GRAIN SUSTAINABILITY FRAMEWORK

First Annual Report 2026

Distinctly Australian.
Trusted Globally.

Contents

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Disclaimer

This marks the publication of the inaugural Annual Report for the Grain Sustainability Framework. This report and additional information can be found on the Grain Sustainability Framework website https://grainsustainabilityframework.com.au/.

The Grain Sustainability Framework is a joint initiative established by GrainGrowers and Grain Producers Australia (GPA). This report was approved for publication by the Grain Sustainability Framework Council on the 18th of December 2025.

External assurance has not been sought for this report and a position on external assurance has not yet been developed by the Grain Sustainability Framework Council. However, much of the information in the report is the subject of third-party assurance and auditing regimes.

Care is taken to ensure the accuracy of the information contained in this publication. However, the Grain Sustainability Framework cannot accept responsibility for the accuracy or completeness of the information or opinions contained in the publication. You should make your own enquiries before making decisions concerning your interests. The Grain Sustainability Framework accepts no liability for any losses incurred if you rely solely on this publication and excludes all liability as a result of reliance by any person on such information or advice.

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Letter from the Grain Sustainability Framework Council Chair

I am proud to introduce the Grain Sustainability Framework First Annual Report. This represents a milestone in our industry's commitment to transparency, accountability, and long-term strategic intent.

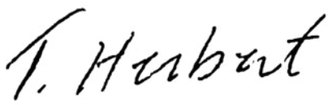
This report is more than a snapshot of progress; it reflects our determination to look beyond today and prepare for tomorrow.

The grains industry faces rapid change in the form of climate variability, shifting global markets, and evolving consumer expectations. Our role is not only to respond but to help shape the conditions for growers to thrive.

Through the Grain Sustainability Framework, we are laying the reporting foundations for a resilient, innovative, and sustainable future. This framework will evolve over time, guided by the feedback and the insights we gather together as an industry.

The Grain Sustainability Framework was developed by the skills-based Grain Sustainability Framework Steering Group in close consultation with our customers, stakeholders, and growers. I thank all who contributed for their hard work, ongoing engagement, and support.

I invite you to explore this report and join us as we continue to build and refine the Grain Sustainability Framework.



Tess Herbert

Grain Sustainability Framework Council Chair

Grain Sustainability Framework Council

Nigel Corish

GrainGrowers Director

Richard Norton

GrainGrowers Director

Shona Gawel

GrainGrowers CEO

Matthew Madden

Grain Producers Australia Director

Mark Schilling

Grain Producers Australia Director

Brendan Taylor

Grain Producers Australia Director

Dr Mark Callow

Grains Research and Development Corporation Council Observer

Letter from the Grain Sustainability Framework Steering Group Chair

It is my privilege to present our first report, shaped by consultation, rigorous discussion, and the combined expertise of a highly skilled Grain Sustainability Framework Steering Group.

This group brought together individuals with diverse and complementary capabilities, each offering unique perspectives and specialist knowledge. Informed by extensive stakeholder consultation and through open dialogue and constructive debate, we challenged assumptions, explored options, and worked collectively to design a reporting framework that is practical, transparent, and future-focused.

Our aim was not only to identify themes, topics and measures, but to create a foundation that meets customer needs, considers our unique Australian operating environment and positions the industry for long term success. By leveraging the strengths of this team, we have delivered a framework that is both robust and adaptable.

Importantly, this work reflects the voice of the industry as a whole. Through engagement with over 40 stakeholder groups representing growers, supply chain partners, and broader industry participants, we have ensured that the framework is grounded in real world insights and aligned with shared priorities. This collaborative approach strengthens our ability to respond to challenges and seize opportunities across the sector.

I want to thank every member of the Grain Sustainability Framework Steering Group for their commitment and insight. Their willingness to share, listen, and collaborate has been central to this achievement.

We invite you to explore this report and share your feedback as we continue to refine and strengthen our approach together.

Catherine Marriott OAM

Grain Sustainability Framework Steering Group Chair

Grain Sustainability Framework Steering Group

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Farm Life Psych
Psychologist and Grower

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Toby Wright

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Head of Strategy and Sustainability

About the Grain Sustainability Framework

The Grain Sustainability Framework is an initiative of the Australian grains industry. Its purpose is to support the long-term sustainability of the industry by using credible data to measure, monitor, and report national performance across environmental, social, and economic indicators.

The Grain Sustainability Framework reports performance over time to highlight strengths, identify areas for improvement and demonstrate progress over time.

The Grain Sustainability Framework does not take policy, advocacy, or political positions. It neither certifies or endorses, nor prescribes specific farming practices or business approaches within the Australian grains industry.

Definition

A sustainable Australian grains industry delivers trusted, high-quality grain through practices that are locally grounded, globally recognised, and economically prosperous.

A sustainable Australian grains industry safeguards people, soil, water, biodiversity and the atmosphere, while supporting growers, communities, and future generations.

Boundary

The grain value chain is complex, spanning multiple stages, stakeholders, and customers. The Grain Sustainability Framework is currently prioritising on-farm sustainability reporting, reflecting the critical role of farm-level practices in driving sustainability outcomes. By starting behind the farm gate, the Grain Sustainability Framework ensures that the foundation of the value chain is robust, measurable, and aligned with global sustainability expectations. This phased approach enables the industry to demonstrate its credentials, meet evolving market demands, and prepare for future whole-of-chain reporting.

Operating Principles

Four operating principles underpin the Grain Sustainability Framework and serve to guide Grain Sustainability Framework development, operation, engagement, and reporting.

Integrity

Demonstrating ethical principles and consistent values, ensuring that actions and communications are honest, responsible, and aligned with stated commitments.

Relevance

Ensuring the Grain Sustainability Framework is valuable to customers, aligned with stakeholders and practical for growers.

Accountability

Committing to measurable outcomes and transparent reporting across the industry.

Continuous Improvement

By responding to current and emerging science, evolving technologies, and shifting stakeholder expectations, and by encouraging innovation, feedback, collaboration, and adoption, the Grain Sustainability Framework and the grains industry stay forward-looking and impactful.

Governance

The governance structure ensures that the Grain Sustainability Framework operates effectively and responsibly. The Grain Sustainability Framework is administered through 5 functions:

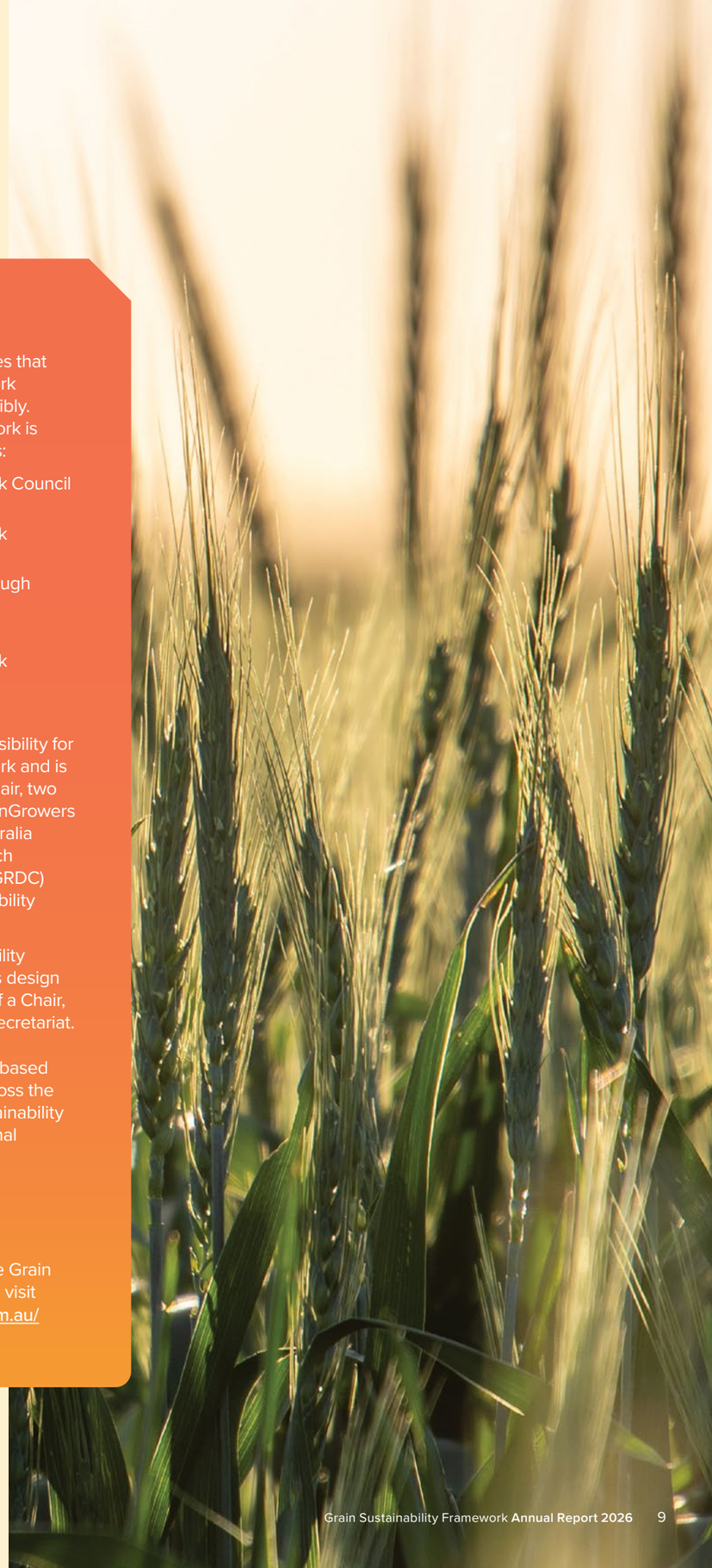
- Grain Sustainability Framework Council responsibility and oversight
- Grain Sustainability Framework Steering Group leadership
- Stakeholder perspectives through industry consultation
- Working group expertise
- Grain Sustainability Framework Secretariat strategic and operational support

The Council takes overall responsibility for the Grain Sustainability Framework and is comprised of an Independent Chair, two GrainGrowers Directors, the GrainGrowers CEO, three Grain Producers Australia (GPA) Directors, a Grains Research and Development Corporation (GRDC) observer, and the Grain Sustainability Framework Secretariat.

The skills-based Grain Sustainability Framework Steering Group leads design and development and consists of a Chair, up to seven members, and the Secretariat. This structure combines grower representation and competency-based leadership with stakeholders across the value chain, ensuring Grain Sustainability Framework alignment with national sustainability priorities.

More Information

For more information about the development and structure of the Grain Sustainability Framework, please visit grainsustainabilityframework.com.au/



The Australian Grains Industry at a Glance

$93.2 billion
Total value of farm production[2]

37,218 people
Employed in on-farm grain production[17]

40.7 million tonnes
Volume of grain exported[1]

61.3 million tonnes
of grain produced[2]

24.9 million hectares
Crop sown in FY25[5]

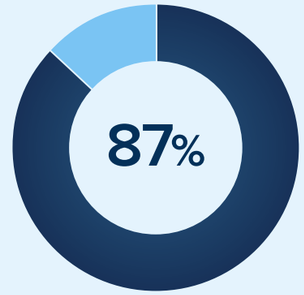
Australia represents the following % of global exports[3]

Sorghum	Chickpea[4]	Canola	Barley	Oat	Wheat
20%	31%	24%	21%	15%	10%

Highlights

Reporting Highlights

Compliance rate with Australian chemical safety standards.



Growers using zero tillage and low tillage practices.

Over the Last Decade

23%
increase in stubble retention coverage.

60%
increase in grain farms with vegetation management plans.

155%
increase in yield mapped cropping area.

230%
increase in growers with a quality assurance or environmental assurance program.

Compared with FY06 Baseline

50%
reduction in absolute GHG emissions.

64%
reduction in GHG emissions intensity.

Industry Opportunities

56%
of grain farms with an on-farm workplace safety program in place.

26%
female participation in on farm grain production.

Additional Industry Opportunities

National data tracking soil carbon levels.

National data tracking soil testing for soil health evaluation and improvement.

National data tracking the management of on-farm waste and packaging.

National data tracking workforce participation of people with disabilities.

Grain Sustainability Framework Reporting Summary

	Topic	Indicator	Data	Trend
Planet	Soil Health	Zero and low tillage practice (% growers)	87%	★
		Stubble retained (% cropped area)	81%	●
		Soil health practice (% growers)	56%	★
	Land Use Change, Natural Ecosystems and Biodiversity	Vegetation management plan (% growers)	56%	●
	Sustainable Resource Use	Variable rate technology (% cropped area)	30%	●
		Integrated pest management (% growers)	58%	★
		Integrated weed management (% growers)	76%	★
		Integrated disease management (% growers)	62%	★
	Greenhouse Gas Emissions	Total net emissions (Mt CO_2-eq)	11.2Mt CO_2-eq	■
		Emissions intensity (kg CO_2-eq/t)	196kg CO_2-eq/t	■
People	Workforce Wellbeing and Workplace Practices	Workplace safety program (% farms)	56%	★
		Notifiable fatalities (5-year totals)	28	●
		Number of lost time claims (5-year groupings)	2,997	●
		Fair Work Ombudsman compliance notices (number/annum)	44	★
		K6 Indicator of Psychological Distress (6-30)	13.5	★
		Personal Wellbeing Index (0-100)	70	★
	Diversity and Inclusion	Gender diversity (% workforce male, % workforce female)	74% male 26% female	●
		Age diversity (% workforce across age groups)	21% 15-34 yrs 37% 35-54 yrs 37% 55-74 yrs 5% 75-100 yrs	●
		Indigenous and Torres Strait Islander representation (% of workforce)	1.1%	■
		Languages other than English representation (% of workforce)	2.4%	●

Grain Sustainability Framework Reporting Summary

	Topic	Indicator	Data	Trend
Product	Grain Integrity	Overall compliance with maximum residue limits (% samples tested)	99.1%	●
		Quality assurance or environmental assurance program (% growers)	43%	●
	Food Supply	Wheat exported (% of total production)	76%	★
Prosperity	Productivity and Profitability	Total Factor Productivity Index (5-year rolling mean)	266	●
		Rate of return (% 3-year rolling mean)	1.2%	●
		Rate of return with capital appreciation (% 3-year rolling mean)	11.3%	●
		Yield mapping (% cropped area)	74%	●
	Climate Change and Adaptation	Climate Adjusted Total Factor Productivity Index (5-year rolling mean)	163	●
	Research, Innovation and Adoption	Grain Research Development Corporation investment in research, development, and extension ($m 3-year rolling mean)	$214.2m	●
	Supply Chain Reliability	National diesel coverage (days)	25	●

Data Trend Key

● Directional improvement ● Holding steady ● Directional decline ■ Compare with care until more data becomes available ★ Baseline

All data sources have been referenced throughout this report.
A complete list of references can be found on page 28.

Grain Sustainability Framework Themes and Topics

The themes and topics in this report were shaped by a comprehensive materiality study conducted in 2024, extensive stakeholder consultation across the Australian grains industry value chain and rigorous evaluation by the Grain Sustainability Framework Steering Group in 2025.

Themes

The Grain Sustainability Framework is structured around 4 overarching themes.

Planet

Grain production that demonstrates environmental stewardship and enduring landscape function.

People

Safe, supported, and connected people and communities.

Product

Delivering grain that meets market expectations and supports Australia's market access and reputation globally.

Prosperity

Strengthening the long-term profitability and adaptability of the grains industry.

Topics

Each of the 4 themes encompass multiple topic areas against which the Grain Sustainability Framework reports industry performance. There are 21 topics in total.

Topics were identified and prioritised using a materiality study - a globally recognised methodology that considers financial impact, regulatory relevance, public attention, and stakeholder importance of each topic. Every topic was assessed on two key factors: its impact on the industry and the level of influence over the topic the industry can exert.

Topics that significantly affect profitability, costs, or risk and where the grains sector can drive meaningful change are given priority. This approach ensures the Grain Sustainability Framework focus on areas most critical for both business performance and sustainability outcomes. To remain relevant, this evaluation process is typically repeated every three to four years.

Reporting

This first annual report features indicators and data for 12 topics. Further work is required in order to satisfactorily report against the remaining 9 topics.

For more information on reporting such as topic definitions and trending data, please visit **grainsustainabilityframework.com.au/**

Planet

Current reporting

- Soil Health
- Land Use Change, Natural Ecosystems and Biodiversity
- Sustainable Resource Use
- Greenhouse Gas Emissions

Future reporting

- Waste and Packaging

Product

Current reporting

- Grain Integrity
- Food Supply

Future Reporting

- Genetic Technology
- Consumer Trends and Behaviours

People

Current reporting

- Workforce Wellbeing and Workplace Practices
- Diversity and Inclusion

Future Reporting

- Talent Attraction, Retention and Development
- Community Engagement and Investment
- Land and Resource Rights

Prosperity

Current reporting

- Productivity and Profitability
- Climate Change and Adaptation
- Research, Innovation and Adoption
- Supply Chain Reliability

Future Reporting

- Public Policy and Regulation
- Governance
- Biosecurity

Reporting - Planet

Topic 1. Soil Health

The protection and enhancement of the condition and quality of soil in order to sustain agriculture and ecosystem function.

Indicator	Data	Reporting Year	Trend
1.1 Percentage of growers undertaking zero tillage and low tillage practice.	87%[6]	2025	★
1.2 Percentage of cropped area where stubble is retained either intact or not standing.	81%[6]	2025	●
1.3 Percentage of growers who have undertaken soil health activities (contouring, washout repair, and soil mapping) over the last 12 months.	56%[7]	2025	★

About the data

1.1 Zero tillage and low tillage methods are practised by 87%[6] of Australian grain growers. These methods protect soil structure and reduce erosion. Minimising soil disturbance helps maintain organic matter, moisture retention, and beneficial soil organisms, all of which improve long-term soil fertility and resilience.

1.2 The practice of stubble retention (intact or not standing) has been adopted across 81%[6] of Australian cropping area compared with 66% in 2016[8].
Stubble retention protects the soil surface from erosion, conserves moisture, and adds organic matter as it breaks down. Stubble retained intact has not been removed or reduced. Stubble retained not standing has been reduced through grazing or slashing but not removed.

1.3 Soil health activities such as contouring, washout repair, and soil mapping are practised by 56%[7] of Australian grain growers. These activities are linked to maintaining soil structure, fertility, and resilience.

Topic 2. Land Use Change, Natural Ecosystems and Biodiversity

Land Use Change, Natural Ecosystems and Biodiversity encompass a range of closely related elements. It involves ensuring respect for Australian land use change legislation, seeking to meet customer expectations that deliver grower value and preventing loss of natural ecosystems through unauthorised conversion to cropping production. It also concerns the conservation, enhancement and scientific management of biological diversity and system function.

Indicator	Data	Reporting Year	Trend
2.1 Percentage of farms with a vegetation management plan.	56%[6]	2025	●

About the data

2.1 Over the past decade, the percentage of Australian grain growing farms with a vegetation management plan has increased from 36%[8] to 56%[6]. Vegetation management plans serve as a proxy indicator for responsible land management and ecological integrity for several reasons: they support compliance with land use legislation, prevent ecosystem loss, conserve biodiversity, meet market expectations for sustainability, and deliver long-term grower value through improved resilience and risk management.

Topic 3. Sustainable Resource Use

Responsible and safe agronomic input application practices, including but not limited to chemical and nutrient use, which enhances input efficiency, manage potential negative impacts on the environment, human health, and non-target organisms. Proactive energy and water consumption practices and efficiency measures.

Indicator	Data	Reporting Year	Trend
3.1 Percentage of cropped area where variable rate technology (VRT) is used for fertiliser application.	30%[6]	2025	●
3.2 Percentage of growers who use integrated pest management (IPM) all or most years.	58%[6]	2025	★
3.3 Percentage of growers who use integrated weed management (IWM) all or most years.	76%[6]	2025	★
3.4 Percentage of growers who use integrated disease management (IDM) all or most years.	62%[6]	2025	★

About the data

3.1 The use of VRT for fertiliser application has grown from 19% of cropped area in 2016 to 30% in 2025[6]. VRT offers precise nutrient delivery based on soil and crop needs, reducing waste and input costs while improving yield and quality. It enhances efficiency, supports sustainable farming, and minimises environmental impacts by preventing over-application and nutrient runoff.

3.2 IPM, used by 58% of growers[6], focuses on controlling insect pests through a combination of biological, cultural, physical, and chemical methods. It emphasises monitoring pest populations and applying control measures only when necessary. This approach reduces pesticide use, lowers costs, and protects beneficial organisms, leading to healthier crops and ecosystems.

Reporting - Planet

Topic 3. Sustainable Resource Use

About the data

3.3 IWM, practised by 76% of growers[6], combines multiple strategies such as crop rotation, cover crops, mechanical cultivation, and targeted herbicide use to manage weeds effectively. The goal is to reduce weed pressure while minimising chemical reliance. By diversifying control methods, IWM helps prevent herbicide resistance, improves soil health, and supports sustainable farming practices.

3.4 IDM is used by 62% of growers[6] and is a comprehensive approach to prevent and manage crop diseases. Strategies include resistant crop varieties, crop rotation, proper irrigation, and judicious fungicide use. By integrating these methods, IDM reduces disease outbreaks, minimises chemical dependency, and promotes long-term crop health and productivity.

Topic 4. Greenhouse Gas Emissions

Understanding and managing greenhouse gas (GHG) emissions associated with grain production.

Indicator	Data	Reporting Year	Trend
4.1 Total net emissions.	11.2 Mt CO_2-eq[10]	FY2021	
4.2 Emissions intensity.	196 kg CO_2-eq/t[10]	FY2021	

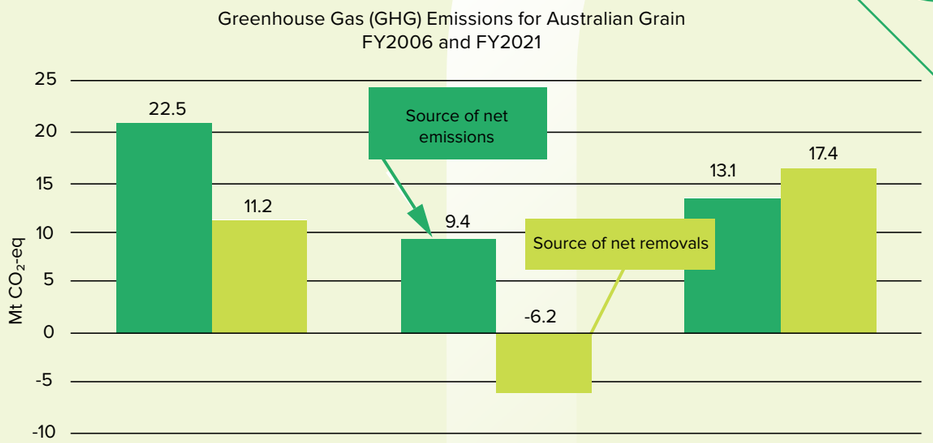
About the data

4.1 Total net emissions include Scope 1,2 and 3 emissions generated from grain production and the GHG emissions resulting from changes in soil and vegetation.

The net emissions figure for FY2021 was 11.2 Mt CO_2-eq[10], 50% lower than the FY2006 baseline figure of 22.5 Mt CO_2-eq[9]. See Figure 1.

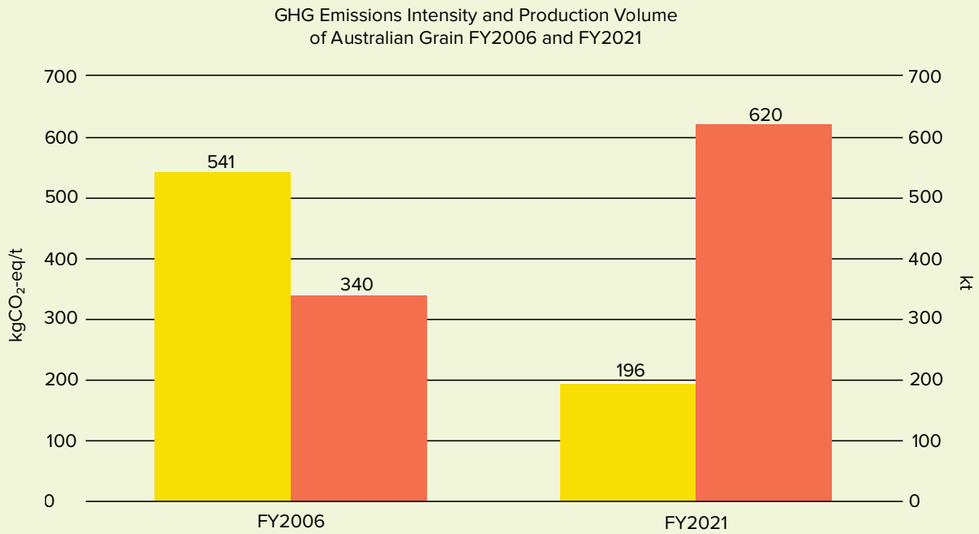
4.2 Emissions intensity is a measure of GHG emissions per unit of output. It is a measure of how efficiently the grain growing process uses resources in terms of its climate impact.

The emissions intensity for grain production in FY2021 was 196kg CO_2-eq/t[10]. This is 64% lower than the FY2006 baseline figure of 541 kg CO_2-eq/t[9]. See Figure 2.



	Total Net Emissions	Emissions from Land Use, Land Use Change and Forestry	Emissions from Grain Production
FY2006	22.5	9.4	13.1
FY2021	11.2	-6.2	17.4

Figure 1. Total Net Emissions, LULUCF, and Grain Production Emissions for the Australian Grain Sector, FY2006 vs FY2021.



	FY2006	FY2021
Emissions intensity ($kgCO_2$-eq/t)	541	196
Production (kt)	340	620

Figure 2. Emissions Intensity and Production Volume for the Australian Grain Sector in FY2006 and FY2021.

Reporting - Planet

The Australian Grains Industry and GHG Emissions

- In 2022, GRDC engaged CSIRO to develop a GHG emissions baseline for the Australian grains industry. The financial year 2006 was chosen as the reference year, and all calculations followed the Common Approach for agricultural GHG accounting.
- The study measured Scope 1, Scope 2, and Scope 3 emissions associated with the production of GRDC's 25 leviable grain crops in FY2006.
- This baseline provides a benchmark for assessing future GHG reduction strategies and practices.
- Reported figures include total net emissions and emission intensity, covering all major GHGs i.e. carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). These are all expressed as carbon dioxide equivalents (CO_2-eq).

Total net emissions

- Total net emissions include Scope 1, 2 and 3 emissions generated from grain production and GHG emissions resulting from Land Use, Land Use Change and Forestry (LULUCF).

Land Use, Land Use Change and Forestry (LULUCF)

- LULUCF refers to how changes in soil and vegetation add or remove GHGs from the atmosphere.
- LULUCF GHG values can be sources of net emissions and sources of net removals.

Baseline total net emissions v FY2020 total net emissions

- Total net emissions in FY2021 were half of the baseline figure i.e. 11.2 Mt CO_2-eq[10] compared with 22.5 Mt CO_2-eq[9].
- The 50% reduction is largely due to soil and vegetation changes in FY2021 that removed GHG emissions from the atmosphere, compared with FY2006 when soil and vegetarian changes were a source of GHG emissions.

Emissions Intensity

- The emissions intensity for grain production in FY2021 was 196 kg CO_2-eq/t[10].
- This is 64% lower than the FY2006 baseline figure of 541 kg CO_2-eq/t[9].
- Even though absolute emissions increased, grain production grew at a much faster rate therefore reducing the rate of GHG emissions per t of grain produced.

Reporting - People

Topic 5. Workforce Wellbeing and Workplace Practices

To promote the health, safety, and wellbeing of employees and growers through evidence-based practices and mental health support. Additionally, upholding and advancing fair labour practices across the grain industry, ensuring safe, respectful, and legally compliant working conditions, to prevent modern slavery.

Indicator	Data	Reporting Year	Trend
5.1 Percentage of grain farms with an on-farm workplace safety program.	56%[6]	2025	★
5.2 Number of notifiable fatalities on-farm (5-year groupings).	28[13]	FY2020-FY2024p	●
5.3 Number of lost time claims (5-year groupings).	2,997[14]	FY2020-FY2024p	●
5.4 Number of Fair Work Ombudsman Compliance Notices issued to grain growing farms per annum.	44[15]	FY2025	★
5.5 Kessler Indicator of Psychological Distress (mean score from 6-30).	13.5[16]	2023	★
5.6 Personal Wellbeing Index (PWI) (mean score 0-100).	70[16]	2023	★

About the data

5.1 This measure establishes a baseline for how widely formal safety programs are implemented to protect workers and reduce accidents on grain growing farms. At present, 56%[6] of Australian grain growing operations have this in place.

5.2 Over the last 5-year reporting period, there have been 28 fatalities across grain-sheep, grain-beef cattle and grain growing enterprises[13].
Over the past 15 years of data (2010-2024), there has been a total of 116 fatalities[13].
The 2023-24 data is preliminary (p). Revisions in preliminary results are likely over future years.

5.3 Time lost claims are serious workers' compensation claims where the injury or illness leads to at least one full day or shift off work. For the last 5-year reporting period, there were 2,997 lost time claims across grain-sheep, grain-beef cattle and grain growing enterprises[14].
Since 2010, there has been 9801 lost time claims, holding steady at close to 3,000 per 5-year period[14].
The 2023-24 data is preliminary (p). Revisions in preliminary results are likely over future years as open claims are finalised.

5.4 During the 12-month period of FY2025, 44[15] official notices were issued for breaches of workplace laws on grain-sheep and grain-beef cattle farms. There were 0[15] notices issued on farms engaged solely in growing cereal or coarse grains, oilseeds, pasture seeds, lupins, field peas, or beans.

Reporting - People

Topic 5. Workforce Wellbeing and Workplace Practices (Continued)

About the data

5.5 Psychological distress among on-farm grain workers was assessed using the Kessler scale, where higher scores indicate greater distress. Australian grain farmers recorded an average score of 13.5, compared with an average score of 11.5 for Australian farmers overall[16].
Australians overall recorded an average score of 11.9[16].

5.6. The PWI measures mental health, physical wellness, and emotional balance. Higher scores indicate greater wellbeing and life satisfaction. Grain farmers reported an average personal wellbeing and life satisfaction score of 70[16]. Farmers overall recorded 73.7, while the Australian population averaged 70.9[16].

Topic 6. Diversity and Inclusion

An industry and workplace culture whereby all feel welcome, valued, respected, and empowered, regardless of their background, identity, or characteristics. A workplace culture that recognises and respects Indigenous and non-Indigenous people's dignity, right to self-determination, and cultural integrity.

Indicator	Data	Reporting Year	Trend
6.1 Gender diversity in grain production.	74% male 26% female[17]	2021	🟡
6.2 Age diversity in grain production.	21% 15-34 yrs 37% 35-54 yrs 37% 55-74 yrs 5% 75-100 yrs[17]	2021	🟢
6.3 Percentage of Aboriginal and Torres Strait Islander peoples employed in the grain production workforce.	1.1%[19]	2021	⬜
6.4 Percentage of grain production workforce members who speak a Language Other Than English (LOTE).	2.4%[20]	2021	🟢

About the data

6.1 The on-farm grain production workforce is 74% male and 26% female[17]. However, this breakdown is based on Australian census data, which records only a person's main job – the one in which they work the most hours. As a result, individuals who earn income off-farm in their main job but still contribute labour to the grain farm are not captured in census figures. This means that true on-farm workforce gender diversity may be misrepresented.

By comparison, the Australian workforce is 53% male and 47% female[21].

6.2 The on-farm grain production workforce skews older, with a higher representation of 35–74 year old workers (74%)[20] compared with the national working population (61.5%)[22].

The workforce has a smaller 15–34 year old cohort compared with Australia overall (38%)[22]. However, this cohort has increased from 18% in 2011[20] to 21% in 2021[18].

Whilst 5%[19] of the on-farm workforce is aged 75-100, 0.6%[22] of the Australian workforce is represented by this age group.

6.3 First Nations people make up 1.1% of the on-farm grain production workforce[19]. By comparison, First Nations people aged over 15 make up 2.1%[24] of the Australian population.

In 2011, First Nations representation for on-farm grain production was at 0.6%[25].

It is important to note that the number of people identifying as Aboriginal and Torres Strait Islander has shown a consistent increase from 2011 to 2021.

According to the 2021 Census, there was a 25.2% increase in First Nation counts from 2016, which is higher than the growth recorded between 2006 and 2011 (20.5%) and between 2011 and 2016 (18.4%)[26].

6.4 In the 2021 Census, 2.4% of the grain-production workforce reported speaking a Language Other Than English at home (LOTE)[20], compared to 23.9% of Australians aged over 15[27]. The proportion of on-farm grain production workers identifying as LOTE speakers has grown over the past decade, rising from 1.5% in 2011[28] to 2.4% in 2021[20].

Reporting - Product

Topic 7. Grain Integrity

To ensure that Australian grain meets market, regulatory, and consumer expectations.

Indicator	Data	Reporting Year	Trend
7.1 Percentage of tested samples that comply with Australian maximum residue limit (MRL) standards for bulk export, container export, and domestic trade programs.	99.1%[29]	FY2024	🟡
7.2 Percentage of growers who are part of a quality assurance or environmental assurance program that assists in market access or receiving a price premium.	43%[6]	2025	🟢

About the data

7.1 Overall compliance with Australian standards stands at 99.1% and has remained consistently above 98.1%[29] throughout the past five reporting years.

Bulk exports involve large volume grain shipments loaded directly into vessels, container exports use smaller customised shipments packed into shipping containers, and domestic trade covers grain sold and used within Australia.

7.2 This measure shows that 43% of grain growers participate in a formal quality assurance or environmental assurance program, an increase from 13% in 2016[6]. The programs help growers meet market requirements, maintain access to premium markets, and potentially secure higher prices for their grain by demonstrating compliance with food safety, sustainability, or environmental standards.

About Maximum Residue Limits (MRLs)

Australia's MRLs are among the strictest globally. They set the maximum amount of chemical residue allowed in food, including grain, based on rigorous safety assessments by the APVMA and FSANZ. If a chemical doesn't have an approved limit, any detectable residue is a breach. This ensures Australian grain is safe for consumers and trusted in international markets.

Topic 8. Food Supply

To be a trusted and reliable partner.

Indicator	Data	Reporting Year	Trend
8.1 Percentage of wheat exported as a proportion of total production.	76%[30]	FY2022	★

About the data

8.1 This measure shows that 76% of Australia's wheat production in 2022 was exported[30]. Wheat is a major export commodity for Australia and plays a consistent role in supporting global food supply.

Reporting - Prosperity

Topic 9. Productivity and Profitability

Improving productivity and profitability through efficient, innovative, and sustainable methods.

Indicator	Data	Reporting Year	Trend
9.1 Total Factor Productivity Index (5-year rolling mean).	266[31]	FY2020-2024	🟢
9.2 Rate of Return (% 3-year rolling mean).	1.2%[32]	FY2022-24	🟢
9.3 Rate of Return with capital appreciation (% 3-year rolling mean).	11.3%[32]	FY2022-24	🟢
9.4 Percentage of cropped area where yield mapping has been applied.	74%[6]	2025	🟢

About the data

9.1 Total Factor Productivity (TFP) reflects the efficiency with which all inputs (land, labour, capital, and materials) are converted into outputs. TFP is expressed as an index relative to the base of 100 set as FY1978. The TFP rolling average over the 5-year period FY2020-FY2024 of 266[31] means productivity over that period has been 166% higher than the base year.

Overall, there is a long-term upward trend in TFP relative to the baseline.

The last 5 years on average show modest positive growth in productivity.

9.2 For the period FY2022-FY2024, grain farms averaged a 1.2%[32] rate of return, excluding capital growth.

9.3 For the period FY2022-FY2024, grain farms averaged a 11.3%[32] rate of return including capital appreciation in the form of land value increases.

9.4 Yield mapping is applied to 74% of cropped area[6], a marked increase from 29% in 2014[8]. Yield mapping uses sensors and GPS during harvest to capture spatial yield data and produce detailed productivity maps. These insights enable targeted input use, optimising fertiliser and seed use, improving efficiency, reducing waste, and boosting profitability.

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Topic 10. Climate Change and Adaptation

Bolstering resilience through proactive adoption of practices to minimise the impact of climate change.

Indicator	Data	Reporting Year	Trend
10.1 Climate adjusted Total Factor Productivity index (5-year rolling mean).	163[31]	FY2022-2024	●

About the data

10.1 Climate adjusted TFP incorporates the impact of climate variability and change on productivity, thus isolating productivity changes due to technology and efficiency improvements from those caused by climate shocks. The index is reported relative to the baseline of 100 established as FY1989. The 5-year rolling mean climate-adjusted TFP index for grain production of 163 means that productivity, after adjusting for climate effects, is 63% higher compared with FY1989.

Climate adjusted TFP indices show a consistent upward trend over 35 years, with the last five years' average of 163[31] the highest in the series.

Topic 11. Research, Innovation and Adoption

Proactively foster and encourage improvements through fit for purpose research, development, extension, and advocacy. Additionally, be a leading industry in the commercialisation and adoption of market-driven and practical agricultural innovation.

Indicator	Data	Reporting Year	Trend
11.1 Grains Research and Development Corporation investment in research, development, and extension (3-year rolling mean).	$214.2m[33]	FY2025	●

About the data

11.1 Across the 3-year rolling average from FY2025[35], the Grains Research and Development Corporation (GRDC) invested an average of $214.2 million in research, development, and extension (RD&E). The funding supports innovation in crop productivity, sustainability, and profitability for Australian grain growers.

GRDC's funding comes primarily from grower levies (around 1% of farm-gate value), government matching contributions (up to 0.5% of the 3-year average gross value of production), and other income such as royalties and investments.

These funds are allocated according to strategic priorities in the RD&E Plan, ensuring a balanced portfolio of projects and guided by economic modelling, which historically delivers a return of $6–$9 for every $1 invested.[34,35,36] The investment reflects GRDC's commitment to driving practical, science-based solutions for the grains industry.

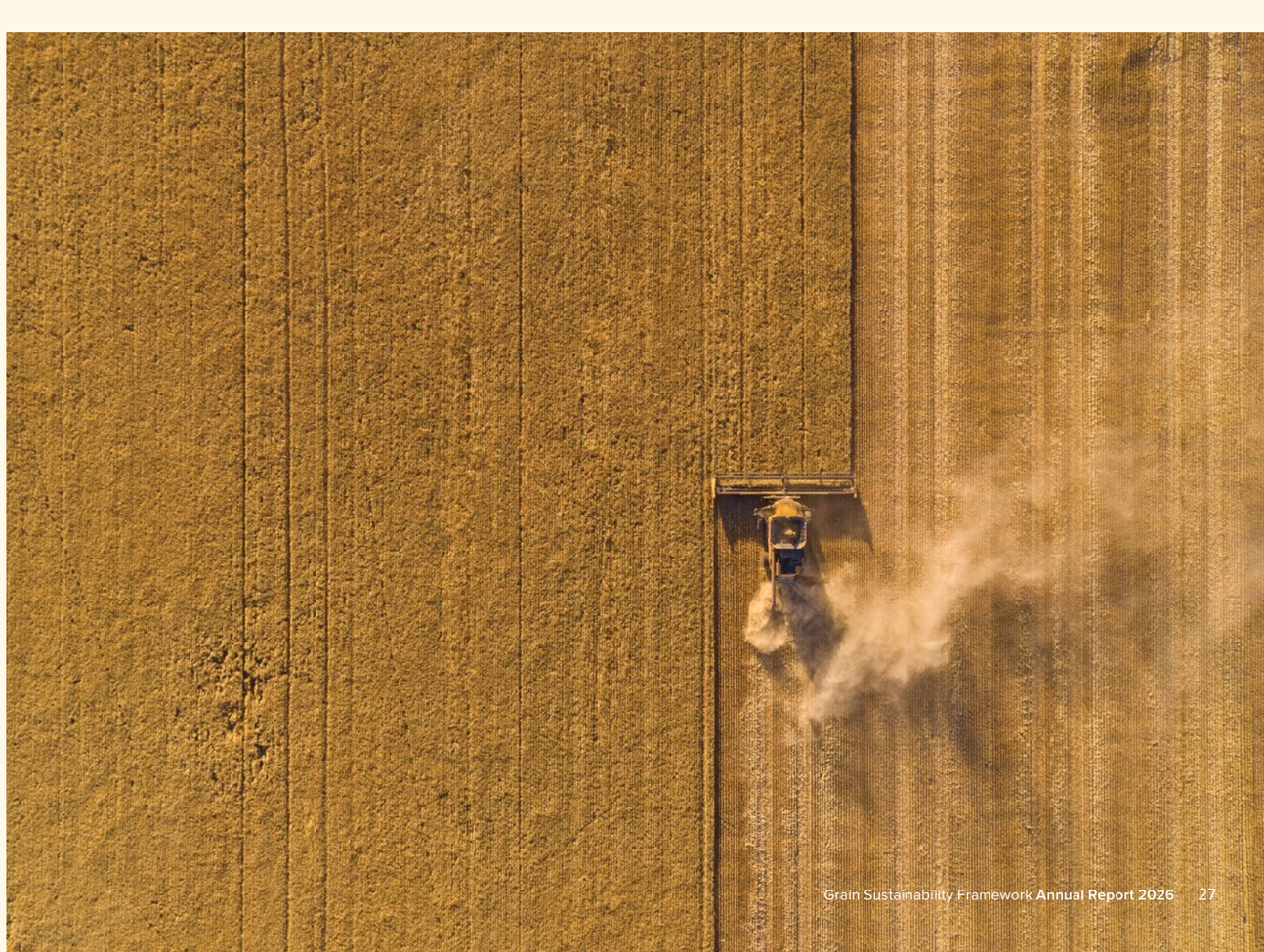
Topic 12. Supply Chain Reliability

Ensuring consistent and reliable input levels over time, adopting practices that mitigate variability, seasonality and minimise fluctuations in production processes.

Indicator	Data	Reporting Year	Trend
12.1 Days of national diesel coverage.	25[37]	FY2025	●

About the data

12.1. Diesel fuel is essential for powering farm machinery and transportation, making a reliable supply vital to maintaining production stability, particularly during peak seasons. In FY2025, Australia's diesel stockholdings were sufficient to sustain 25 days of demand[37] under normal consumption rates across all dependent sectors.



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