-australias-chicken-meat-industry/

¹³ Wiedemann, S., McGahan, E. and Poad, G. (2012). Using Life Cycle Assessment to Quantify the Environmental Impact of Chicken Meat Production. Rural Industries Research and Development Corporation. https://agrifutures.com.au/product/using-life-cycle-assessment-to-quantify-the-environmental-impact-of-chicken-meat-production/



People and the community are at the heart of the Australian chicken meat industry. A safe and healthy workforce, equipped with the right skills, is vital to ongoing success. The industry strives to maintain and grow trusting relationships with local communities through supporting local jobs and businesses, and investing in community initiatives.

The industry supports employment opportunities for more than 58,000 people in a wide variety of employment areas — IT and technology, agribusiness, science, engineering, quality assurance, laboratory services, marketing, transport, production and processing, veterinary, nutrition, administration and management. Many jobs are located in rural and regional areas of Australia, but the industry also employs people in larger, urban areas and major cities.

Like many other agricultural and manufacturing industries, the industry continues to face the challenge of a constrained candidate market. Ongoing priorities for the industry are attracting talented individuals, developing workforce capabilities and retaining skilled employees.

Workplace safety and wellbeing is a key priority for the industry. This includes managing risks and reducing injuries in activities identified as high risk, such as onsite traffic management, plant and equipment isolation, and manual handling. The industry works cooperatively and proactively with the Australian Government and state and territory jurisdictions to ensure compliance with legislative requirements in relation to work health and safety.

In addition to regulatory compliance, the industry's approach to safety is founded upon risk reduction, safety management systems, safe behaviours and injury prevention management. Safety walks, hazard inspections, toolbox talks and procedural compliance inspection and auditing programs are also consistent practices across the industry.

Looking beyond physical workplace health and safety, the industry is highly cognisant of the importance of mental health in overall wellbeing. As a part of its commitment to health and safety, supply chain participants actively support employee mental wellbeing and promote awareness of positive mental health behaviours and practices. By fostering a culture of continuous learning and investing in development, the industry not only enhances employee skillsets but also cultivates a dedicated and motivated workforce. Recognising the significance of human capital in the industry's success, efforts to attract, retain and train staff are instrumental in building a robust foundation for the present and future of the chicken meat sector.

In recognising the importance of the industry's workforce, AgriFutures Australia in 2024 released an Australian chicken meat industry workforce strategy,¹⁴ one of the first comprehensive sectoral workforce strategies for the livestock sector. The primary objective of this strategy is to cultivate people capability and foster a diverse and sustainable workforce, all contributing to the long-term prosperity of the industry. The strategy identifies challenges and opportunities for the chicken meat industry to ensure a sustainable workforce, and includes a short-, medium-

¹⁴ KPMG Australia. (2024). Building people capability and a diverse and sustainable workforce: Australian chicken meat industry workforce strategy. https://agrifutures.com.au/product/building-people-capability-and-a-diverse-and-sustainable-workforce/ and long-term roadmap for attraction, retention and training. By addressing crucial aspects related to attraction, retention and training, the strategy aims to bolster the industry's long-term prosperity, which will support the continued growth of the sector as a secure, safe and sustainable employment option in Australia.

Given the broad-based background and composition of the workforce within the industry, upholding the principles of inclusion and diversity in the workplace is very important to sustain a positive work culture. As such, the industry will consider the suitability of additional workforce metrics, including gender ratios, for inclusion in future reiterations of the Framework. The industry is committed to providing an inclusive and supportive workplace where its people are welcomed, inspired to make a difference, and feel that their voices are heard. The industry is also committed to upholding good practices in labour standards and human rights, particularly in regard to the protection of migrant workers.

The industry is proud of the economic contribution it makes to both urban and regional communities throughout Australia in terms of direct employment opportunities, as well as its charity and community support that positively impacts local communities. The industry undertakes a range of initiatives and sponsorships, and provides financial and in-kind support in areas such as community sport and healthy lifestyle programs, support for disadvantaged community groups, and support for charity organisations.

People and community industry performance metrics

Number of people employed in the industry

Industry employee breakdown by gender

Percentage of the workforce who identify as culturally or linguistically diverse.



8.4 FOOD SECURITY AND ECONOMIC RESILIENCE



The Australian chicken meat industry is proud of the positive contribution it makes to the Australian economy and the important role it plays in supporting the country's nutrition and food security by providing an affordable, healthy, safe and sustainable source of protein. Chicken meat is the most widely consumed meat protein in Australia, accounting for close to half of all meat protein consumed by Australian households. The industry is a leader in hygienic food processing, which ensures that food is safe and wholesome, verified, and assured through good manufacturing practice and audited food safety programs.

Food production and consumption

Annual chicken consumption currently exceeds 50 kg per person.¹⁵ Chicken meat is Australia's most frequently eaten meat-based protein. Due to its affordability, versatility and taste, 68 per cent of Australians eat chicken meat as part of a meal at least twice a week.¹⁶

Based on ABARES data, chicken meat consumption is forecast to continue on this growth trajectory, reaching 52 kg annual per capita consumption by 2030.¹⁵

ABARES has forecast poultry production to be a record 1.5 billion kilograms in 2024-2025, boosted by lower feed costs and high levels of consumer demand. Over the outlook period to 2028-2029, poultry meat production is projected to grow, driven by productivity improvements and lower feed grain prices. In the alternative scenario, poultry meat production is assumed to rise but at a slower rate due to projected higher feed costs.¹⁷

As domestic consumption demand and population growth continue to increase, it is predicted that Australian chicken meat production will need to increase by at least 200 million kilograms (about 100 million birds) above current capacity by 2030. Meeting this demand will require substantial additional investment in farms, infrastructure, machinery, transport and workforce. Based on the industry's ongoing investment to achieve year-on-year growth, Australia is fortunate to be in a position of self-sufficiency in chicken meat production and consumption. About 97 per cent of chickens produced in Australia are consumed domestically, with the remaining 3 per cent exported as part of achieving overall carcase balance.¹⁸ Very little chicken meat is imported into Australia due to the strict biosecurity and quarantine requirements in place to protect the health status of the Australian meat chicken flock.

¹⁵ ABARES. (2024). Agricultural commodities: March quarter 2024 - Outlook tables. https://www.agriculture.gov.au/abares/research-topics/agricultural-outlook/data#agricultural-commodities

¹⁶ Umberger, W. J. and Malek, L. (2021). Market insights for Australia's chicken meat industry. AgriFutures Australia. https://agrifutures.com.au/product/market-insights-for-australias-chicken-meat-industry/

¹⁷ ABARES. (2024). Agricultural Commodities Report: March guarter 2024. https://doi.org/10.25814/byvh-ne21

¹⁸ Australian Chicken Meat Federation. (2023). Facts and Figures. https://chicken.org.au/our-product/facts-and-figures/

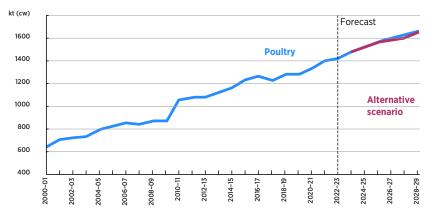


Figure 5. Annual volume of Australian poultry production. Note: Data to the right of the dashed line indicate estimates, forecasts and projections. Source: ABARES, Australian Bureau of Statistics.

Food production and consumption industry performance metrics

Volume (kg) of chicken meat produced annually.

Annual per capita consumption (kg) of chicken meat.

Percentage of chicken meat produced in Australia that is consumed domestically.

Food safety

Delivering high-quality, safe and wholesome chicken meat products to Australian consumers is a key focus for the Australian chicken meat industry.

The industry recognises the critical role it plays in protecting public health and maintaining consumer confidence. By implementing rigorous chicken health, biosecurity and food safety measures throughout the production process, from farming through to processing and beyond, the industry consistently delivers product that is high quality and meets strict process hygiene standards, which are regularly audited by government and independent third-party assessors.

The industry is committed to fostering and promoting a positive food safety culture, and actively participates in national and state jurisdictional programs on foodborne illness reduction, including compliance with regulated process hygiene controls; development and implementation of industry food safety guidelines; active participation in food safety standards development and review processes; and ongoing industry research into food safety innovations.

In an era of heightened awareness regarding food safety, the industry extends its commitment beyond its own supply chain, collaborating with regulators to enhance education within the food service industry and among consumers. This collaborative effort aims to raise awareness and improve food preparation practices, further reducing food safety risks and reinforcing the industry's dedication to delivering safe and wholesome chicken products to customers and consumers.

Food safety performance metrics

Percentage of primary processing facilities certified to a Global Food Safety Initiative (GFSI) food safety certification program.

Food safety performance targets

100 per cent of primary processing facilities hold third-party hazard analysis critical control point (HACCP) accreditation by 2028.

90 per cent of primary processing facilities are certified to a Global Food Safety Initiative (GFSI) food safety certification program by 2028.

Value creation

The Australian chicken meat industry is a significant economic contributor. ABARES forecast the gross value of poultry meat production (GVP) for 2024-2025 to be \$3.9 billion,¹⁹ with an estimated retail value of more than \$8 billion.

Chicken meat is projected to remain the most consumed meat in Australia over the medium term. Consumer preference for chicken meat is expected to drive per capita consumption growth of 1 per cent per year over the ABARES outlook period (to 2028-2029). Additionally, lower chicken meat prices relative to other livestock proteins are expected to further boost consumption demand.

To continue growing its value to the economy, the industry is investing in, and researching, opportunities to boost performance. AgriFutures Australia launched the *AgriFutures* *Chicken Meat Program RD&E Plan* 2022–2027²⁰ to guide investment to deliver research outcomes to benefit the whole industry. This includes detailed research projects investigating modern technologies and the industry's capacity to innovate, which will help drive increased productivity and profitability for the industry.

Value creation industry performance metrics

Gross value of production (\$).

Annual return on investment on industry investment in research and development.

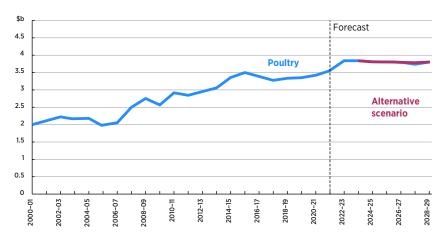


Figure 6. Real gross value of poultry meat production. Note: Data to the right of the dashed line indicate estimates, forecasts and projections. *2023–2024 Australian dollars. Source: ABARES; Australian Bureau of Statistics.



¹⁹ ABARES. (2024). Agricultural Commodities Report: March quarter 2024. https://doi.org/10.25814/byyh-ne21

²⁰ AgriFutures Australia. (2022). AgriFutures Chicken Meat Program RD&E Plan 2022-2027.

https://agrifutures.com.au/product/agrifutures-chicken-meat-program-rde-plan-2022-2027/



^{9.} GOVERNANCE

As sustainability is an ever-evolving space, the Framework is intended to be a living document that provides a shared vision and direction in sustainability for the Australian chicken meat industry. The Framework will be reviewed and updated every three years as an ongoing partnership between AgriFutures Australia, as the RD&E organisation for the chicken meat industry. and the Australian Chicken Meat Federation, as the peak industry representative body.

The ongoing governance and implementation of the Framework will consider:

- The decision-making authority regarding industry commitments made in the Framework remaining with industry participants, with responsibility and ownership for the commitments made as part of the Framework.
- Responsibility for the ongoing development and direction of the Framework and its implementation being shared by AgriFutures Australia and the Australian Chicken Meat Federation, and overseen by a Sustainability Steering Committee.
- Representation by industry sectoral groups in decision

making regarding the Framework, including the Australian Poultry Industries Association and the Australian Chicken Growers Council.

- Consistency and comparability in line with other existing and emerging Australian agriculture sectoral frameworks, and in particular other Australian livestock sustainability frameworks.
- Mechanisms to engage with broader stakeholders to elicit feedback on the Framework along the industry value chain.

Public reporting of progress against the commitments made in the Framework, and associated data protocols, is anticipated to occur on a biennial basis subject to industry feedback.



The Australian Chicken Meat Industry Sustainability Framework will be updated every three years according to this cycle, to reflect contemporaneous industry matters, trends and broader changes associated with domestic and global sustainability developments.

^{10.} APPENDIX

10.1 MATERIALITY ASSESSMENT

In 2022, the Australian chicken meat industry tasked AgriFutures Australia with commissioning and managing the industry's first sustainability materiality assessment.²¹ The materiality assessment aimed to show which topics (issues, risks and opportunities) are of greatest importance to the industry and its stakeholders, and to inform sustainability efforts across the industry. Sustainability consultancy Point Advisory, an ERM Group Company, was commissioned to undertake the materiality assessment and prepare the report. Key outcomes and the methodology and stakeholder engagement process used to determine material topics for the industry are outlined below.

Methodology

Phase 1 of the assessment focused on building an understanding of the industry's operating context and generating ideas for potential topics (issues, risks or opportunities). A review of strategic documents, an international comparison and review, and a megatrends analysis were followed by a series of interviews with internal and external stakeholders, and a workshop with the Project Steering Group.

Phase 2 involved a survey of stakeholders, including industry employees, to gather their views on the developed topic universe and on the industry's environmental, economic and social impacts. The survey asked respondents to rank groups of topics in order of importance, and asked how the industry's approach to managing each topic affected their decisions.

Phase 3 began with the development of a methodology to inform how topics would be

prioritised. The 'importance to industry' criteria were developed with the Project Steering Group and stakeholders were grouped and assessed for their relative importance. Each topic was then given a score, both for its importance to the industry and its importance to stakeholders. Topic scores created a materiality matrix.

Results

The results of the materiality assessment demonstrate the importance of workplace safety, food safety, animal welfare and climate resilience to the Australian chicken meat industry.

Food security, cost of living and the stability of prices and supply chains also ranked as key priorities, reinforcing the notion that the industry plays a crucial role in providing a healthy and reliable source of nutrition for Australians.

Climate change mitigation, adaptation and resilience, feedstock, and sustainable packaging also were noteworthy areas of impact. These scored highly among both the industry and external stakeholders.

Finally, stakeholders recognise the role of the chicken meat industry in consistently providing an affordable, sustainable and highquality source of protein.

²¹ Point Advisory. (2022). Materiality assessment of the Australian chicken meat industry. AgriFutures Australia. https://agrifutures.com.au/product/materiality-assessment-of-the-australian-chicken-meat-industry/







