



Australian Dairy Industry Council Inc.

Australian Dairy Industry Sustainability Framework

Progress Report 2015



Reporting Progress against the Dairy Industry's 2020 Sustainability Targets and Performance Measures



Enhancing livelihoods Improving wellbeing Reducing environmental impact



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Statement from the Chairs

We're strengthening our commitment

We present to you the 2015 Progress Report for the Australian dairy industry's Sustainability Framework. We invite you to review this report to see where we have made progress towards our 2020 targets and where we still need to do more.

The Australian dairy industry is strengthening its commitment to provide a sustainable industry — one that enhances livelihoods, improves the wellbeing of people and our animals and reduces our environmental impact. We know that it is important to provide evidence of our commitment and this report provides that evidence.

The Sustainability Framework is led by the Australian Dairy Industry Council (ADIC), supported by an industry Steering Committee and underpinned by Dairy Australia. It is a whole of industry commitment.

The content of the Framework is also guided by stakeholder consultation to ensure we understand their needs and expectations. Our work in 2015 has involved extensive and ongoing engagement both within the industry and with our broader stakeholders. These stakeholders include our customers, suppliers, government, other primary industries, non-government and special interests groups and, importantly, the communities which support our farms and processing plants. This consultation is helping the Framework evolve with changing stakeholder expectations.

Issues that have emerged in recent times include labour practices, food waste, transparency, traceability and the broad range of evolving dairy production systems. Globally, the recently announced UN Sustainable Development Goals and the commitment to implement practices to hold global temperature rise to a maximum of two degrees are also challenges that the dairy industry needs to consider. These areas and other emerging issues will be reviewed against the Framework in 2016.

As you will see in this report, we still have gaps in our targets and performance indicators, as well as areas where we have not made progress against our Targets. A priority in 2016 will be to review the gaps and address these where appropriate — or find better ways to measure progress against the Targets. Many measures are around perceptions and we want to move to more robust ways to measure our performance. This should help us better understand the challenges we need to address as we strive to be a sustainable and prosperous industry supported by the community.

We are proud to have made progress in some targets — for example, our farmers and manufacturers have demonstrated progress in improving nutrient, land and water management, and reducing consumptive water intensity, greenhouse gas emissions and waste to landfill.

The dairy industry's efforts in helping the Government to secure Free Trade Agreements with our major trading partners, China, Japan and Korea, will also help increase our future competitiveness and profitability.

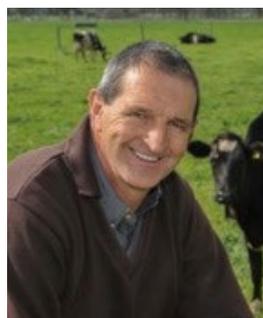
Other targets — for example reducing time lost to injury on farms and in the manufacturing sector — have not progressed as well as hoped. We will continue our efforts to make progress in these important areas.

“Our work in 2015 has involved extensive and ongoing engagement both within the industry and with our broader stakeholders.”



The Australian dairy industry is also proud to play its part in the global movement towards greater sustainability. The industry aspires to meet rising demand worldwide for industries to manage their environmental impact and contribute to action on issues such as climate change, labour practices, animal welfare, health and wellbeing. These same issues are a key part of the Australian dairy industry's Sustainability Framework.

The Australian dairy industry's work on its Sustainability Framework was acknowledged with a Banksia national sustainability award in 2015. We are grateful for the wider community endorsement of our achievements so far, and invite you to read this report and encourage your feedback. Your contribution will help us continue to improve outcomes for our industry and our communities so we can address the challenges we face together.



Chris Griffin
Chair, Dairy Sustainability Steering Committee and Consultative Forum



Simone Jolliffe
Chair, Australian Dairy Industry Council



BANKSIA
SUSTAINABILITY
AWARDS 2015
CATEGORY WINNER

Dairy Industry Sustainability Framework

March 2016

ADIC is the peak industry policy body and the owner of the Australian Dairy Industry Sustainability Framework on behalf of industry.



Enhancing Livelihoods

For the 39,000 Australians employed on farms and in manufacturing by the dairy sector, dairying is their future. It creates jobs for generations and careers for life. By generating \$13.5 billion in economic value, dairying makes a vital contribution to the nation and, in particular, regional communities.



Improving Wellbeing

With a unique natural package of 10 essential nutrients, dairy foods have helped underpin the health and wellbeing of generations of Australians. As an industry, we care deeply for the wellbeing of the community and our animals.



Reducing Environmental Impact

Dairy farmers are responsible stewards of the land. Dairy farmers and manufacturers work hard to reduce waste to landfill, reduce greenhouse gas emissions intensity, and use water wisely. Technology and tenacity underpin our commitment to reduce our impact on the environment.



2015 Executive Summary

Reporting our progress and planning for the future



The Australian dairy industry's 2015 Sustainability Progress Report continues the industry's commitment to report our progress transparently against our 2020 targets.

This report provides background on the dairy industry as it is today as context for the discussion on our progress. It also sets out the background to the Framework – the principles we adhere to, the governance arrangements for the framework and our stakeholder consultations. The 2015 Progress Report also shows where the disclosures made align with the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (see Appendix 2).

Detailed discussion on each Target is provided under the following headings:

- Our Story in Brief
- How we're tracking
- What we're doing
- What we're planning
- What our stakeholders are saying.

The Executive Summary provides a quick overview scorecard outlining our results to date. While we have made progress in some of the Targets, we have not progressed as we had hoped in others.

Progress during 2015 against those indicators for which baselines and targets have been established, showed several areas of improvement, including:

- The intensity of waste sent to landfill by manufacturers has dropped 46% since 2011, and exceeds the 40% target set for 2020; however, this measure only covers approximately 33% of industry by milk production — further work in 2016 will be undertaken to increase the coverage
- The increased proportion of farmers with nutrient management plans, which at 58% is on-track to achieve the 2020 target of 80%, having almost doubled since 2012
- The reduction in the use of routine calving induction — 88% of farmers do not use it compared to 80% in 2014.



We are especially concerned that we have regressed from the 2014 results for Target 3 (Providing a Safe Work Environment for all Dairy Workers). Enhancing the safety of all our people is paramount and we will be reviewing the activities in this area to see how we can improve this outcome in 2016. Other areas where the industry's performance has declined include the proportion of people who recognise dairy as a quality product, which slipped to 69% from a baseline of 72% (the 2020 target is 80%).

There are other areas where further progress is needed, such as increasing the proportion of dairy farmers who are aware of, and implement, the recently agreed (January 2016) standards for animal welfare. Currently, awareness stands at 56%, with our target for 2020 being 100%.

We are disappointed to report that we did not establish baseline data for all 41 indicators in the Dairy Industry Sustainability Framework, nor, in some cases, set performance targets, despite a plan to do so in 2015.

As the Australian dairy industry strives to maintain its place as a trusted provider of food, we also recognise that community wants and needs change over time. The ongoing development of our Framework means we need to understand the expectations of our customers and the communities in which we operate, both now and well into the future and be responsive to change.

During 2015 consultation with stakeholders raised new issues such as labour practices and the broad range of evolving dairy farm production systems. In addition, global talks led by the United Nations set new goals for sustainability (SDGs) and climate action (COP21).

Together, these issues, views and events raised questions about the priorities in the industry's strategy for the sustainable production of dairy products. As a result, the industry has spent time considering the impact of these factors on the sector.

Now, as a result of the shifting landscape, globally and nationally, a detailed materiality study and a review of all targets, indicators and performance measures will be undertaken during 2016. The findings will help industry stay up-to-date with what issues matter most to our stakeholders and how to prioritise and respond to them.

We hope this work will make the industry's choice of issues, activities and outcomes clearer and, as a result, gaps in information about baselines, progress and targets for the most important indicators will be filled.

The industry has and continues to deal with a number of important policy and engagement issues — for example, the implementation of the Murray Darling Basin Plan (which will affect the amount of water farmers can use). These issues take time to address, and sometimes distract from the ongoing actions needed on the ground to reach our 2020 Targets.

Our approach during 2016 will be to prioritise those issues which are most significant for the industry and our stakeholders. This will include consideration of how the industry can support Australia's commitment to the United Nations Sustainable Development Goals and COP21, balance the contribution to sustainability targets made by the farming and manufacturing sectors, encourage and support continuous improvement throughout the supply chain and respond to continuing calls for evidence of our sustainability credentials.

The 2015 Progress Report provides a snapshot of our progress and sets the base for our work during 2016. You can also view the report on line at www.sustainabledairyoz.com.au. We welcome your comments on our 2015 report.





2015 Executive summary



Priority area	Target	Indicator	Baseline	2015*	2020 target	Progress	Towards our 2020 target	Snapshot	
Creating industry prosperity	1 Increase the future competitiveness and profitability of the Australian dairy industry	1.1 % Profitable farms (rolling 3 year average)	55%	42%	Under review	↘	<p>Indicator 2.3 Community recognition</p> <p>3% drop in recognition</p>	<p>52% of farmers planning capital investment</p>	
		1.2 Market preference	Under review	Under review	Under review	—			
		1.3 Market access	Under review	Under review	Under review	—			
		1.4 % of farmers planning capital investment	40%	52%	Under review	↗			
		1.5 Product diversity	Under review	Under review	Under review	—			
Supporting communities	2 Increase the resilience and prosperity of dairy communities	2.1 Economic contribution	Under review	Under review	Under review	—	<p>Indicator 3.2 Long Term Injury Frequency Rate (dairy farmers)</p> <p>23% increase in LTIFR</p>	<p>68% consumers agree dairy is an essential part of the community</p>	
		2.2 Government recognition	Under review	Under review	Under review	—			
		2.3 Community recognition	— dairy industry is an essential part of community	71%	68%	78%			↘
Investing in dairy people	3 Provide a safe work environment for all dairy workers	3.1 OHS training	— dairy farming	46%	46%	100%	→	<p>Indicator 4.2 Participation in development (extension)</p> <p>19% increase in participation</p>	<p>100% OH&S training for all manufacturing employees</p>
			— dairy manufacturing	100%	100%	100%	✓		
		3.2 Lost Time Injury Frequency Rate (LTIFR)	— dairy farming	5.2	6.4	3.6	↘		
			— dairy manufacturing	8.7	10.9	6.1	↘		
		3.3 Fatalities	— dairy farming	2	3	Zero	✗		
	4 Attract, develop and retain a skilled and motivated dairy workforce		— dairy manufacturing	0	0	Zero	✓		
		4.1 Suitable applicants (farm)	— dairy farms	20%	20%	Under review	→		
			— dairy manufacturing	Under review	Under review	Under review	—		
		4.2 Participation in development activities	— extension	20%	39%	40%	↗		
			— education	Under review	Under review	Under review	—		
	4.3 Retain workforce		75%	75%	90%	→			
	4.4 Business planning		8%	8%	50%	→			

Understanding 2015 Performance

↗ improvement from last measurement ↘ no change from last measurement ↘ regression from last measurement * If no measurement in 2015, latest available shown ✓ ongoing target achieved in 2015 ✗ ongoing target not achieved in 2015 "Under review" indicates where an appropriate baseline measure or target has yet to be established



Improving wellbeing

Priority area	Target	Indicator	Baseline	2015*	2020 target	Progress	Towards our 2020 target	Snapshot	
Ensuring health and safety	5 All dairy products and ingredients sold are safe	5.1 Chemical residues — compliance	Zero non-compliance	Zero non-compliance	Zero non-compliance	✓	<p>Indicator 5.3 Consumer support (quality products)</p> <p>Baseline 77% 2015 Performance 77% 2020 Target 86%</p> <p>No improvement in recognition of dairy as a quality product</p> <p>Indicator 6.1a Healthy diet (good health)</p> <p>Baseline 72% 2015 Performance 69% 2020 Target 85%</p> <p>3% drop in consumer perception</p>	<p>9 product recalls were recorded in 2014</p> <p>69% consumers agree dairy is essential for good health</p> <p>88% farmers do not use routine calving induction</p>	
		5.2 Product recalls	7	9	Zero	✗			
		5.3 Consumer sentiment	— dairy products are safe	67%	67%	77%			➔
— dairy makes high-quality products	77%		75%	86%	➔				
Maximising nutrition	6 Dairy contributes to improved health outcomes for Australian communities	6.1a Healthy diet	— dairy is essential for good health	72%	69%	85%			➔
			— dairy food increases my weight	32%	31%	20%			➔
		6.1b Healthy diet — NHMRC	Recognised	Recognised	Ongoing recognition	✓			
Caring for our animals	7 Provide best care for all animals	6.2 Daily intake	Under review	Under review	Under review	—			
		7.1 Compliance with standards	— aware of new standards	56%	56%	100%			➔
			7.2 Recommended practices:			100%			
		— reduce use of routine calving induction	80%	88%		➔			
		— don't dock tails	80%	85%		➔			
		— disbud prior to 2 months	57%	63%		➔			
		— lameness strategy	87%	95%		➔			
— cool infrastructure	94%	98%		➔					
— bobby calves fed within 6 hours prior to transport	97%	97%		➔					
7.3 Public recognition of caring for animals	60%	59%	75%	➔					

Reducing environmental impact

Priority area	Target	Indicator	Baseline	2015*	2020 target	Progress	Towards our 2020 target	Snapshot	
Minimising our environmental footprint	8 Improve nutrient, land and water management	8.1 Exclusion of stock from waterways	73%	76%	90%	➔	<p>Indicator 8.2 Nutrient management plans</p> <p>Baseline 30% 2015 Performance 58% 2020 Target 80%</p> <p>28% increase in nutrient management plans</p> <p>Indicator 10.1 Emissions from dairy manufacturers</p> <p>Baseline 8.71 CO₂-e per ML 2015 Performance 152.5 CO₂-e per ML 2020 Target 125.11 CO₂-e per ML</p> <p>15% drop in GHG emissions intensity</p>	<p>58% of farmers have nutrient management plans</p> <p>0.7% reduction in company GHG emissions intensity since 2014</p> <p>12% cut in waste to landfill since 2014</p>	
		8.2 Nutrient management plans	30%	58%	80%	➔			
		8.3 Irrigation automation	47%	54%	80%	➔			
		8.4 Managing land for conservation and biodiversity	47%	45%	80%	➔			
		8.5 All dairy farmers actively managing noxious weeds where relevant	— noxious weeds identified as major land issue	37%	29%	Not relevant			➔
			— actively managing noxious weeds where a problem	28%	28%	100%			➔
	8.6 Recycle water on farm	50%	75%	100%	➔				
	9 Reduce the consumptive water intensity of dairy manufacturers by 20%	9.1 Consumptive water intensity of dairy manufacturers (litres per litre of milk processed)	1.75	1.58	1.40	➔			
	10 Reduce greenhouse gas emissions intensity by 30%	10.1 Emissions from dairy manufacturers (tonnes of CO ₂ equivalent per ML milk processed)	178.7	152.5	125.8	➔			
		10.2 Farm emissions abatement actions	Under review	Under review	Under review	—			
	11 Reduce waste to landfill by 40%	11.1a Waste to landfill intensity of dairy manufacturers (tonnes of waste per ML milk processed)	2.69	1.45	1.61	➔			
11.1b Manufacturers: signatories to Australian Packaging Covenant (APC)		9	17	All manufacturers	➔				
11.2 Farm level waste reduction		Under review	Under review	Under review	—				

Understanding 2015 Performance

➔ improvement from last measurement ➔ no change from last measurement ➔ regression from last measurement * If no measurement in 2015, latest available shown ✓ ongoing target achieved in 2015 ✗ ongoing target not achieved in 2015 "Under review" indicates where an appropriate baseline measure or target has yet to be established



Section 1:

About our Industry, the framework and this report



About our industry, the Framework and this report

About the Australian dairy industry

Through its farms and manufacturing sector, the Australian dairy industry not only provides nutritious food but is a significant contributor to the national economy.

Despite challenges caused by low rainfall and depressed global prices, the dairy industry remains Australia's third-largest rural industry behind beef and wheat, with a farm-gate production value of \$4.7 billion in 2014/15.

Our 6200 farms (approximately 97% family owned) produced 9.7 billion litres of milk in 2014/15, an increase of 3.8% on the previous year¹. However, seasonal conditions and tight profit margins will see a likely 2% decrease in production in 2015/16, according to Dairy Australia.

Compared to our annual total of 9.7 billion litres of milk, our neighbours in New Zealand produce 19 billion litres annually, while the USA produces 93 billion litres.

Australians each drink around 105 litres of milk, eat 13.5kg of cheese, 4kg of butter and 7.2kg of yoghurt per year². Our milk production more than meets our domestic consumption needs, and a large amount of dairy produce is exported. Australian dairy has an enviable international reputation, and 34% of our annual production is exported, particularly to South East Asia, Japan, China, Africa, the Middle East, Mexico, and Russia.

Despite such a large percentage our production sent overseas, and being the fourth largest dairy exporting country, our exports comprise only 6% of total world dairy trade exports.

The Australian dairy farming system is predominantly pasture based. Cows produce 25–40 litres of milk each day. Dairy has many challenges — for example, our farms use water and energy, and other materials like fertiliser and feed, while generating effluent and greenhouse gas emissions.

Farms and manufacturing plants employ approximately 39,000 people directly and more than 100,000 people indirectly through related services, including research and development, dairy transport and veterinary services.

While most milk production occurs in the south-east states of Australia, all states have dairy industries that supply fresh drinking milk to nearby cities and towns. Much of the milk processing occurs close to farming areas, making the industry an important presence in regional communities, generating jobs and opportunities.

 See www.dairyaustralia.com.au/Home/Standard-Items/~media/Documents/Publications/Australian%20Dairy%20Industry%20In%20Focus%202015.pdf

¹ Situation and Outlook, July 2015, Dairy Australia

² Australian Dairy Industry in Focus, 2015



About the Dairy Industry Sustainability Framework

The Australian Dairy Industry Sustainability Framework is owned and led by industry. The Framework was developed in 2012 and sets the direction for continual improvement, providing guidance to farmers, manufacturers and industry bodies on our shared priorities and commitments.

The Framework was developed to reflect the dairy industry value chain considering feed production to manufacturing, retail and packaging, export and consumption. The initial focus has been on the areas where dairy farmers and manufacturers have the greatest impact and most direct control over the issues and outcomes.

The Framework was deliberately crafted to evolve over time — embracing change as projects are implemented, progress is demonstrated, data techniques are modified, or new issues arise. As more research is developed and better metrics become available, they will be incorporated into the Framework.

The development of the initial Framework was informed by a number of projects including:

- Mapping of existing industry programs
- A review of targets adopted by dairy industry bodies in other countries
- Assessment of sustainability issues material to the dairy sector
- Identification of stakeholders and their interests.

i To view the Framework on line visit the Dairy Australia website or visit www.sustainabledairyoz.com.au

Principles and Guidance

The development of the Framework was informed by international guidelines and standards, including the United Nations Global Compact and the Global Reporting Initiative (GRI) G4.

It was also guided by a set of agreed principles to help identify and prioritise issues and guide ongoing action and decision-making (see Figure 1).

These principles include an *appreciation of stakeholder interests* which ensures that stakeholders from across the dairy value chain are engaged directly in the ongoing development of the Framework.

Principles	Informed by
Ethical behaviour	
Transparency and accountability	
Appreciation of stakeholder interest	
Competitive neutrality 'not providing competitive advantage'	
Collective action that delivers mutual benefit	
Inclusivity	

Figure 1: A set of agreed principles helped identify and prioritise issues and guide ongoing action and decision-making

Since the adoption of the Framework, a number of global and national initiatives have been developed. These have also influenced our ongoing approach, areas of interest and discussions with our stakeholders. These include the 17 United Nations (UN) Sustainable Development Goals which have unprecedented buy-in as a result of consultation and negotiations involving all 193 UN member states, the private sector and civil society. The Goals outline 169 targets across areas including poverty reduction, food security and energy and will directly influence national policy settings.

(see www.un.org/sustainabledevelopment/development-agenda/)

The international dairy industry has established the Global Dairy Agenda for Action (GDAA)³ and developed the global [Dairy Sustainability Framework](#)⁴. Dairy Australia is a full member of the GDAA and the Australian Dairy Industry Sustainability Framework aligns with this global framework.

³ The Global Dairy Agenda for Action. Available at: <http://dairysustainabilityframework.org/the-gdaa/background/>

⁴ Dairy Sustainability Framework. Available at: <http://dairysustainabilityframework.org>



The GDAA was a vocal supporter of the United Nations Sustainable Development Goals, released September 2015 and the COP21 climate conference held in Paris in December 2015. The United Nations Sustainable Development Goals provide a roadmap for global development efforts to 2030 and beyond. The UN made clear that dairy has an important role to play through the delivery of sustainable actions that address the climatic, economic and social aspects of food production.

In Australia, the Australian Securities Exchange has recently introduced recommendations for listed companies to improve disclosure on sustainability risks. As of July 2015, all listed companies in Australia must disclose more information on their social, economic and environmental sustainability risks and how they are managing those risks⁵.

We will continue to monitor developments in sustainability disclosure, particularly in the agricultural or dairy industries at a local, national and international level. We will draw upon the principles and guidance that underpin these initiatives as they will influence the ongoing evolution of the Framework.

Governance

The ADIC, the dairy industry's peak policy body, has overall responsibility for the Framework — setting and reporting progress against the Framework targets and performance measures (see Figure 2). Dairy Australia, the industry-owned national service body, facilitates and supports the ADIC in developing and implementing the Framework. A Steering Committee was established in 2012 to drive the ongoing development and implementation of the Framework. The Steering Committee meets monthly and includes representatives from farmer organisations as well as manufacturing companies.



Figure 2: The governance model of the Australian Dairy Industry Sustainability Framework

The Steering Committee seeks endorsement from the ADIC on any major recommendations.

Representation and members of the Steering Committee are listed in the Appendix.

The Dairy Sustainability Consultative Forum was established in 2013. Consisting chiefly of non-industry stakeholders, the Forum provides feedback on our progress and facilitates two-way discussion on emerging issues both nationally and internationally. The Consultative Forum has two face to face meetings per year.

The Framework has been developed through a continuous improvement process, seeking feedback and active forms of review.

Figure 3 illustrates an approach to sustainability that progresses along a maturity path from legal compliance and initial measurement activities to more strategic approaches in which sustainability and business objectives are mutually reinforcing.

Our intention is to continue to evolve and develop the Framework and its features as issues emerge and progress is made. This will include improving data collection and measurement techniques and actively demonstrating performance improvements as the Framework overall moves toward more strategic industry-wide solutions.

⁵ Australian Securities Exchange (ASX), 2014. Available at: www.asx.com.au/documents/asx-compliance/cgc-principles-and-recommendations-3rd-edn.pdf

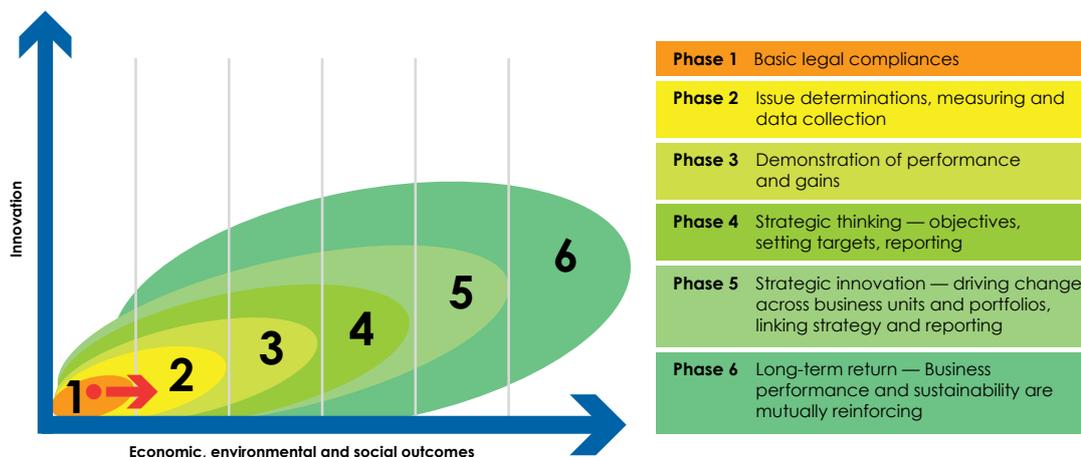


Figure 3: The maturity path of a sustainability model
(Source: Modified from EPA Qld)

Defining report content

This is our third annual Progress Report. It demonstrates our progress towards the goals and targets of the Framework and where we need to continue to do more.

Unless otherwise stated, the information in this report refers to the 2014/15 financial year. This report draws upon Standard Disclosures from the GRI G4 Sustainability Reporting Guidelines and these are identified in the GRI Content Index shown in the Appendix.

This year our report also demonstrates alignment with the UN Sustainable Development Goals. We have highlighted where the Australian dairy industry either has an impact on a particular goal, such as combating climate change, or where it can actively contribute to the achievement of a goal, such as food security. The UN Sustainable Development Goals and their associated targets will also be used to provide guidance in the ongoing development of the Framework.

Various research papers and surveys have been used in the development of this report and appropriate references are provided. Some of these surveys are not conducted on an annual basis and therefore updated data may not be available for this reporting period. In these instances, the most recent available data has been reported. It should also be noted that some percentages may not add up to 100%, as they are rounded to the nearest figure.

Determining the issues

Defining and prioritising the material sustainability issues to include in our Framework and progress reports is critical to supporting our ongoing strategic approach to sustainability.

Material⁶ issues are defined as those which reflect our significant economic, environmental and social impacts and substantively influence the assessments and decisions of our stakeholders.

A review of material issues was first undertaken in 2011 to inform the development of the Framework. This was informed by AccountAbility's 5 part materiality test⁷ which included reviews of:

- Direct financial impacts (e.g. risk register)
- Policy (e.g. stated commitments and policies active in the industry)
- Peers and their positions on issues (e.g. Dairy UK)
- Societal norms (e.g. regulations)
- Stakeholder concerns (both internal to the industry and external)

In preparing the 2014 progress report, a limited review of material issues was repeated to test their currency and relevance.

The review included a survey of global peers as well as a desktop media scan and analysis of Dairy Australia's media monitoring tools (e.g. Dairy Monitor)⁸.

A more comprehensive refresh of the material issues will be undertaken in 2016 to support the ongoing evolution of the Framework and to inform the content of the 2016 Progress Report.

⁶ GRI G4 online. Available at: <https://g4.globalreporting.org/how-you-should-report/reporting-principles/principles-for-defining-report-content/materiality/Pages/default.aspx>

⁷ AccountAbility, 2003. Available at: <http://www.accountability.org/images/content/0/8/085/Redefining%20Materiality%20-%20Full%20Report.pdf>

⁸ For more information on the methodology and results of materiality determinations to date see the Australian Dairy Industry Sustainability Framework 2012, Australian Dairy Industry Sustainability Progress Report 2013 and Australian Dairy Industry Sustainability Progress Report 2014. Available at: www.dairyaustralia.com.au/Industry-information/Sustainability/Industry-sustainability.aspx



Engaging stakeholders



Stakeholders took part in two Consultative Forums during 2015.

The dairy industry engages stakeholders through a variety of mechanisms.

The stakeholder groups engaged in the Framework itself were identified through a mapping exercise: customers, suppliers, government, primary industries, non-government groups, special interest groups and others.

Stakeholders, their interests and our engagement mechanisms are outlined in Table 1.

In preparation for the 2015 Progress report, material issues were refined through extensive stakeholder engagement. The Framework, and its associated progress reporting, continue to be developed through discussions with multiple stakeholders.

The Steering Committee and Consultative Forum are both expressions of this approach.

In the past 12 months, specific stakeholder engagement activities were pursued to test, prioritise and understand the concerns already raised as well as identify emerging issues.

This included:

- A survey of Consultative Forum members regarding the content and quality of the Australian Dairy Industry Sustainability Progress Report, 2014. The survey provided some initial responses to the ranking of issues and feedback to improve the quality and relevance of reporting.
- Two meetings of the Consultative Forum. Among other things, these meetings were used to review the 2014 Progress Report and discuss the nature of emerging issues and trends in the sector.

- Direct interviews of 12 stakeholders on the current priorities of the Framework, our progress to date and consultation activities as well as emerging issues and their nature. The interviews provided a vehicle for more in depth and richer discussions with specific stakeholder groups.
- A visit to a major dairy farm and Devondale Murray Goulburn's new Sydney manufacturing facility.

The results of the stakeholder engagement undertaken this year confirmed the relevance of the existing themes and objectives of the Framework. It also raised some new issues, trends and points of emphasis for consideration in the ongoing development of the Framework and our progress reporting which will be monitored and addressed in coming review cycles. Specifically:

- **Transparency and traceability.** Global and domestic customers have increasing expectations of both transparency (open and frank communication) and traceability (with evidence to demonstrate this) in the sector.
- **Intensification of farming systems.** Some stakeholders are uncertain of impacts and opportunities arising from the increasing intensification of farms, specifically animal welfare, resource efficiencies and responses to climate variability.
- **Labour practices, worker health and safety.** While attraction and retention are ongoing issues, there is increasing focus on labour practices in supply chains. Ensuring the fair treatment of all workers, including workers on 417 visas, in a safe and dignified work environment will be an issue for further discussion as will mental health.
- **Animal husbandry and welfare.** As an industry which depends on animals, the dairy sector needs to know more about community expectations regarding the health and well-being of cows.
- **Community resilience.** The dairy industry depends on viable rural communities and contributes actively to local economies. Understanding the relationship between the industry and the communities in which it operates, the value it brings and how communities respond to change all require further exploration through the Framework and its ongoing development.



- **Climate change.** The Framework to date has focused on carbon mitigation efforts by manufacturers. The impacts of climate change itself through the value chain and adaptation responses will also require increasing attention.
- **Food waste.** The challenge of food security requires a reduction in the generation of food waste across the dairy value chain. Wasted food also represents significant resource waste in the form of the energy, water and materials used to produce it.

Stakeholder group	Stakeholders	Interests and concerns	Engagement
Customers	Retailers	Pressure on-farm milk prices; labour practices; bobby calves; responsible sourcing; household incomes in Australia set to drop in next five years.	2 Consultative Forum (CF) meetings per year CF meeting reports 12 meetings with individual stakeholders Visit to farm and manufacturing facility
Suppliers	Banking	Industry capacity (people) — successional planning, education; environmental, including waste management, water efficiency; rural -urban divide; health and wellbeing (mental health).	
Government	State and Federal Government Department	Land health — soils (nutrient efficiency, soil constraints, soil moisture).	
NGOs	Community development	Dairy's non-financial contribution to regional communities.	
Primary Industry	Representative groups	Climate change — must be discussed in terms of adaptation. Biosecurity — need to raise profile and on-farm adoption. Framework needs targeted communications: snapshot for consumers; in-depth reporting for better informed.	
Special interest	Animal welfare	Bobby calves; lameness; downer cows; mastitis; induction; intensification.	
Other	Regional development	Health of farmers; animal welfare debate will grow — is dairy ready; social inclusivity — cultural diversity in supply chain could present challenges for some Australians; profitability of dairy farms.	

Table 1: Stakeholders, their interests and our engagement mechanisms



Issues across our value chain

In order to explore the significant issues that have the potential to affect the Australian dairy industry and its stakeholders, we have started developing a value chain map for the sector (see Figure 4).

While many issues go well beyond the immediate control of the dairy value chain, others resonate strongly in several key places along the value chain and this is where they need to be addressed.

This year we have shown the dairy value chain with the Framework's major targets plotted where we believe the issues to be most material. Inputs through the value chain include water, hay, grain and fertiliser on farm, and logistics, ingredients, packaging, energy and water in the manufacturing sector.

Australian Dairy Industry value chain

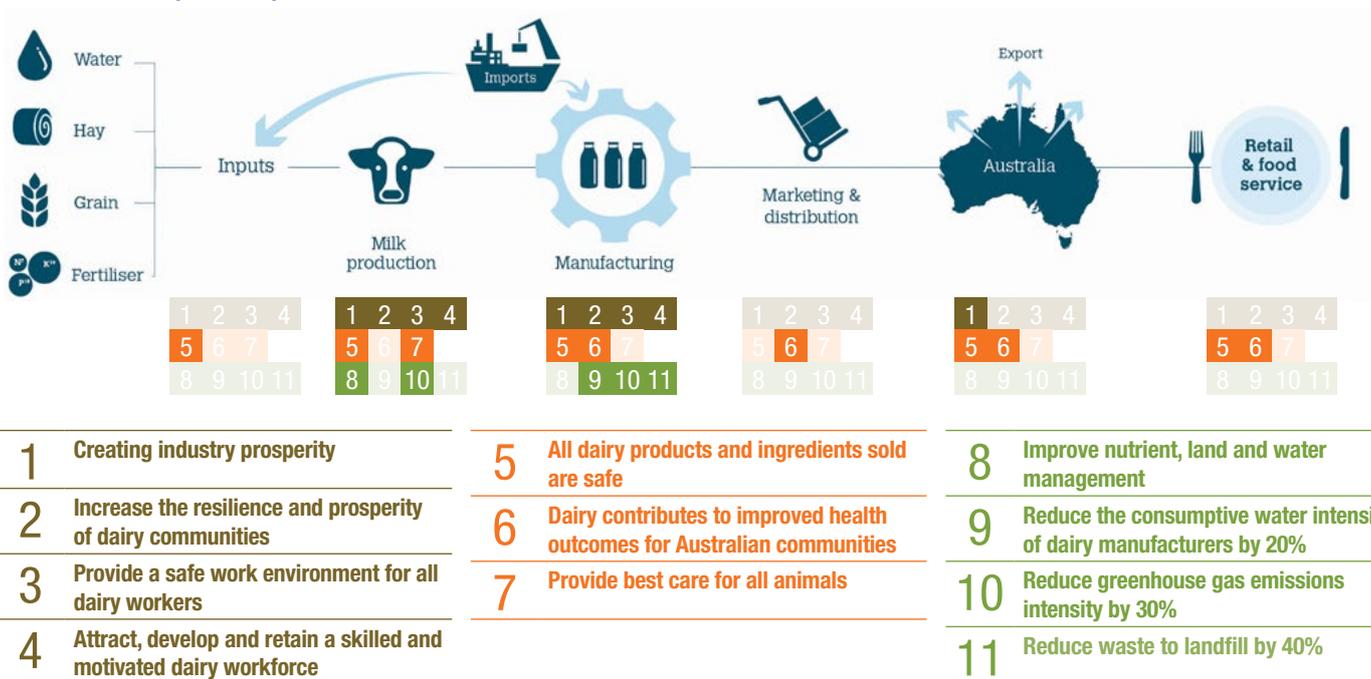


Figure 4: Sustainability Framework targets plotted against Australian Dairy Industry value chain map



Industry snapshot

From Dairy Australia's Australian Dairy Industry in Focus 2015:

size

National dairy herd



1.74 million cows

Average herd size

284 cows

environment

On-farm carbon footprint:



1.11 kg CO₂ per litre of milk produced

Farms are predominantly pasture based with approximately 70–75% of dairy cattle feed requirements coming from grazing in a year of 'normal' seasonal conditions



Supplementary feeding is widespread, predominantly



grains, hay & silage

milk production

Total milk production



9.731 billion litres

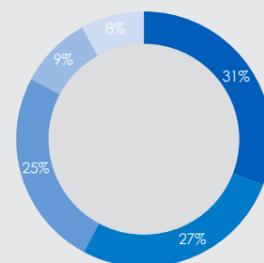
Average production

5730 litres/



milk utilisation

- Cheese **31%**
- Skim milk powder/butter milk powder **27%**
- Drinking milk **25%**
- Other products **9%**
- Whole milk powder **8%**



Drinking milk

25%



export



34%

Percentage of milk production exported

Total Australian exports

\$2.88 billion

(6% of world dairy trade)



major markets

for Australian dairy products:



Australia; Greater China; Japan; Singapore; Indonesia; Malaysia

industry



Dairy industry workforce — direct employment of about

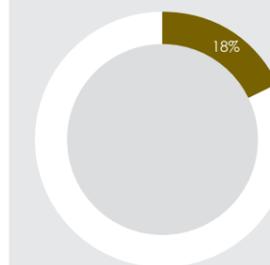
39,000

97% vs 3%

Dairy farms are 97% family owned and operated and corporate farms comprise 3% of farms



■ Family owned farms
■ Corporate farms



Share farming is employed on approximately 18% of farms

18%

\$13.5 billion

Australian dairy a \$13.5b farm, manufacturing and export industry





Section 2: Detailed discussion on 2015 Progress



Enhancing livelihoods

Priority area 1: Creating industry prosperity

Target 1: Increase the future competitiveness and profitability of the Australian dairy industry



Despite the many challenges, the dairy industry remains Australia's third-largest rural industry behind beef and wheat, with a farm-gate production value of more than \$4 billion.

OUR STORY IN BRIEF

Australian dairy performs in tough global conditions

The more stable returns for dairy products generated by the Australian domestic market, together with a diverse range of export markets and products, has helped cushion the industry through an internationally volatile 2014/15. Australian dairy farmers received some of the highest milk prices on record in 2014. However, China's oversupply issues, Russian trade sanctions and a sharp increase in global supply had a negative effect on farmgate prices across the world.

The 2015 financial year finished with softer milk prices globally, but the Australian dairy manufacturing sector maintained milk prices for farmers relative to other dairy trading nations. Although global dairy commodity prices have increased from their recent extreme lows, the

international market is yet to recover as the supply and demand imbalance continues⁹.

2015 saw significant policy changes to improve the long-term competitiveness of the industry. The signing and coming into force of the China-Australia Free Trade Agreement is a particularly significant achievement following a concerted industry effort to promote a commercially meaningful result.

Despite the downturn in prices, farmer confidence remains firm. The National Dairy Farmer Survey (NDFS 2015)¹⁰ showed 20% of farmers were predicting an improvement in farm business returns whilst 40% anticipate no change. However, the increasing dry conditions are impacting on farm input costs (water and feed) and this is likely to be reflected in reduced confidence in 2016 and potentially lower milk production.

⁹ Dairy Situation and Outlook 2015: www.dairyaustralia.com.au/~/_/media/Documents/Stats%20and%20markets/S%20and%20O/S%20and%20O%20October%202015/October%202015%20Dairy%20Situation%20and%20Outlook.pdf

¹⁰ NDFS 2015 www.dairyaustralia.com.au/Markets-and-statistics/Market-situation-and-outlook/National-Dairy-Farmer-Survey.aspx

Target 1: Increase the future competitiveness and profitability of the Australian dairy industry

Target
1



After solid farm production growth of 3.8% in 2014/15 (to a total of 9.7 billion litres), Dairy Australia's initial forecast was for a 2% increase in national production for 2015/16, within a range of 9.8 to 10 billion litres¹¹. However, this is likely to be revised to a 2% decrease due to seasonal conditions and tight margins.

Despite the many challenges, the dairy industry remains Australia's third largest rural industry behind beef and wheat, with a farm-gate production value of more than \$4 billion.

The private sector has also begun to position itself for opportunities in both local and international markets. Over the last two financial years, processors have invested an estimated \$1 billion and there is a further estimated \$1 billion on the horizon for upgrading and expanding capacity. There has also been significant investment in the farm sector during the past 18 months from groups such as Bestons, Leppington Pastoral, Camperdown Dairy International and ACE Farming.

¹¹ Dairy Situation and Outlook 2015: www.dairyaustralia.com.au/~/media/Documents/Stats%20and%20markets/S%20and%20O/S%20and%20O%20October%202015/October%202015%20Dairy%20Situation%20and%20Outlook.pdf

SUSTAINABLE DEVELOPMENT GOALS

The Australian dairy industry is aware of the role it can play in contributing to global sustainability frameworks and activities. With the recent agreement and release of the United Nations Sustainable Development Goals and the COP21 meetings in Paris, the global dairy sector, aligned through the Global Dairy Agenda for Action, is engaging on a global level. The Australian Dairy Industry's Sustainability Framework reflects a strong alignment with these global activities, and the principles and targets of specific Sustainable Development Goals:



8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of micro-, small- and medium-sized enterprises, including through access to financial services.

HOW WE'RE TRACKING

Target 1: INCREASE THE FUTURE COMPETITIVENESS AND PROFITABILITY OF THE AUSTRALIAN DAIRY INDUSTRY

Indicator	Baseline	Performance		2020 Target
		2015	Progress	
1.1 % Profitable farms (rolling 3 year average)	55%	42%	↘	Under review
1.2 Market preference	Under review	Under review		Under review
1.3 Market access	Under review	Under review		Under review
1.4 % of farmers planning capital investment	40%	52%	↗	Under review
1.5 Product diversity	Under review	Under review		Under review

Understanding 2015 Performance

- ↗ improvement on baseline towards target
- ↘ no improvement towards target
- ↘ regression baseline to target
- * no measurement in 2015 (latest available shown)
- ✓ ongoing target achieved in 2015
- ✗ ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established



Baselines, targets: a work in progress

The Framework outlines five performance measures of industry competitiveness and profitability that are in various stages of evolution:

- Farm profitability
- Market preference
- Market access
- Capital investment
- Product diversity

Our intention is to continue to develop measures that provide meaningful data and drive culture and practice change in the industry.

1.1 X% increase in the number of dairy farms that are profitable

In previous reports, we have used the Australian Bureau of Agricultural and Resource Economics and Science (ABARES) data as the baseline to reflect progress against the target. The ABARES data is based on dairy industry selected physical and financial estimates, by state. Whilst this was deemed to be the most appropriate measure at the time, it has become increasingly clear that the percentage increase in the number of profitable dairy farms on its own is not a particularly useful measure. A complete picture is not possible with one single parameter. Ultimately, profitability should be assessed in terms of cash, profit and wealth¹².

In the short-term we will continue to use the ABARES data (as it is still a good indicator of trend) until the newly launched DairyBase program provides sufficient data to better reflect profitability on dairy farms. We have also included a metric based on the findings from the National Dairy Farmers Survey (NDFS) 2015 where farmers were asked directly if they made an operating profit in the previous year, and if they expect to make a profit in the following year.

The data source for this measure will continue to evolve as we endeavor to develop a more meaningful measure of profitability.

Baseline performance measure: 55% of dairy farms were profitable based on a three-year rolling average to 2012/13 (ABARES)¹³.

¹² Farm Profitability Report 2015, p. 7. Available at: www.australiandairyfarmers.com.au/PDF/Farm-profitability-Report-2015-Final.pdf, www.dairyaustralia.com.au/Home/Standard-Items/~/_media/Documents/Farm-Business-management/Sustainable%20farm%20profitability%20report/Farm-profitability-Report-2015-Final.pdf

¹³ ABARES, 2015. Dairy industry selected physical and financial estimates, by state. Available at: www.agriculture.gov.au/SiteCollectionDocuments/abares/surveys/dairy-by-state.xls

2014 performance measure: In 2013/14, 52% of farmers had a positive farm business profits (ABARES). This compares with the ABARES adjusted figure of 35% in 2012/13, 64% in 2011/12 and 65% in 2010/11. The baseline measure agreed was profitability based on a three year rolling average using ABARES data. Based on the ABARES adjusted 2011 to 2014 data, 51% of farmers had a positive farm business profit.

2015 performance measure: In 2014/15, 39% of farmers had a positive farm business profit (ABARES). This compares with the ABARES adjusted figures of 52% in 2013/14, 35% in 2012/13 and 64% in 2011/12. Based on the 2012 to 2015 data, 42% of farmers had a positive farm business profit (ABARES)^{14,15}.

The NDFS 2015 showed that 79% of farmers surveyed expected to make an operating profit in 2014/15 and 82% of respondents made an operating profit in 2013/14.

1.2 X% increase in the market preference for buying Australian dairy products, compared with our top 3 international competitors (NZ, EU and US)

Performance measure: Still to be established — will be reviewed in 2016.

1.3 Ensuring sustainability criteria (e.g. carbon, animal welfare, environmental impact) do not impede market access

Performance measure: Still to be established — will be reviewed in 2016.

1.4 Increase adoption of new technologies and innovative management practices within the dairy industry

Baseline performance measure: For farm: 40% of dairy farmers reported they were planning capital investments in the next 12 months (NDFS 2013). For manufacturers: To be established.

¹⁴ As above.

¹⁵ Note: the three year rolling average is calculated using the most recent ABARES estimates (available at the time of the report preparation) on reported farm profitability for the latest three financial years. ABARES estimates for the most recent two years (FY2014 and FY2015) are provisional and preliminary and are expected to be both refined and finalised in subsequent years. Similarly, ABARES estimates reported as performance measures in past Progress Reports have also changed, and amendments to prior years estimates and rolling averages due to these updates are included here.



2014 performance measure: For farm: 51% of dairy farmers reported they were planning capital investment in the next 12 months (NDFS 2014). 48% of dairy farmers reported they did make capital investments in the last 12 months (up from the 40% who said in 2013 they were planning to do this).

2015 performance measure: For farm: 52% of dairy farmers reported they were planning capital investment in the next 12 months (NDFS 2015). 56% of dairy farmers reported they did make capital investments in the last 12 months (up from the 48% who said in 2014 they were planning to do this).

Over the last two financial years, manufacturers have invested an estimated \$1billion and there is a further estimated \$1billion on the horizon for upgrading and expanding capacity. Some of the investments and joint ventures include: Devondale Murray Goulburn's capital raising; Fonterra Australia's JV with Being Mate; Bega Cheese/Tatura's JV with Blackmores; Lion's cheese plant investment in Burnie; Norco's investment in fresh milk processing; Pactum's JV with ACM and Freedom Foods; and Burra's investment in infant formula manufacturing.

1.5 Provide consumers with greater choice and access to a variety of dairy products and/or ingredients to meet their specific nutritional needs

Performance measure: Still to be established — will be reviewed in 2016.

WHAT WE'RE DOING

The dairy industry is focusing on building resilience into our farm and manufacturing businesses in order to enable them to thrive in the good times and survive in more turbulent times.

The historic China Free Trade Agreement (FTA) reflects the international interest in our industry and presents a great opportunity for Australian dairy. We have secured improved terms of trade for our dairy products and the dismantling of tariffs over the next decade will see increasing volumes of Australian dairy products enter China. China is the largest world market and the China FTA should give the Australian dairy industry and external investors greater confidence to invest in growing their businesses.

The Trans Pacific Partnership (TPP) was finally concluded on the 4 October 2015 with modest, but important gains for the Australian dairy industry. The TPP agreement extended existing trade arrangements in key markets as well as forging access into new markets.

Dairy Australia has been working to help the industry become more profitable and develop appropriate metrics so the principles of profitability are better understood, encouraged and put into practice, including managing risk and volatility better¹⁶.

In February 2015, the industry held a dairy investment workshop in partnership with Austrade and the State Governments to help streamline the discussion between the various state investment agencies on how to engage with the investment community on dairy issues. Dairy Australia also ran a pilot workshop exploring farmer "investor readiness" in November 2015. The aim was to help farmers better understand what they need to do in order to provide an attractive proposition for external parties to invest capital into their businesses.

Dairy's investment in the Dairy Futures CRC, which began in 2010, is delivering innovations that benefit the Australian dairy industry. The CRC began with two major goals: to double the rate of genetic gain in Australian dairy herds and to create new tools that fundamentally change the breeding of pasture plants. By June 2016, other major research streams will deliver or exceed their projected impacts. The first hybrid breeding lines will deliver rapid gains for dairy pastures. Elite hybrid plants have been demonstrated to have a 20% increase in yield.

DairyBase, launched in May, 2015, is a web-based tool that enables dairy farmers to measure and compare their farm business and financial performance over time — year on year and season on season — as well as to undertake budget planning. It is simple to use and provides meaningful financial information that enables farmers to compare past performance and prepare budgets using industry benchmarks. Feedback across all sectors of the dairy industry has been overwhelmingly positive. By the end of the financial year DairyBase had accumulated over 300 registered users. And by mid-November 2015 the number had risen to 800.

¹⁶ Farm Profitability Report 2015, p. 7. Available at: www.dairyaustralia.com.au/Home/Standard-Items/~/_media/Documents/Farm-Business-management/Sustainable%20farm%20profitability%20report/Farm-profitability-Report-2015-Final.pdf



WHAT WE'RE PLANNING

The industry will continue to provide input into trade agreement discussions and seek improvements in terms of trade.

The data collected through DairyBase allows farm business performance to be calculated in a consistent manner across the entire dairy industry, making it an important industry resource. DairyBase goes a long way towards illuminating the business dimensions of a dairy enterprise and in the future will provide valuable information to inform RD&E investment. DairyBase is the first in a suite of tools. A Standard Chart of Accounts has been released, a cash flow tool is in a prototype phase and the first in a series of Farm Business Management capability programs are being piloted.

While the Dairy Futures CRC will finish in June 2016, the board of Dairy Australia approved funding for a new entity, DairyBio. The Victorian government and Dairy Australia are jointly investing \$45 million over the next 5 years in a strategic partnership for innovation in dairy bioscience. DairyBio will continue to provide research to substantially improve the key resources of pasture feedbase and herd quality for the dairy industry to increase yield and the productivity of cows.

Dairy Australia has secured funding through the first round of the Federal Government's \$100 million R&D for Profit funding program, which aims to boost funding to nationally coordinated, strategic research that delivers farm gate productivity and profitability outcomes for Australian farms. Funding will be used for programs to stimulate private sector extension in Australian agriculture to increase returns from R&D; improve profitability of cows; improve irrigation performance; and turn waste into revenue (fertiliser).

Dairy Australia is also engaging with the second round of the funding program. The industry will also continue its work on trade barriers and other FTAs.

OUR PEOPLE, PROJECTS



Devondale Murray Goulburn implements new capital structure

Murray Goulburn Co-operative Co. Limited (MG) successfully implemented its new capital structure with the listing of the MG Unit Trust (ASX code: MGC) on the Australian Securities Exchange (ASX) in July 2015.

Devondale Murray Goulburn is Australia's largest dairy foods company. Through its co-operative structure, it has more than 2600 supplier-shareholders and via the MG Unit Trust, has also now welcomed more than 6000 unitholders to share in MG's future.

The successful implementation of the capital structure gives MG access to \$500 million in new capital to invest in world-leading, low cost manufacturing and supply chain capabilities to better connect with customers and consumers across international and domestic markets.

The successful listing was the culmination of a two-year, comprehensive consultation process with MG supplier-shareholders to ensure that MG has the strong and stable capital base it needs to pursue its growth and value creation strategy to deliver a sustainable high farmgate milk price and future earnings.

The capital structure involved several offers to invest in MG and raise \$500 million. The Supplier Share Offer (SSO) was open to eligible shareholders to acquire shares up to their share standard and the Supplier Priority Offer was available to all MG suppliers to buy shares at the same price as units in the MG Unit Trust. Together these offers raised \$62 million.

The subsequent Initial Public Offer (IPO) to buy units in the MG Unit Trust along with the Friends of Murray Goulburn Offer, which was open to residents of MG's dairy regions, existing and former suppliers and MG employees, contributed approximately \$438 million through the issue of units.



Following the capital raising, MG Chairman, Philip Tracy said it was rewarding that so many investors had decided to invest in MG: "We believe the strength of demand for Units in the MG Unit Trust is testament to the quality of our business and a further endorsement of MG's growth and value creation strategy to maximise farmgate milk prices and future earnings."

"Most importantly, MG now has the capital it needs to deliver on its plans to grow the business and invest in key capital projects for dairy beverages, consumer cheese and nutritional powders which will further increase MG's weighting towards higher value-add premium dairy foods and away from the volatility of bulk commodity markets and prices," Phil said.

Fonterra invests \$120 million in state-of-the-art cheese plant

Fonterra Australia announced it will invest \$120 million in building a state-of-the-art cheese plant at its factory in Stanhope, Victoria.

The new facility will replace the hard cheese plant, which was destroyed by fire in December 2014, with a larger, modern facility that will produce cheese for Australian consumer, foodservice and export markets.

Fonterra Oceania Managing Director Judith Swales says investing in the new plant will help Fonterra to deliver on its multi-hub strategy to get the maximum value out of every drop of milk and drive increased returns from the business.

"We are focusing on areas where we can win in a highly competitive market, and that means optimising our product mix and investing in higher value add products that will deliver the best returns for our farmer shareholders. Rebuilding and expanding our Stanhope cheese plant is key to this.

"The new state-of-the-art facility will be able to produce 45,000MT of cheeses each year including parmesan, gouda and mozzarella, an increase of 15,000MT on the previous plant.

The new plant will supply local and export markets and leverage Fonterra's footprint in 100 export markets and also the recent FTAs with China, Japan, and Korea.

"Importantly, the new plant will require significant growth of the local milk pool by 2020, and demonstrates Fonterra's commitment to growing the industry long term. It means our local farmers can be assured of the future of dairy in northern Victoria," Ms Swales says.

The multi-million dollar project will secure the future of the site and generate up to 30 new jobs. It is being supported by the Victorian Government through its *Regional Jobs and Infrastructure Fund*.

"We acknowledge and thank the Victorian Government for their support of this project, which will help secure Stanhope's future as a world-class producer of cheese," says Ms Swales.

Speaking at the unveiling of the plans, Victoria's Minister for Agriculture and Regional Development, the Hon. Jaala Pulford said Fonterra's investment demonstrated its confidence in the future of Australian dairy.

"Fonterra's significant investment in their Stanhope facility is a major vote of confidence in Victoria's dairy industry and confirms regional Victoria's reputation as a great place to do business."

Construction of the new plant will begin in 2016 and is expected to be completed in 2017.

WHAT OUR STAKEHOLDERS ARE SAYING

The profitability of every dairy farm is of critical importance to creating industry prosperity. It influences investment decisions made by every farm business, including decisions about expansion, climate change and trade. The wide variety of business models means the industry cannot adopt a singular approach to creating prosperity.

Consumers are increasingly demanding cheaper products but seeking more evidence as to whether they have been produced in an environmentally-friendly manner. This issue of cheaper products, fuelled by supermarkets, will not change in the medium term.

The real cost of producing food needs to be acknowledged and used to help educate the community, helping dispel the myth of cheap food.

Cheaper products can have a flow-on effect to the farm gate price, and to dairy communities, so long-term deals between supermarkets and manufacturers must be sustainable.

"The economic profitability of dairy enterprises, while there will be ups and downs, it's something that can't fall off the agenda. It influences investment decisions made by every farm business, including decisions about expansion, climate change and trade."

Rural banker.



Enhancing livelihoods

Priority area 2: Supporting communities

Target 2: Increase the resilience and prosperity of dairy communities



Dairy farmers and employees tend to be very active members in their local communities.

OUR STORY IN BRIEF

Measuring the wellbeing of farmers and their communities

With a farmgate value of \$4.7 billion, the Australian dairy industry enriches regional Australian communities. It directly employs approximately 39,000 Australians on farms and in factories, while more than 100,000 Australians are indirectly employed in related service industries¹⁷.

Building the resilience and prosperity of dairy farmers directly supports their local community. Manufacturing also adds to community resilience through direct employment and indirect economic flow-on effects.

Dairy farmers and employees tend to be very active members in their local communities and most manufacturers sponsor local activities and clubs. This assists in building social capital within a dairy community, which in turn helps to ensure these communities are prepared for change and are able to address issues as they arise.

Enhancing the resilience and prosperity of dairy communities underpins the dairy industry's future success. To do this, we are improving our understanding and developing indicators to measure the wellbeing of farmers and their communities.

The idea of wellbeing as a measure of progress is rapidly gaining support worldwide. An increasing number of national and international organisations include indicators of wellbeing in their reporting.

Wellbeing is the outcome of many different influences that interact with each other in complex and dynamic ways to change a person's overall quality of life, or a community's livability and resilience.

Farmers are vulnerable to mental and physical health issues, so understanding wellbeing is important at both an individual and industry level.

¹⁷ Dairy Australia. Available at: www.dairyaustralia.com.au/Industry-information/About-the-industry/About-the-Australian-dairy-industry.aspx



SUSTAINABLE DEVELOPMENT GOALS

Dairy industries also have a role to play in enhancing livelihoods on a global scale. Nearly one billion people globally earn their livelihood through contact with the dairy sector (Global Dairy Agenda for Action¹⁸). The dairy sector makes a remarkable impact on improving livelihoods, social equity, community health and wellbeing, as well as reducing social inequity by contributing to the social fabric of rural communities. The framework's goal of supporting dairy communities aligns with the UN Sustainable Development Goal #8. Decent Work and Economic Growth:



8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of micro-, small- and medium-sized enterprises, including through access to financial services.

Target 2: INCREASE THE RESILIENCE AND PROSPERITY OF DAIRY COMMUNITIES

Indicator	Baseline	Performance		2020 Target
		2015	Progress	
2.1 Economic contribution	Under review	Under review		Under review
2.2 Government recognition	Under review	Under review		Under review
2.3 Community recognition				
- dairy industry is an essential part of community	71%	68%	↘	78%
- people appreciate dairy farmers in our community	76%	79%	↗	87%

Understanding 2015 Performance

- ↗ improvement on baseline towards target
- no improvement towards target
- ↘ regression baseline to target
- * no measurement in 2015 (latest available shown)
- ✓ ongoing target achieved in 2015
- ✗ ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established

HOW WE'RE TRACKING

Baselines, targets: a work in progress

The Framework uses three measures to track progress on Target 2 — Increase the resilience and prosperity of dairy communities:

- Economic contribution
- Government recognition
- Community recognition

Currently, baseline data for only one of the measures, community recognition, has been established. Further baseline data for the other measures is being investigated. In particular, we plan to convene a working group to explore the social contribution dairy provides to regional communities and develop indicators to measure this value. As part of this process, we will draw upon the findings of the 2014 Canberra University Regional Wellbeing Survey¹⁹ that examines the wellbeing of individuals, and the wellbeing of the communities they live in.

¹⁸ Global Dairy Sustainability Framework. Available at: <http://dairysustainabilityframework.org/wp-content/uploads/2015/10/The-Dairy-Sector-Ready-to-Help-Achieve-The-Sustainable-Development-Goals.pdf>

¹⁹ Canberra University, 2015. 2014 Regional Wellbeing Survey report. www.canberra.edu.au/research/faculty-research-centres/ceraph/regional-wellbeing/survey-results/2014-survey-results



2.1 Intent: to set a measure around the contribution that the dairy industry makes to the economy of dairy regions

Baseline performance measure: To be established. Dairy Australia is funding an economic analysis of the value dairy brings to each dairy area and comparing it to other alternatives in the region — an initial draft of the work has been completed but it is still under development. The work should be available around March 2016.

2.2 The contribution and importance of dairy is recognised in relevant local and state government strategies (especially growth and investment strategies)

Baseline performance measure: still to be established. The NDFS 2015 reported that 43% of farmers believe the government sees the dairy industry as vital to the Australian economy. The successful conclusion of the China FTA would suggest that government values the role that the dairy industry plays in the health of the Australian economy.

2.3 Increase consumers' and dairy communities' recognition of the value of the dairy industry

This target and the supporting indicators are under investigation and will be reviewed in 2016. We acknowledge that we need to develop a meaningful metric that moves beyond a perceived recognition of value to a meaningful measurement of value. In the meantime, we have reported against the existing performance measures.

Consumer recognition of the value of the dairy industry: Target 10% increase

Baseline performance measure: 71% of consumers agree the dairy industry is an essential part of their community — with 14% neutral 5% disagree and 11% don't know (DM 2013).

2014 performance measure: 70% (19% neutral, 4% disagree, 7% don't know) of consumers agree "the dairy industry is an essential part of our community" (DM 2014).

2015 performance measure: 68% (20% neutral, 6% disagree, 6% don't know) of consumers agree "the dairy industry is an essential part of our community" (DM 2015).

People appreciate dairy farmers in our community: Target 15% increase

Baseline performance measure: who 76% of farmers agree that "people in my region appreciate the role that dairy farmers like myself play in our community" (NDFS 2013).

2014 performance measure: 76% of farmers agree "people in my region appreciate the role that dairy farmers like myself play in our community" (NDFS 2014).

2015 performance data: 79% (4% neutral, 16% disagree, 1% don't know) of farmers agree "people in my region appreciate the role that dairy farmers like myself play in our community" (NDFS 2015).

The results indicate significant variability in perception from year to year, as well as between community and farmer. This result further supports the view that this is not a meaningful metric that truly reflects the value created by the industry.

WHAT WE'RE DOING

To help us better understand the contribution the dairy industry makes to local and regional communities, the framework must continue to evolve and be broadened to explore the value dairy jobs and people bring to communities.

It needs to move beyond a perceived recognition of value to a meaningful measurement of value. Work has begun to establish indicators for measuring change in regional community resilience and wellbeing.

The aim is to be able to measure and monitor dairy's contribution to the resilience and wellbeing of regional communities by developing a framework and indicators that can also be relevant to other rural commodity sectors.

Further work will be undertaken with Canberra University using their Regional Wellbeing Survey (CU RWS).

300 dairy farmers contributed to the 2014 CU RWS, which found that dairy farmers are the second-most likely to invest in their community (after cotton growers), have the highest sense of wellbeing, and the third-lowest level of distress. Tasmanian farmers are the most satisfied with their lives.

Further work will be conducted with the CU RWS in 2016. Dairy Australia is encouraging more farmers to participate in the future to collect a more representative sample of the industry.



The modelling work commissioned by Dairy Australia to determine the economic impact of the dairy industry in Australia was completed in late 2015. However it needs further work before it can be released to refine the outcomes so they can be compared with the economic impact provided by non-dairy alternatives in each dairy area around Australia. This work should be finalised around March 2016 and will be used to help determine the economic and social impacts/multipliers that dairy has on regional communities.

A networking event held in 2015 highlighted the value the Gippsland dairy industry brings to the region and its growth opportunities. Gippsland Dairy — Leveraging the Opportunities was a pilot project held in a dairy region, to build on the successful Legendairy breakfast held at Parliament House in Canberra in October. The event is expected to be rolled out across all dairy regions. It aimed to capture the attention of regional decision-makers with local dairy representatives promoting the value of the dairy industry and the potential it offers to the wider community.

The Gardiner Foundation is also committed to strengthening dairy communities. For 12 years it has partnered with the Foundation for Rural and Regional Renewal (FRRR) and invested over \$1million in small grant to fund projects in dairy communities with small populations. Each year the Gardiner Foundation provides \$100,000 to FRRR to fund grants for inventive and practical community-driven projects. These grants, of up to \$5000, aim to strengthen small Victorian dairy communities, build their capacity to deal with local issues and enhance existing community infrastructure. These grants will continue in 2016.

WHAT WE'RE PLANNING

A working group will be established to explore what are the enabling factors across communities and networks that are the fundamental building blocks for social capital. It will also explore the development of a community resilience indicator, especially looking at what elements of a dairy-focused community enhance or detract from resilience and prosperity. As part of this process, we will be looking at community development outside of the dairy industry.

The dairy industry must be prepared and ready to respond to community sensitivities. Industries must have the tacit or explicit agreement of society to operate and grow, acknowledging our social licence. Industries that ignore or lose social licence face greater activism, consumer backlash, litigation, regulation and political interference.

To ensure the dairy industry is able to both advocate for and respond to issues affecting our social licence to operate, we commissioned research to identify and explore gaps between stakeholder expectations and industry performance. This work will be further developed in 2016.

Beyond dairy being resilient in itself, we must remain connected to the wider community.

OUR PEOPLE, PROJECTS



Stanhope celebrates being named Australia's Legendairy Capital.

Stanhope named Australia's Legendairy Capital

The LEGENDAIRY Capital program aims to identify and celebrate outstanding regional communities in dairy town's right across the country and tells the stories of the inspiring ways the industry has shaped those communities.

A year-long campaign held every second year, the LEGENDAIRY Capital program encapsulates the warmth and wit of the industry's LEGENDAIRY communications platform to strengthen connections between dairy farmers and their regional communities.



The Australia-wide program called on towns in the country's eight dairy regions (www.legendairy.com.au/dairy-farming/our-industry/our-regions) to nominate their community for the prestigious title by sharing stories about what makes them LEGENDAIRY. Launched in April 2015, towns were required to submit a worthy project that would benefit the entire community, later judged against a set of criteria as part of their nomination.

In July, eight regional finalists were named from a total of 104 nominations from 39 towns. The announcement of Australia's LEGENDAIRY Capital for 2015 followed in September.

The positive response from each nominated town exceeded expectations — communities were filled with pride and in many cases emotional about what the recognition means to dairy farmers and their community.

To ensure this spirit and the stories of the eight LEGENDAIRY Capitals were captured, the LEGENDAIRY team travelled to each town to personally meet the Capital nominators and the community lynchpins.

It was clear from these visits that the LEGENDAIRY Capital program has captured the attention, hearts and minds of individuals and entire communities across the country:

"We often feel forgotten and unnoticed. LEGENDAIRY allows us feel needed and an important part of a local community,"
Wendy Couch, Peterborough farmer.

"Awards like this bring a town's people together, gives it an identity, and shows off the strength of the community's producers. It's fantastic to see these successes in a week where we've seen the ugly side of racism, rubbish littering our beautiful bushlands, and damning statistics naming Shepparton among the state's most disadvantaged areas.

"We can so often focus on the negatives — especially when they headlining local and national media coverage. So it's heartening to know that the people who live here, love our region and are proud of their patch,"
Colac Herald.

Following on from the successful launch of the LEGENDAIRY Capital program, the naming of the eight regional finalists, and the subsequent announcement of northern Victoria's Stanhope as Australia's LEGENDAIRY Capital 2015, Stanhope prepared a community celebration on 12 November attended by hundreds of locals.

i For more information about the LEGENDAIRY Capital program visit: www.legendairy.com.au/dairy-talk/capital

WHAT OUR STAKEHOLDERS ARE SAYING

The target highlights the importance of supporting the resilience and prosperity of dairy communities, but farmer wellbeing requires specific attention.

Farmer health — both mental and physical — requires a greater focus and it's important that the Framework realises and addresses this, as farmer resilience supports community resilience.

There is work underway by different organisations (including the University of Canberra) in developing a greater understanding of the factors behind community resilience, and building indicators to measure this. For example, what are the elements of a dairy-focused community that enhance or detract resilience/prosperity?

The Framework's indicators could be strengthened to drive increased resilience and prosperity in local communities, as some could gain the impression the priority is on ensuring the right to farm.

"The questions for dairy are 'What are the enabling factors across communities and networks which are the fundamental building blocks for building social capital?' and 'How can dairy add and subtract from them, so industry can invest in or manage the risk around them?'"

Rural banker

Enhancing livelihoods

Priority area 3: Investing in dairy people

Target 3: Provide a safe work environment for all dairy workers



The dairy industry's goal is that all business owners and employees have a safe and healthy work environment.

OUR STORY IN BRIEF

Safety underpins future success

The dairy industry is one of the most important contributors to the Australian economy, especially the Victorian economy, and safety is one of the key factors that will keep the industry competitive and encourage people to work in it.

A safe work environment will ensure accidents are minimised, productivity is enhanced and the full benefits of farm and manufacturing facilities realised.

The dairy industry's goal is that all our people — whether they work in manufacturing facilities, on farms or in the service sector — have a safe and healthy work environment.

The dairy industry has set a target of 100% of on-farm and manufacturing workers to have completed Occupational Health & Safety training by 2020.



SUSTAINABLE DEVELOPMENT GOALS

The dairy industry's Framework will help support the Australian government to tackle the United Nations (UN) Sustainable Development Goal #8 to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. We are also guided by the International Labour Organisation Declaration on Fundamental Principles and Rights at Work and the United Nations Guiding Principles on Business and Human Rights:



8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

HOW WE'RE TRACKING

Target 3: PROVIDE A SAFE WORK ENVIRONMENT FOR ALL DAIRY WORKERS				
Indicator	Baseline	Performance		2020 Target
		2015	Progress	
3.1 OHS Training				
- dairy farming	46%	46%*	➔	100%
- dairy manufacturing	100%	100%	✓	100%
3.2 Lost Time Injury Frequency Rate (LTIFR)				
- dairy farming	5.2	6.4	↘	3.6
- dairy manufacturing	8.7	10.9	↘	6.1
3.3 Fatalities				
- dairy farming	2	3	✗	Zero
- dairy manufacturing	0	0	✓	Zero

Understanding 2015 Performance

- improvement on baseline towards target
- no improvement towards target
- regression baseline to target
- no measurement in 2015 (latest available shown)
- ongoing target achieved in 2015
- ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established

The Framework measures a safe work environment using indicators for OH&S training, time lost due to injury and workplace fatalities.

Safe Work Australia²⁰ collates data for the Lost Time Injury Frequency Rate (LTIFR) for both the dairy cattle farming and dairy product manufacturing sectors annually.

Safe Work Australia defines its strategy scope as: *All accepted workers' compensation claims with one or more weeks of time lost from work. Journey claims and fatality claims are excluded. The frequency rate of work-related injuries and diseases is the number of cases expressed as a rate per million hours worked by employees.*

Baseline data for these indicators is included where it has been established.

²⁰ www.safeworkaustralia.gov.au/sites/swa/statistics/industry/agriculture-forestry-fishing/pages/agriculture-forestry-fishing



3.1 100% on-farm and dairy manufacturing workers completed OH&S training (on-going compliance).

Baseline performance measure: All dairy companies have OH&S programs in place. The power of people on Australian dairy farms (POP) survey (2014) found that 46% of dairy farmers had a documented OH&S plan in place. This figure has now been adopted as our baseline measure

2014 performance measure: All dairy companies continue to maintain OH&S programs. The 2014 POP survey enabled a baseline measure for dairy farms to be developed. In 2014, 46% of dairy farmers had a documented OH&S plan in place (35% have informal plans) and 74% have induction programs for new employees. OH&S information has been incorporated into the Employment Starter Kit initiative (ESKi)²¹.

3.2 30% reduction in Lost Time Injury Frequency Rate (LTIFR)

2015 performance measure: All dairy companies continue to maintain OH&S programs. The POP survey (see appendix for information) was not conducted in 2015, it will be conducted in 2016, which will enable progress to be reported next year. The most recent data available is from 2014.

The nature of the work safety statistics collected by Safe Work Australia means that there is often a lag in data, and subsequent revision in previously reported data. This means that our progress against the target is challenging to report as historical data is adjusted from year to year. With that in mind, this year we are reporting the 2015 performance based on the latest provisional data from 2013/14 against the adjusted baseline data from 2010/11.

Baseline performance measure: 30% reduction by 2020 in LTIFR from a 2010/11 baseline²² of:

- An LTIFR of 5.2 based on all accepted workers' compensation claims with one or more weeks of time lost from work per million hours worked in the **dairy cattle farming** sector.

- An LTIFR of 8.7 based on all accepted workers' compensation claims with one or more weeks of time lost from work per million hours worked in the **dairy product manufacturing** sector.

2014 Performance measure:

- An LTIFR of 9.5 based on all accepted workers' compensation claims with one or more weeks of time lost from work per million hours worked in the **dairy cattle farming** sector.
- An LTIFR of 8.4 based on all accepted workers' compensation claims with one or more weeks of time lost from work per million hours worked in the **dairy product manufacturing** sector.

2015 performance measure:

- The LTIFR in **dairy cattle farming** for 2013/14 is reported provisionally²³ at a rate of 6.4²⁴. This is a 23% increase on the adjusted 2010–11 baseline LTIFR of 5.2. The LTIFR of 6.4 in **dairy cattle farming** is lower than the 10.7 LTIFR recorded for sheep, beef cattle & grain farming and the 7.8 LTIFR for the agriculture sector as a whole over the same period.
- The LTIFR in **dairy product manufacturing** for 2013/14 is reported provisionally at a rate of 10.9. This is an increase of 25% on the adjusted 2010/11 baseline LTIFR of 8.7²⁵. The provisional LTIFR for **dairy product manufacturing** of 10.9 compares with: beverage manufacturing (5.9), sugar and confectionery manufacturing (6.9), bakery product manufacturing (6.2) and grain mill and cereal manufacturing (18.5).

3.3 Zero workplace fatalities

Performance measure: Zero workplace fatalities

2014 performance data: Safe Work Australia recorded one fatality in dairy cattle farming during 2013. The single fatality recorded was the result of a vehicle collision on a public road. Incidents involving vehicles accounted for 71% of fatalities on Australian farms generally between 1 July 2003 and 30 June 2011. The most common vehicles involved were tractors, aircraft, light vehicles and quad bikes

21 www.dairyaustralia.com.au/Levy-investment/Case-studies/People-and-Skills-Case-Studies/ESKi-Employment-Starter-Kit-initiative.aspx

22 Baseline LTIFR figures are taken from Safe Work Australia data and have been revised from previously reported. 2010/11 figures that were available for the 2013 and 2014 Australian Dairy Industry Sustainability Reports. Revisions are attributed to one off changes in Safe Work Australia's data collection and calculation methods, and retrospective revisions to ABS injury data.

23 At the time of reporting Safe Work Australia provides only provisional figures for the latest reporting year (2013–14). These figures are expected to be revised in 12 months' time however they have been chosen as a best indicator of the current year's trend.

24 Safe Work Australia, September 2015. Work health and safety statistics: Frequency rates of serious claims by industry, 2000–01 to 2013–14p.

25 As above.



respectively²⁶. There were zero fatalities in dairy product manufacturing.

2015 performance measure: Safe Work Australia recorded three fatalities in dairy cattle farming during 2014, the latest figures available. The three fatalities were all vehicle related — with two resulting from a quad bike accident and the third from a standard vehicle accident. There were zero fatalities recorded in dairy manufacturing for the same period²⁷.

WHAT WE'RE DOING

Raising awareness of farm safety

Dairy Australia has implemented a new project that will raise awareness of farm safety on dairy farms, leading to a safer working environment for owners and staff.

It aims to change the way farmers think about safety on dairy farms in order to make a sustainable improvement to the safety of everyone who works or visits the farm.

A Lead & Design team from Dairy Australia is working with farmer steering committees in South Australia and northern Victoria to implement this pilot program.

Manufacturers have their own targets around reducing LTIFR and achieving zero fatalities. By law, all dairy businesses must provide evidence of training as part of their OH&S commitments.

WHAT WE'RE PLANNING

A safe environment for all

The power of people on Australian dairy farms (POP) survey will be conducted in 2016, which will enable further progress in this area to be reported next year.

Meanwhile, farmers now have a simple tool to assess how their farm measures up against the Work Health and Safety legislation. The Safety on Farm Snapshot allows farmers and their staff to assess the safety systems on farm in a 'traffic light' format.

It takes about 15 minutes to complete and can be done by the Farm Manager alone or preferably by involving all of the farm team. It was adapted with permission from a similar format produced by Safework SA for small businesses.

Bill Youl, Program Manager, Workforce Planning and Action, Dairy Australia, said the key is the simplicity of design and ease of application, as it gives an overall snapshot of legislation and whether farmers are compliant.

i To download a copy of the Safety on Farm Snapshot, visit: www.thepeopleindairy.org.au/announcements/safetysnapshot

OUR PEOPLE, PROJECTS



Students from the Timboon P-12 School learn about farm safety.

Farm safety starts early

Students from the Timboon P-12 School took part in a farm safety visit at Devondale Murray Goulburn suppliers Paul and Michelle Fowler's Brucknell dairy farm.

The Fowlers welcomed the local year five students to their Brucknell dairy farm as part of a unique agricultural program which links the school with its community and embraces the area's farming identity.

The farm safety visit followed a similar format to that conducted for the first time in 2012 where Paul, Michelle and other guest speakers spoke to groups of students at various points around the farm.

At each station, the children were assisted by speakers from Worksafe, the Vet Group, CERT and Devondale Murray Goulburn to identify and discuss potential hazards associated with that particular farming practice. By the end of the visit, students were well briefed in risks pertaining to the dairy, farm animals, dams and waterways, machinery and traffic, as well as chemical storage and the application of first aid responses.

²⁶ Safe Work Australia, March 2013. Work-related injuries and fatalities on Australian farms..

²⁷ Safe Work Australia, December 2015. Work-related injuries and fatalities on Australian farms.



A large percentage of the children who attended the safety session were from a farming background; with all students not living on farms indicating that they were regular visitors to farms. An emphasis was placed on the fact that farms are a unique combination of workplace, residence and play environments and as such the students needed to be aware of the safety hazards present.

The forum provided students with a basic understanding of health and safety concepts. It is anticipated that exposure to these concepts at a young age will encourage greater awareness and ownership of their own health and welfare and see young people become advocates for safer farms and workplaces in the future.

WHAT OUR STAKEHOLDERS ARE SAYING

Worker health and safety encompasses both physical, including the use of heavy machinery on farm and in manufacturing facilities, and mental health issues, including unsociable hours.

Providing a safe work environment can require a change in attitude and behaviour, which can prove challenging.

The fair treatment of workers must be considered, whether they are backpackers on farms, or employees recruited through employment agencies to work in manufacturing or transport. Dairy workers on visas are needed in the industry — it needs to be assured that they are treated fairly.

Media revelations of illegal labour in agricultural industries in 2015 means the industry needs to consider its responsibilities to those along the supply chain. Farmers that treat their own employees fairly must now help ensure workers with input into any product brought on farm have also been treated fairly.

Consumers expect this and it is an issue that will continue to evolve.

“Government needs to get better health professionals in regional Victoria who understand farmers, rural workers and push change through this target group of the population.”

Farming focused research centre.



Enhancing livelihoods

Priority area 3: Investing in dairy people

Target 4: Attract, develop and retain a skilled and motivated dairy workforce



Attracting and retaining employees is strongly linked to workplace health and safety.

OUR STORY IN BRIEF

Engaged employees will drive industry success

Our people are key drivers of productivity and essential to the dairy industry's success. To maintain or grow dairying therefore requires an understanding of how well dairying attracts, retains and develops its workforce. From single person managers or owners to large corporate farms and manufacturers, the ability to effectively engage people to operate the farm business and dairy manufacturing facilities is critical.

Recent workforce related issues identified by farmers include the increasing complexity of industrial relations and safety regulation, as well as the need to improve access to information and resources to support the effective management of people.

Further, issues for the dairy industry such as generational demographics and regional differences create challenges and opportunities. Attracting and retaining employees is also strongly linked to workplace wellbeing, health and safety.

It is expected that labour issues within the dairy supply chain will become increasingly complex and gain a higher profile for both the industry and the community. We need to improve our understanding of the interconnectedness of these issues as well as the needs and expectations of our people.

It is important to not only attract and develop skilled people in the dairy industry, but to also develop the capacity of the essential support services network to provide quality advice to dairy businesses. We aim to bring all of these groups together by facilitating the collective action of farmers, manufacturers, service providers and relevant training and employment providers to develop local solutions to local workforce planning challenges.

Target 4: Attract, develop and retain a skilled and motivated dairy workforce

Target 4



SUSTAINABLE DEVELOPMENT GOALS

The Australian dairy industry is guided by a number of international frameworks focused on ensuring decent work practices. We look to the International Labour Organisation Declaration on Fundamental Principles and Rights at Work, the United Nations Guiding Principles on Business and Human Rights and UN Sustainable Development Goal #8:



8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

HOW WE ARE TRACKING

Target 4: ATTRACT, DEVELOP AND RETAIN A SKILLED AND MOTIVATED DAIRY WORKFORCE				
Indicator	Baseline	Performance		2020 Target
		2015	Progress	
4.1 Suitable Applicants				
- dairy farms	20%	20%	➔	Under review
- dairy manufacturing	Under review	Under review		Under review
4.2 Participation in development activities				
- extension	20%	39%*	↗	40%
- education	Under review	Under review		Under review
4.3 Retain workforce	75%	75%*	➔	78%
4.4 Business planning	8%	8%*	➔	50%

Understanding 2015 Performance

- ↗ improvement on baseline towards target
- ➔ no improvement towards target
- ↘ regression baseline to target
- * no measurement in 2015 (latest available shown)
- ✓ ongoing target achieved in 2015
- ✗ ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established

The Framework uses applicant suitability, professional development, employee retention and business transition planning to measure investment in dairy people.

A key focus over the last year has been to evolve how we measure success. Our baseline data focused on measuring output metrics such as the number of people attending workshops, applying for jobs or participating in extension activities. We acknowledge that these are not meaningful outcome measures and have been working to get a better understanding of the change we are creating. The intention is to develop measureable indicators that can demonstrate the extent to which the industry is upskilling and using or creating best practice change.

In the meantime, the baseline data we are using is drawn from *The power of people on Australian dairy farms (POP) survey* conducted in September 2014. Our capacity to report 2015 progress against these targets is limited as the POP Survey is biennial, and therefore was not conducted in 2015. Consequently we are not able to report progress against this indicator in 2015. The POP Survey will be repeated in 2016 and we can report progress next year.

4.1 30% increase in the number of suitable applicants for dairy industry jobs

Baseline performance measure: For dairy farms: 56% of dairy farms reported to have found suitable applicants for jobs (NDFS 2013). Manufacturer baseline to be determined.



2014 Performance measure: For dairy farms: 20% of dairy farms reported to have found it easy to recruit suitable applicants (POP 2014). Performance measure for dairy manufacturers not yet established. The POP Survey data was deemed to be more representative and will now be used as the baseline for future measurements.

2015 performance measure: The POP Survey was not conducted in 2015, therefore we are not able to report progress against this indicator in 2015. It will be conducted in 2016, which will enable progress to be reported next year. Discussion on establishing a manufacturer baseline is continuing.

4.2 Increase participation in development activities — 50% increase in education and 100% increase in extension activities

Baseline performance measure: Participation in extension activities was 20% in 2012 (NCDE) and participation in education activities still to be determined.

2014 Performance measure: 39% participation in extension activities was reported in 2014 (POP 2014), with 74% of those respondents reporting a positive impact on efficiency/effectiveness as a result of training. A baseline for participation in education activities is still to be established and we are still working on a baseline measure for manufacturers

2015 performance measure: The POP Survey was not conducted in 2015, therefore we are not able to report progress against this indicator in 2015. It will be conducted in 2016, which will enable progress to be reported next year. A manufacturer measure is still to be established

4.3 Retain an experienced and motivated dairy workforce — 20% increase in the number of experienced employees retained

Baseline performance measure: Was to be developed — now adopted the 2014 performance measure of 75%

2014 Performance measure: Dairy farmers reported that 25% of farms that employed staff had employees leave over the last 12 months (retained 75%) and that 17% of employees that are working on-farm have a career plan (POP 2015).

2015 performance measure: The POP survey was not conducted in 2015, therefore we are not able to report progress against this indicator in 2015. It will be repeated in 2016.

Key priority areas to explore will include what percentage of workers retained were experienced employees and appropriate measures for off-farm dairy workers.

4.4 50% of dairy farmers have a well-developed business transition plan

Baseline performance measure: The POP survey (2014) reported that 38% of dairy farmers reported that they planned to grow their business and 8% had a formal plan in place for the future of their farm. This figure has now been adopted as our baseline measure.

2014 performance measure: 38% of dairy farmers reported that they planned to grow their business and 8% had a formal plan in place for the future of their farm (POP 2014).

2015 performance measure: The POP Survey was not conducted in 2015, therefore we are not able to report progress against this indicator in 2015. It will be repeated in 2016.

WHAT WE'RE DOING

Creating pathways for new and existing employees

In 2015, the dairy industry's drive to attract, retain and develop capable people in all parts of the dairy industry has continued.

The industry's Employment Starter Kit Initiative (ESKi) which began in 2013 has now seen 2100 copies distributed. This kit details all of the mandatory requirements for dairy farm businesses that employ staff.

In August this year, Dairy Australia and Australian Dairy Farmers finalised a Dairy Industry Labour Agreement with the Department of Immigration and Border Protection. This agreement will enable dairy farmers who are experiencing difficulties recruiting suitably experienced and skilled employees to recruit senior farmhands from overseas.

The Stepping Stones guide (see www.thepeopleindairy.org.au/stepping-stones/overview.htm), originally launched in Tasmania in 2013, has been extended nationally. This guide, which forms part of the Stepping Stones program, aims to provide clear career pathways into the Australian dairy industry through to retirement.

The first stage has been the development of regional case studies that can be used as a guide to a variety of career pathways, illustrating how to acquire skills and make the most of opportunities in our industry.



Stepping Up, which is the second stage includes planning to build skills and knowledge with a well-developed wealth creation strategy in mind and options that include share farming, leasing and dairy farm ownership. Employment Made Easy or eMe (www.eme.org.au) is a useful job-matching service for dairy farm employers and job seekers alike. It is currently being rolled out across the eight dairy regions.

The National Centre for Dairy Education has continued to expand the provision of high quality, dairy specific education programs. In 2014/15 NCDE became a multi-sector education system covering schools, VET and higher education. The NCDE brand is the umbrella for Dairy Australia's investment in industry education. Data is now being gathered to show the number of people enrolling in dairy specific programs across Australia. This will assist in tracking the identified targets.

In late 2014 the dairy industry successfully launched a model Code of Practice for dairy share farming. Given the huge variation in farms and in individual circumstances there has never been a standard share dairy farming agreement. The Code sets out guidelines that owners and share farmers can follow in setting up an agreement that will work for both parties.

To date, 100 consultants across Australia have participated in training on the Code with very positive feedback. Dairy farmers who have used the new code in setting up share farming agreements have been equally positive. As the dairy industry continues to build our profile within the community, the standards and guidelines set out in the Code of Practice will help to promote share farming as an effective way to operate a dairy farm business and demonstrate that there is a viable path to successfully building a dairy farming career.

The Dairy Manufacturing Scholarship Program is held each year, supported by Dairy Australia and manufacturers across the dairy supply chain. The main objective of the program is to attract recent graduates and diploma holders into the dairy industry and to train them in relevant aspects of dairy manufacturing. All recent graduates have found employment in the industry within two months of completing the program.

The Gardiner Dairy Foundation supported the Monash Industry Team Initiative (MITI) in 2014/15. The three month program is designed to expose high achieving students to employment opportunities in regional Victoria, while at the same time giving dairy manufacturers access to new skill sets and exposure to potential future employees. MITI operates by placing small multi-disciplinary student teams with dairy manufacturers to solve specific company challenges on a commercial-in-confidence basis. In 2015, 10 teams of four students in the fields of engineering, education, commerce, mathematics and Information Technology have taken up projects with Devondale Murray Goulburn, Fonterra, Bega Cheese, Burra Foods and Warrnambool Cheese and Butter. The Monash Dairy Industry MITI program won the 2015 Business/Higher Education Round Table (B/HERT) Award for Outstanding Excellence in Collaboration.

WHAT WE'RE PLANNING

Dairy takes charge of extension

The goal with extension is to increase the rate of change on-farm for more profitable, sustainable and competitive dairy farm businesses. This requires a better model for the delivery of extension services.

Dairy Australia has been implementing a new model for extension in which it takes on more of the overall responsibility for the coordination of these services. The aim is to achieve better co-ordination of extension in each region and delivery of improved services to farmers.

A national extension platform is being developed, which includes a regional backbone through the Regional Development Programs, Extension Coordinators in all regions, continued investment in group based extension activities, including Focus Farms, discussion groups and the development of key extension programs.

Dairy Australia works with multiple partners and organisations from the private and public sectors and continues to invest with State Governments in a more integrated approach to research, development and extension.

In Western Australia, the establishment of the Dairy Industry Hub by Western Dairy, has been achieved through collaboration with Dairy Australia and the WA Department of Agriculture and Food. This initiative has been welcomed by the dairy industry in Western Australia.

Target 4: Attract, develop and retain a skilled and motivated dairy workforce

Target
4



Dairy has been reviewing the issue of workers along the supply chain. There will be further demand on farmers and businesses to have a clear understanding of all elements of their operations and their supply chains. Dairy recognises this responsibility. Last year, the Australian Government signed off on UN Sustainable Development Goals in principle, including the need for the right of all workers to a safe, fair and respectful work environment. The dairy industry supports the Government approach on these goals.

We will be following the outcomes of the Victorian State Government's Inquiry into the *Labour Hire Industry and Insecure Work* that reports to the Premier and the Minister for Industrial Relations in July 2016. The performance indicators will also be discussed in 2016 to see if they are still the best measures to ensure safe work environments and what needs to be considered if industry wishes to measure the provision of a fair and ethical work environment. As an example, illegal migrant labour is an important issue in all sectors, including the dairy industry. Mental health and safety have also been raised as areas for further discussion.

OUR PEOPLE, PROJECTS



These secondary students spent six days learning about the dairy supply chain as part of WCB's Adrian Meade Dairy Innovation Program.

An early investment in the next generation

An early investment to attract the brightest minds to the dairy industry is undertaken by Warrnambool Cheese and Butter (WCB) each year through the Adrian Meade Dairy Innovation Program.

In 2015, 13 Year 10 and 11 students interested in dairy careers spent six days looking at the whole dairy industry supply chain, touring the WCB factory, as well as visiting farms and service providers, educational institutions, retail markets, AgriBio, Dairy Australia and the Port of Melbourne. The final day focussed on pathways into careers in the industry.

The program was created in memory of former WCB supplier, director and chairman Adrian Meade, a passionate advocate for regional students pursuing tertiary education.

It is intended to open students' eyes to the wide range of careers in the industry, encouraging them to see it as a place where innovative leaders make their careers using the latest technologies.

The students were selected after impressive performances in interviews.

The program is supported by agriculture teacher and WCB supplier, Phil Mahony, who provided invaluable assistance to the program by explaining the importance of each stage of the supply chain to the students.

This is the second year the program has run and it has been well received by students, parents, schools and industry alike.

The students are now in a good position to develop informed career plans and tailor their future studies to pursue their dairy careers.

WHAT OUR STAKEHOLDERS ARE SAYING

Dairy has been called a leader in the attraction and retention of staff and therefore requires stronger indicators around this target. "Participation" in extension activities is a weak indicator.

With an aging workforce in agriculture, specifically targeting a younger demographic would be beneficial. The appeal of on-farm employment and a greater emphasis on succession planning, to enable people to step up and step back, are also issues to be addressed.

"Dairy is a leader in this space and should have stronger indicators around this target. What about a measure of the number of apprenticeships; do we know how many employers have development plans, employment contracts, and/or HR consultants to support them?"

Regional support organisation.



Improving wellbeing

Priority area 4: Ensuring health and safety

Target 5: All dairy products and ingredients sold are safe



The dairy industry works with Australian and international agencies to ensure all dairy products sold are safe.

OUR STORY IN BRIEF

Making food safety a priority

The Australian dairy industry has world class quality assurance systems in place to ensure all dairy products and ingredients sold are safe.

The industry works with Australian and international government regulatory agencies and service suppliers to ensure the safety of all dairy products and ingredients sold.

In 2014, there were nine product recalls as reported by Product Safety Recalls Australia, primarily due to microbial contamination²⁸.

The Australian Milk Residue Analysis (AMRA) Survey is an independent national monitoring program that checks for potential agricultural and veterinary chemical residues and environmental contaminants in Australian bovine milk.

Of the 1000 milk samples collected and the 13,400 analyses conducted in 2014/15, there were no residues detected above the relevant Australian Maximum Residue Limit (MRL) as specified in the Australia New Zealand Food Standards Code.

These results provide objective evidence that the Australian dairy industry's approach to agricultural and veterinary chemical usage is responsible, effective and in accordance with good agricultural practice. It also demonstrates that the food safety programs adopted by the dairy industry are successful in managing potential residue contaminations.

The level of inquiry and expectation from consumers and supply chains around transparency is increasing. To meet these demands we have made the AMRA Survey Annual Report 2014–15 publicly available (see www.dairyaustralia.com.au/amra)

²⁸ Product Recall information: Australian Competition and Consumer Commission (ACCC) Product Safety Recalls Australia website. Available at: www.recalls.gov.au/content/index.php?id/952826



SUSTAINABLE DEVELOPMENT GOALS

Australian dairy industry is committed to safe food and can play its part in delivering the UN Sustainable Development Goals, particularly 2.1, by delivering safe and nutritious foods all year round.



2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

HOW WE'RE TRACKING

Target 5: ALL DAIRY PRODUCTS AND INGREDIENTS SOLD ARE SAFE				
Indicator	Baseline	Performance		2020 Target
		2015	Progress	
5.1 Chemical residues - compliance	Zero non-compliance	Zero non-compliance	✓	Zero non-compliance
5.2 Product recalls	7	9	✗	Zero
5.3 Consumer sentiment				
- dairy products are safe	67%	67%	➔	77%
- dairy makes high-quality products	77%	75%	⬇️	86%

Understanding 2015 Performance

- ➔ improvement on baseline towards target
- * no measurement in 2015 (latest available shown)
- ➔ no improvement towards target
- ✓ ongoing target achieved in 2015
- ⬇️ regression baseline to target
- ✗ ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established

Consumers recognise dairy quality, safety

Monitoring non-compliant chemical residues, product recalls and consumer sentiment is how the Australian dairy industry measures the safety of dairy products and ingredients.

In terms of chemical residues, all samples analysed under the Australian Milk Residue Analysis (AMRA) Survey complied with the Maximum Residue Limits in the FSANZ Food Standards Code during 2014/15.

Consumer sentiment about the safety of dairy products is tracked in the annual Dairy Monitor (DM) Survey.

Consumer sentiment on safe dairy products has marginally decreased from last year, but returned to baseline levels. Sentiment on quality has improved but is still below the baseline. Differences from year-to-year may emerge based on industry and promotional activities and information being portrayed through various channels.

However, it is important that all sectors appreciate the need to maintain dairy's reputation as a producer of safe, quality products.

5.1 Zero non-compliant chemical residuals found during the AMRA Survey

Baseline performance measure: Zero non-compliant chemical residues found during the 2011/12 Australian Milk Residue Analysis (AMRA) Survey.

2014 performance measures: Zero non-compliant chemical residues found during the 2012/13 AMRA Survey.

2015 performance measure: Zero non-compliant chemical residues found during the 2014/15 AMRA Survey.

Reference: See 2014/15 Survey Report and Fact Sheets here: www.dairyaustralia.com.au/amra



5.2 Zero product recalls due to food contamination (as reported by Product Safety Recalls Australia)

Baseline performance measure: There were seven product recalls in 2012 (as reported by Product Safety Recalls Australia).

2014 performance measures: There were eight product recalls due to food contamination in 2013 (was reported as seven in the 2014 Progress Report — but website shows eight total for 2013).

2015 performance measures: There were nine product recalls due to food contamination/allergens in 2014, which is an increase from the 2012 baseline data of seven recalls. [More information here.](#)

5.3 15% increase in the number of consumers who agree Australia produces high quality and safe dairy products by 2020

Baseline performance measure: 67% of consumers agree (21% neutral, 2% disagree and 9% don't know) Australia produces safe dairy products and 77% of consumers agree (16% neutral, 2% disagree and 6% don't know) Australia produces high-quality dairy products (DM 2013).

2014 performance measures: 69% of consumer agree (20% neutral, 2% disagree, 9% don't know) Australia produces safe dairy products and 74% of consumers agree (18% neutral, 2% disagree, 6% don't know) Australia produces high-quality dairy products (DM 2014).

2015 performance measures: 67% of consumers (21% neutral, 3% disagree, 9% don't know) agree Australia produces safe dairy products and 75% of consumers (18% neutral, 2% disagree, 5% don't know) agree Australia produces high-quality dairy products (DM 2015).

WHAT WE'RE DOING

Enhancing our international reputation

Building on the success of long running projects for both the Japan and China markets, the Australian dairy industry has introduced a South East Asia Dairy Scholarship program, in conjunction with the Victorian Government, as part of its ongoing market development plan to enhance its international reputation.

Australia hosted 15 delegates from Thailand, Malaysia, Singapore, Indonesia, the Philippines and South Korea, who toured research, farm, processing, regulatory and training facilities, acquiring a solid understanding of the entire dairy supply chain.

This experience enables participants to speak from a position of first-hand knowledge about why Australia is a very safe producer of high quality dairy products. The success of the initial program in 2015 will result in the program being an annual fixture in the Australian dairy industry export market development calendar.

The dairy industry is also encouraging prudent use of antibiotics that are needed to effectively treat animal health issues. There is increasing scrutiny on the use of antibiotics in animals and it is important that we understand what is used in Australia and how it is used. Australian dairy representatives are also working with the Australian government on Antimicrobial resistance (AMR) monitoring.

Following submissions by the dairy industry, meat food safety jurisdictions have accepted that on-farm dairy QA programs also address the meat food safety issues. This should streamline audit requirements for dairy farmers as they produce dual products — both milk and meat — and previously have been subject to the requirements of separate milk and meat auditable QA food safety programs.

WHAT WE'RE PLANNING

Embedding a food safety culture into dairy businesses

Dairy Australia will facilitate a project to help dairy businesses, especially small to medium enterprises (SMEs), be trade ready. This project is funded under the Australian Government's Package Assisting Small Exporters (PASE) and aims to help embed a food safety culture within a dairy business' continuity plans, as well as provide mechanisms to demonstrate how the culture is being effectively implemented. A Steering Committee involving state and federal jurisdictions, together with industry representatives will oversee the project.

The project will build on work done by Safe Food Queensland, in partnership with Food Standards Australia New Zealand (FSANZ) and Dairy Australia. A series of workshops for dairy SMEs were held to help the businesses be better prepared to manage business continuity, traceability, food recalls and reputation management (both the business and the industry) in the face of a quality and/or safety incident.



OUR PEOPLE, PROJECTS



WA farmers Vicki and Luke Fitzpatrick recorded some of the best milk quality in Australia.

Industry recognition for herd health

Safe dairy products start with high quality milk. The Australian Milk Quality Awards recognise farms that have achieved the best milk quality in Australia based on annual average bulk milk cell count (BMCC) across Australia's milk processing companies.

Farmers achieving a low cell count are also financially rewarded with a premium for their milk and with significant cost savings on mastitis treatments and labour.

The popular annual awards are based on BMCC data supplied by dairy companies. Monthly averages are then used to calculate the annual average BMCC for each farm — the winners are the 5% of farms with the lowest BMCC results. Each company then sends out the winners' plaques directly to their suppliers.

The top 100 farmers with the lowest BMCC levels are also recognised. This year, Vicki and Luke Fitzpatrick at Waroona, in Western Australia, were recognised in the top 100. The couple has adopted several changes to improve herd health and profitability. They have changed calving patterns and also reduced milking times by making changes to their dairy, including installing new milking cups and liners which have proved a great success.

Dairy Australia Program Development Manager, Erika Oakes, said the on-farm management of milk quality is key to ensuring the competitiveness of Australian dairy in the marketplace.

“For example, analysis shows that a farmer milking 300 cows who lowers their BMCC from 300,000 to 200,000 stands to save \$35,700 per year.”

The Australia Milk Quality Awards help to promote the need for continuous improvement in achieving high quality milk at the farm level.

WHAT OUR STAKEHOLDERS ARE SAYING

The industry needs to focus on transparency and traceability for those things that are important to consumers and customers, otherwise you add costs — not value — to the supply chain. Work could be performed in this area to understand exactly what the market wants. Expectations of consumers and customers are dynamic, not static.

There is an increasing interest in provenance, nutritional facts and food safety, so there is an opportunity to tell more of your story, including more coverage of the value of existing QA programs.

A lot of bodies are auditing, which increases cost and complexity, and further streamlining of audits would remove costs and aid profitability.

“Through a regulatory lens (as opposed to a ‘consumer lens’), dairy is a shining light; the factories are the cleanest.”
Supermarket.



Improving wellbeing

Priority area 5: Maximising nutrition

Target 6: Dairy contributes to improved health outcomes for Australian communities



Dairy is part of a healthy lifestyle but many Australian fail to meet recommendations of the Australian Dietary Guidelines.

OUR STORY

Children not eating enough dairy

The food environment has become increasingly competitive over the past 12 months due to new food trends and fads, including proliferation and promotion of dairy free diets and milk alternatives.

These alternatives not only create confusion in consumers' minds, but make it more difficult to share positive messages regarding the health benefits of dairy.

Dairy foods — milk, cheese and yoghurt — are recommended by the National Health and Medical Research Council's (NHMRC) Australian Dietary Guidelines as being part of a healthy diet.

Other studies support this recommendation by indicating adequate dairy food consumption is associated with a reduced risk of obesity and related chronic diseases.

Dairy foods contain a package of essential nutrients including calcium for strong bones, protein for growth and development, riboflavin for eyesight and iodine for brain function.

However, many Australians fail to meet the dairy intake recommendations of the Australian Dietary Guidelines. According to the 2011–13 Australian Health Survey (AHS), which incorporated the National Nutrition and Physical Activity Survey (NNPAS), nearly three quarters of females (73%) and half of all males (51%) aged two years and over did not meet their calcium requirements²⁹.

To address this, programs such as Legendairy promote the health benefits of dairy.

²⁹ 2011–13 Australian Health Survey (AHS), 2011–13. Available at: www.abs.gov.au/australianhealthsurvey and www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.008~2011-12~Main%20Features~About%20the%20National%20Nutrition%20and%20Physical%20Activity%20Survey~110

Target 6: Dairy contributes to improved health outcomes for Australian communities

Target
6



Dairy Australia has invested in a consumer campaign targeting Mums of kids aged 5 to 12 years as the key grocery buyer. This campaign, known as 'Balanced Mums', aimed to drive positive changes in consumer attitudes to dairy foods.

The annual Dairy Monitor Survey (DM 2015) showed that almost all key dairy attitudes of mums of kids 5–12 had positive shifts. 'Balanced Mums' perception that dairy is essential for good health and wellbeing and trust in the dairy industry improved. Concerns that consuming dairy could increase weight reduced.

However, DM 2015 showed fewer mums were targeting or claiming to consume three serves of dairy each day for themselves or their kids, and this highlights the ongoing work that is required to achieve consumption of three serves of dairy each day.

SUSTAINABLE DEVELOPMENT GOALS

The dairy industry's capacity to contribute to nutrition and a healthy global population is also linked to the Sustainable Development Goals, particularly #2 and #3:



2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.



3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

HOW WE'RE TRACKING

Target 6: DAIRY CONTRIBUTES TO IMPROVED HEALTH OUTCOMES FOR ALL AUSTRALIAN COMMUNITIES

Indicator	Baseline	Performance		2020 Target
		2015	Progress	
6.1a Healthy Diet:				
- dairy is essential for good health	72%	69%	↘	85%
- dairy food increases my weight	32%	31%	↗	20%
6.1b Healthy Diet - NHMRC	Recognised	Recognised	✓	Ongoing recognition
6.2 Daily intake	Under review	Under review		Under review

Understanding 2015 Performance

- improvement on baseline towards target
- no improvement towards target
- regression baseline to target
- no measurement in 2015 (latest available shown)
- ongoing target achieved in 2015
- ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established



Testing consumer sentiment

The Framework measures both the recognition of milk, cheese and yoghurt as part of a healthy diet and actual consumption against recommended intake.

The Dairy Monitor Survey is used each year to measure shifts in attitudes and behaviours. Consumer concerns around issues relating to dairy nutrition, such as saturated fat and alternatives to dairy, all impact on consumer sentiment.

We recognise that this indicator needs to evolve as consumer sentiment is not a meaningful measure of good community health outcomes. This will be reviewed in 2016.

6.1 Improve recognition that dairy (milk, cheese and yoghurt) is a key element of a healthy diet.

a. Improve consumers' perception of the health and nutrition benefits of dairy foods.

Baseline performance measure: Increase the % of individuals who agree "Dairy foods are essential for good health and wellbeing" from 72% (DM 2013 — where 22% were neutral and 6% disagreed) to 85% by 2020.

2014 performance measure: 68% of individuals agree "Dairy foods are essential for good health and wellbeing" (27% neutral and 6% disagree) (DM 2014).

2015 performance measure: 69% of individuals agree "Dairy foods are essential for good health and wellbeing" (25% neutral and 7% disagree) (DM 2015).

Baseline performance measure: Decrease the % of individuals who agree "I'm concerned consuming dairy foods will increase my weight" from 32% (DM 2013 — where 32% were neutral and 36% disagreed) to 20% by 2020.

2014 performance measure: 30% of individuals agree "I'm concerned consuming dairy foods will increase my weight" (37% neutral and 33% disagree) (DM 2014).

2015 performance measure: 31% of individuals agree "I'm concerned consuming dairy foods will increase my weight" (37% neutral and 32% disagree) (DM 2015).

b. NHMRC Australian Dietary Guidelines continue to recommend milk, cheese and yoghurt as part of a healthy diet.

Baseline performance measure: Milk, cheese and yoghurt maintain their recognition as five food group foods in the Australian Dietary Guidelines.

2014 and 2015 performance measure: Milk, cheese and yoghurt continue to maintain their recognition as five food group foods in the Australian Dietary Guidelines.

6.2 X% increase in the proportion of Australians meeting their recommended daily intake of the milk, yoghurt, cheese and/or alternatives food group as outlined in the 2013 Australian Dietary Guidelines. (Target to be set in 2016, once analysis of the 2011–12 national nutrition survey in relation to the 2013 Australian Dietary Guidelines is released by the ABS).

The 2011–12 national nutrition survey (part of the AHS) reported that 85% of the population aged 2 years and over consumed some type of milk products and dishes on the day of the survey. Milk was consumed by 68% of the population, cheese by 32% and yoghurt by 16%. www.abs.gov.au/australianhealthsurvey

The ABS data for proportion of Australians meeting the Australian Dietary Guidelines will be released in 2016.

WHAT WE'RE DOING

Promoting the health benefits of dairy

In 2015, Dairy Australia was in direct contact with over 38,000 health professionals providing the evidence and explaining the benefits of dairy foods in a healthy balanced diet.

We are taking the lead in a world-first international intervention trial assessing the effects of a food-based dairy intervention on the risks of falls and fracture in residential aged care facilities, which is well underway.

On behalf of the industry, Dairy Australia has a seat at the table for the "Healthy Food Partnership" a Federal Government initiative to co-operatively tackle obesity and encourage healthy eating. The partnership includes preventative health groups, food industry bodies and government.

A "Start and End your Day with Dairy" [campaign](#) was promoted under the industry's Legendary campaign, investing in a consumer campaign targeting mums as the key grocery buyer.

Olympic gold medallist Michael Klim came on board as a Legendairy ambassador, reinforcing the benefits of starting and ending the day with dairy foods, and the important role milk, cheese and yoghurt plays in recovery after exercise.



WHAT WE'RE PLANNING

Increased marketing to reach more mums

The campaign strategy and implementation of the Legendairy program has been refined.

Heading into its third year, the Legendairy marketing campaign, led by Dairy Australia, will be refocused to achieve greater cut-through and impact.

Lessons from past activities and insights gained from recent qualitative and quantitative consumer research will underpin the new approach. This research identified that although dairy foods are not always top of mind and dairy usage is often incidental, they are highly valued in the diet — being delicious, healthy, natural and an essential part of a balanced diet.

The original campaign budget has been boosted from \$1.45m to \$2.5m, which will expand the reach to 2.6 times more mums nationally and ensure there is TV presence.

The outcomes of the program will continue to be assessed throughout the next two years.

Lion Dairy & Drinks Managing Director Peter West said: "Australians want to eat better quality and more nutrient-dense products, and our dairy and juice portfolio is already well placed to help them do so.

"We are taking a leadership position on nutrition education and labelling to help consumers understand what's in their food, as well as introducing new packaging options to better help manage their portion size," he said.

Mr West said the Goodness Project is a perfect example of how sustainable commercial success is dependent on meeting the future needs of the community.

"Australians are so much more nutrition savvy than as recently as 10 years ago. Technology will make it easier for them to seek out information and plan their diets. The food companies that thrive over the coming decades will be focused on helping Australians live better, healthier lives."

Lion Dairy & Drinks worked with experts at CSIRO and Deakin University to agree on robust nutrition criteria for assessing its portfolio.

Reformulation initiatives achieved in the first year are expected to remove around 170 tonnes of added sugar and 175 tonnes of fat from the Australian food supply in the coming year.

Lion Dairy & Drinks was one of the first food and drinks companies to commit to the Australian government's Health Star Rating (HSR), along with additional energy information (energy per 100g/mL and per serve); 20% of its products now display the HSR.

By 2019, 80% of Lion Dairy & Drinks' portfolio will meet its 'best' or 'good' for you criteria, reducing the proportion of its 'treat' products.

Achieving Lion Dairy & Drinks Goodness Project targets by 2019 are expected to remove around four tonnes of sodium, 1400 tonnes of sugar and 500 tonnes of fat from the national food supply annually³⁰.

In addition, Lion will also remove all artificial colours, flavours and added fructose in its children's products.

OUR PEOPLE, PROJECTS



A year of Good progress — Lion releases Goodness Project annual update

Lion Dairy & Drinks released its first annual progress update for its [Goodness Project](#), which makes a commitment to help consumers improve their health and nutrition.

The Goodness Project celebrates the existing goodness of its products and illustrates Lion Dairy & Drinks' commitment to a range of additional targets to further improve the nutritional value of its products, address portion size and improve the nutritional literacy of consumers.

Help for Foodbank helps children

Foodbank is Australia's largest food relief organisation, sourcing food for 110,000 meals a day from the food industry and distributing them to over 2800 charities and 1000 schools Australia-wide. Foodbank supplies food to local agencies and charities. Over a third of all food goes to rural and regional areas.

³⁰ Based on sales volume Oct 2015

Target 6: Dairy contributes to improved health outcomes for Australian communities

Target
6



Foodbank has run its Fresh Milk Program for many years and is currently receiving support from Fonterra, Devondale Murray Goulburn, Parmalat and Lion. Under the program, 1.2 million litres of fresh milk was delivered in 2014–15, with more than 4.7 million litres delivered over the last 5 years to people in hardship.

Those assisted include the homeless and unemployed as well as low income families, the elderly and people with a disability. More than one-third of those receiving food via Foodbank are children.

Foodbank's target for 2015/16 has increased, as demand for nutritious food increases, and the dairy industry will continue to provide support.

WHAT OUR STAKEHOLDERS ARE SAYING

There is greater consumer awareness about the health impacts of food, and a greater demand for high quality food.

There is consumer recognition of the health benefits of dairy foods and the industry could focus its effort on promoting the message that increased consumption means improved health.

The target focusses on improved health outcomes for Australian communities, and effort should also be made to ensure improve health outcomes for Australian dairy farmers.

"We don't make enough of the health, nutritional benefits" (of dairy foods)

Supermarkets



Improving wellbeing

Priority area 6: Caring for our animals

Target 7: Provide best care for all animals



Our vision for animal welfare is that 'every dairy animal is well cared for'.

OUR STORY

Healthy cows integral to successful farms

Cows are the livelihood of Australia's dairy farmers. Their health and wellbeing are essential to the success of every dairy farming business. Farmers have a proven commitment to their herd and the animal husbandry practices demonstrate this.

As an industry, the vision for animal welfare is that "every dairy animal is well cared for". The National Dairy Industry Animal Welfare Strategy³¹ underpins this vision and encourages responsible animal husbandry for good animal welfare outcomes.

The industry strategy and recommended practices are consistent with the new Australian Animal Welfare Standards and Guidelines for Cattle (see www.animalwelfarestandards.net.au/cattle).

The Standards have now been agreed by State and Territory governments, with the exception of NSW, and become legal requirements that will progressively be implemented by each State and Territory, replacing the existing Codes of Practice. They must be met by all dairy farmers, covering the full range of on-farm management practices for cows, and their welfare considerations. The dairy industry has always had a strong commitment to animal welfare, and most dairy farmers are already exceeding the requirements of the Standards.

All Australian dairy farmers participate in farm quality assurance programs — the food safety elements of these programs are audited to ensure compliance with mandatory food safety legislation. Animal welfare outcomes are included in these programs.

To deliver safe, high quality dairy products, dairy farmers must practice sound animal husbandry and keep their animals in peak condition.

³¹ Dairy Australia. Available at: www.dairyaustralia.com.au/Home/Standard-Items/~/_media/Documents/Animal%20management/Animal%20welfare/Welfare%20overview/DA_ADIC-welfarestrategy.pdf



HOW WE'RE TRACKING

Target 7: PROVIDE BEST CARE FOR ALL ANIMALS				
Indicator	Baseline	Performance		2020 Target
		2015	Progress	
7.1 Compliance with standards				
Aware of new standards	56%	56%*	→	100%
7.2 Recommended practices:				
- reduce use of routine calving induction	80%	88%	↗	100%
- don't dock tails	80%	85%*	↗	
- disbud prior to 2 months	57%	63%*	↗	
- lameness strategy	87%	95%*	↗	
- cool infrastructure	94%	98%*	↗	
- bobby calves fed within 6 hours prior to transport	97%	97%*	→	
7.3 Public recognition of caring for animals				
- dairy farmers do a good job caring for animals	60%	59%	↘	75%

Understanding 2015 Performance

- ↗ improvement on baseline towards target
- no improvement towards target
- ↘ regression baseline to target
- * no measurement in 2015 (latest available shown)
- ✓ ongoing target achieved in 2015
- ✗ ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established

Our vision: every animal is well-cared for

The ways in which the Framework measures the extent to which Australian dairy farmers are adhering to good animal husbandry practices are outlined below. Baseline data is included where it has been established. This includes a metric for consumer sentiment.

7.1 100% of industry complying with legislated animal welfare standards

Previous baseline performance measure: 92% of dairy farmers were aware of the Codes of Practice for the Welfare of Cattle (Animal Husbandry Survey, 2012).

2014 performance measure: New Australian Animal Welfare Standards and Guidelines for Cattle have been developed and in 2014, had not been endorsed and implemented by State and Territory governments. In the most recent survey (Animal Husbandry Survey, 2014) 56% of dairy farmers were aware of the new recommended Standards. The baseline measure reported in the 2013 Sustainability Report was the percentage of farmers who were aware of the existing Codes of Practice — and shown as 92% in 2012.

The survey now asks a different question, considering that the new Standards will replace the existing Codes of Practice. The 56% awareness of the new Standards will be a better baseline for future reports and also shows that there is further work needed to raise awareness. The aim is to increase this figure to 100% and ensure all dairy farmers comply with the Standards by 2020.

2015 performance measure: The biennial Animal Husbandry Survey was not undertaken in 2015 and further data will be available in 2016. We are working on evolving this indicator as we acknowledge its limitations as a measure of progress. We are aware of one conviction for breach of regulations for animal cruelty on a dairy farm in 2015.

7.2 All of industry adopting relevant industry recommended practices for animal care

Baseline performance measure: More than 80% of Australian dairy farmers do not dock the tails of their cows; 80% of dairy farmers do not use routine calving induction as a farm management tool (2.2% of cows were induced); 57% of farmers disbud calves prior to two



months; 87% of dairy farms have an effective lameness strategy in place; 94% of dairy farms have infrastructure in place to keep cows cool during hot weather; 97% of farmers who sell or transport calves feed them between one and six hours prior to transport with the average time being 2.5 hours (Animal Husbandry Survey 2012).

2014 performance measure: More than 85% of Australian dairy farmers do not dock the tails of their cows; more than 80% of dairy farmers do not use routine calving induction as a farm management tool and although induction is used on a similar number of farms as 2012, the number of cows induced has almost halved (about 1.3% of cows nationally); 63% of farmers disbud calves prior to two months; 95% of dairy farms have an effective lameness strategy in place; 98% of dairy farms have infrastructure in place to keep cows cool during hot weather; 97% of farmers who sell or transport calves feed them between 1 and 6 hours prior to transport with the average time being 2.6 hours. 2% of farmers didn't know and 1% fed calves at more than 6 hours (Animal Husbandry Survey, 2014³²).

2015 performance measure: The biennial Animal Husbandry Survey was not undertaken in 2015. As part of the introduction of the revised industry policy to phase-out routine calving induction, a more comprehensive survey of calving induction was conducted in 2015 with cooperation from veterinarians in regions where seasonal calving is used. Calving induction was used on 12% of farms in 2015 from these regions compared with the estimate of 23% from the Animal Husbandry Survey, 2014³³.

7.3 25% increase in the number of consumers who believe dairy farmers do a good job caring for animals

Baseline performance measure: 60% of consumers believe dairy farmers do a good job caring for animals — 18% neutral, 5% disagree and 16% don't know (DM 2013)

2014 performance measure: 62% of consumers believe dairy farmers do a good job caring for animals — 18% neutral 4% disagree and 16% don't know (DM 2014).

2015 performance measure: 59% of consumers believe dairy farmers do a good job caring for animals — 20% neutral 4% disagree and 17% don't know (DM 2015).

WHAT WE'RE DOING

Training and tools to improve animal health and welfare

Dairy Australia's Countdown Mastitis Toolkit App is not only improving cow health and milk quality but also helping farmers save thousands of dollars every year.

The app has had more than 3000 downloads since it was first released in September 2013. It was designed in consultation with dairy farmers, advisors and vets and is based on the Countdown mastitis control program and associated resources.

A new set of easy-to-use visual guides has been created by Dairy Australia's Countdown team to help farmers minimise mastitis in the dairy. The Countdown Shed Guides feature key aspects of the Countdown Farm Guidelines and clearly illustrate the steps required to prevent, monitor and treat mastitis through a pictorial format. The new approach to mastitis control should also help reduce the use of antibiotics for mastitis treatment.

InCalf advisors trained by Dairy Australia through the 10-month post graduate Repro Right course have a central role in assisting farmers improve herd reproductive performance through the application of a consistent, integrated and scientific approach. They will also assist the dairy industry to achieve the goal to phase out routine calving induction. Graduates from the first two courses work in businesses servicing 1800 farms nationally. This program has a target for the Repro Right advisory network to reach 30% of the national herd by 2017.

Thirty new trainers attained their Certificate IV Training and Education (TAE) in 2014/15. This additional capability is now enabling delivery of industry accredited training courses such as 'Cups On Cups Off' and 'Euthanasia of Livestock' in all dairy regions of Australia. Extension and support materials for lameness courses 'Healthy Hooves' have been revised for new workshops to be conducted by Regional Development Programs in 2016.

The Australian Animal Welfare Standards for Cattle (recently agreed by State and Territory governments) will be essential legal requirements that must be met by all dairy farmers. Australian government regulations help ensure farmers deliver an acceptable standard of care for their animals.

³² Dairy Australia Animal Husbandry Survey, 2014. Available at: www.dairyaustralia.com.au/Home/Standard-Items/~/_media/Documents/Animal%20management/Animal%20welfare/Welfare%20overview/18082015_Animal%20husbandry%20survey%20brochure_8pgs_LR%20WEB.pdf

³³ As above.



The standards will take time to implement in State legislation, but they are based on the former Codes of Practice for Cattle and are consistent with the National Dairy Industry Animal Welfare Strategy.

Codes of practice for the welfare of animals (including for cattle and land transport) have been reviewed with input from industry and the wider community to produce Australian Animal Welfare Standards and Guidelines.

Standards are legislated minimum requirements and are enforceable while Guidelines are advisory and non-legislative.

WHAT WE'RE PLANNING

Improving animal welfare across the board

The industry's consultations with stakeholders have confirmed that the priorities set for animal welfare strategies implemented by industry are consistent with community expectations. Following a review of progress in reducing routine calving induction, the dairy industry has endorsed a revised policy to phase it out through improved herd management practices, tools and technology. With cooperation from the Australian Veterinary Association's Cattle Veterinarians Special Interest Group, an annual limit on the number of cows to be induced in an individual herd will be imposed unless a special exemption is granted for exceptional circumstances beyond the control of the herd manager, such as disease, adverse weather events. Farms granted an exemption will be required to implement a structured fertility management program. Unplanned late inductions which provide no benefit to future seasonal fertility are to be discontinued. The limit set for routine calving induction without an exemption in 2016 is 15% of cows in a herd.

Dairy Australia will continue to support farmers to implement improved reproductive management through the InCalf, Repro Right and InCharge programs. The industry is also continuing to invest in ongoing research in genetic improvement and fertility management to achieve long term improvements in herd fertility.

Work is also continuing to ensure the welfare of calves — whether reared for herd replacements, sold for veal or raised for beef production. Work continues in promoting recommended calf management practices and the popular "Rearing Healthy Calves" manual, first printed in 2011, is under review with a second edition planned for publication in 2016.

The new "Euthanasia in Livestock" course has been welcomed by farmers, state government veterinary services, milk processors and animal welfare groups. In 2015, there have been 234 people trained through the National Centre for Dairy Education (NCDE) on Euthanase Livestock. This comprised a mixture of farmers, vets and other service providers. A recent follow up survey found the training has greatly improved farmers' sense of competence in performing euthanasia of livestock and all indicated that they will be recommending the training to others. There is continued support for the Euthanase Livestock program in 2016.

Healthy Hooves is a new program dedicated to the prevention and treatment of lameness. It is in the final months of development, with roll out of resources and workshops scheduled for July 2016. Resources include farmer workshops on prevention and treatment, prevention manual, lameness scoring, data capture, instructional videos, and a calculator for determining the cost benefits of reducing lameness.

The dairy industry is also working in partnership with meat processors to help ensure calves are transported in accordance with all relevant standards and guidelines to achieve good welfare outcomes.

OUR PEOPLE, PROJECTS



Trevor Beasley's meticulous record keeping is a key factor behind his herd's fertility.

Simple measures achieve good reproductive performance

Due to a decline in dairy cow fertility in Australia, there has been increasing difficulty for seasonal calving dairy herd owners to maintain a seasonal calving pattern. Calving induction has sometimes been used in order to maintain this pattern, and avoid culling cows that are not in calf.



Port Fairy farmers Trevor and Carolyn Beasley run a 260 cow operation and have never undertaken early calving induction. By only keeping fertile cows in their herd they have reduced the need for induction and they are able to maintain the performance of their herd through five simple measures:

- Keeping meticulous records
- Knowledge of each cow's history
- Maintaining efficient heat detection
- Keeping the herd well fed during all stages of lactation
- Treatment of pre-joining and non-cycling cows

In addition, Trevor and Carolyn suspect that keeping less fertile cows results in less fertile replacements. Because they don't rely on staff to manage the herd, they need to know the history of all cows — this is where their meticulous record keeping comes in handy.

Caring for all calves — Continuous consistent care

Camperdown dairy farmer Chris Place milks 400 cows with his wife and brother and says correctly caring for his calves is not a difficult task. He believes a warm, dry shed is central to rearing healthy calves and ensuring they are fit for transport.

"We treat our bobby calves the same as our heifer calves, no different — it is not hard to do it and that way we don't have to worry about looking after sick calves".

Around 400 cows are raised each year on the Jelbart dairy farm near Leongatha in Gippsland. The farm has developed its own manual for calf rearing called "Continuous consistent care". Protocols cover all aspects of calf care including feeding, weaning, preparing for transport and caring for sick calves.

Nutrition is everything, according to Max Jelbart, and making sure the calves are well fed is a focus in the calf shed. "From birth to weaning is the most efficient time for an animal to gain weight and sets them up for life."

Calves are removed from their mothers usually within 12 hours of birth, to minimise Johnes risk and ensure calves that do not drink from their mothers are fed at least two litres of colostrum at the first feed — with more at subsequent feeds.

"It's important to feed calves good quality colostrum, so we use a Brix meter to test it," says Max.

Calves are then fed milk twice a day until around day 14 and once a day after that, with weaning occurring at 10–12 weeks in a process taking about 10 days. All calves have access to hay grain and water at all times. Calves are closely observed during feeding to monitor their health and wellbeing.

"If a calf is aggressively feeding, it will do well. If a calf is not drinking, or just fiddling with its milk, it's a sign of trouble."

At the Jelbart farm, calves have dry bedding in a well-ventilated, draught free area. A new vaccine is also available for E.coli and rotavirus which was used for the first time last autumn at the Jelbart farm.

"We think it's made a difference," says Max.

Detailed records of all health treatments are kept. Different coloured necklaces identify which calves need special attention or are on treatment of any sort.

"Observation and individual treatment is the key to success" states the Jelbart farm manual.

What else? "Plenty of TLC," says Max.

WHAT OUR STAKEHOLDERS ARE SAYING

The dairy industry could communicate more effectively around perceptions of animal welfare, and doing this as well as other animal industries. There is a need for consumer transparency about animal welfare as there is increasing community focus on animal welfare and it is capable of influencing buying choices.

There has not been a lot of communication from dairy around husbandry practice. It does not feel like things (practices) have changed much in recent years. The progress on animal welfare seems static. The effort seems to have been put into other sustainability areas.

There is a perception that intensive dairy farming is coming and it's bad for the industry. The issue is a concern for some dairy consumers and the industry needs to explain the efficiency benefits of larger dairies, that the use of intensive practices is being driven by climate variability and the availability of land and resources.

"It's important for the dairy industry to be involved in these conversations (about intensification) and have a position, in terms of larger enterprises; much of the focus is on amenity and environment, what about facility design, animal welfare concerns as part of the review process?"

Animal welfare group



Reducing environmental impact

Priority area 7: Minimising our environmental footprint

Target 8: Improve nutrient, land and water management



75% of farmers are now recycling water from the dairy shed.

OUR STORY

More farmers recycling water, protecting waterways

Australian dairy farmers are committed to managing their land and the water they use responsibly. The Australian dairy industry undertook the first Sustainability Framework NRM Survey in 2015 to gather data on the work farmers are doing to maximise environmental benefits. The 2015 Survey built on the Dairying for Tomorrow (DfT) NRM Surveys undertaken in 2000, 2006 and 2012. (See www.dairyingfortomorrow.com.au).

The findings of the 2015 NRM Survey reflected across the board progress in practices being undertaken on dairy farms to improve land, soil and water management.

There has been an improvement in the proportion of dairy farms with most of their waterways fenced (from 73% in 2012 to 76% in 2015). Additionally, 24% of respondents with waterways on their property have plans to undertake more fencing in future. More than half of this group will still undertake the fencing planned even if funding support for fencing is no longer available, but in many cases, the planned work would take longer than currently anticipated.

Survey data suggests that on the 59% of dairy farms using irrigation water, the area irrigated and the means by which it is watered have remained similar over the past nine years. Currently water use is known and recorded for each irrigation on 58% of irrigated farms.



Adoption of automation has continued to rise, enabling farmers to use less water but with greater precision, with more than half of irrigation farms now using timers or other systems, particularly where they are irrigating with sprinklers or pivots. Other changes (including upgrading delivery structures, increasing farm storage) have been made on 54% of irrigated farms. Decisions on when to irrigate continue to be driven by past experience (mentioned by 67% of irrigators) rather than using specific devices such as tensiometers (10%) or scheduling tools (2%).

Nationally, 75% of dairy farms recycle water from the dairy shed and a further 5% intend doing so in the near future. The farms not recycling this water are typically those running smaller herds and those in Queensland and WA. While 85% of water is reused on farms where it is recycled, this equates to a much lower 60% when all farms are taken into consideration (including those that reuse none). Many farms are therefore recycling a considerable amount of the water used in the dairy, but there is clearly scope to encourage further adoption of this practice, particularly among those with smaller herds.

The 2015 NRM Survey found that less than half of all dairy farms (45%) manage areas for conservation or biodiversity. On average these areas represent 7% of the farm (or 4% of all dairy farm land). This does not include farmers who fence off waterways. Data extrapolation suggests that about 59,000 hectares are being managed for conservation. This is probably to be expected however, with economic pressures meaning that as much land as possible needs to be productive. Regardless, this result indicates an area where farmers may need further support.

Dairy farmers are now typically using four and five different types of fertilisers on their properties compared to three and four types in 2012. This may be due in part to an increase in the proportion of farms conducting soil tests (from 82% in 2012 to 87% in 2015) — with 42% doing so annually — and the fact that 58% now have a nutrient budget or Fert\$mart [plan](#) for the farm. Fert\$mart is the dairy industry's national nutrient management framework. It may also be due to the increasing number of dairy farmers now sourcing advice from professionals (from 82% in 2012 to 88% in 2015).

Data included in the 2015 NRM Survey report is based on responses from 601 randomly selected dairy farmers who participated in a telephone survey between August and September 2015.

The survey response rate was a high 69%, resulting in a good level of confidence in results. The margin for error on the total sample is $\pm 3.5\%$ but rises to $\pm 12.7\%$ where there are smaller subsamples.



SUSTAINABLE DEVELOPMENT GOALS

Dairy farmers are proactive in managing environmental impacts such as natural resource depletion and adverse impacts of environmental degradation. Through the Global Dairy Agenda for Action, the industry is increasingly understanding and embracing the role dairy farmers have to play in achieving the recently released UN Sustainable Development Goals:



2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.



8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production, with developed countries taking the lead.

HOW WE'RE TRACKING

Target 8: IMPROVE NUTRIENT, LAND AND WATER MANAGEMENT				
Indicator	Baseline	Performance 2015	Progress	2020 Target
8.1 Exclusion of stock from waterways	73%	76%	↗	90%
8.2 Nutrient management plans	30%	58%	↗	80%
8.3 Irrigation automation	47%	54%	↗	80%
8.4 Managing land for conservation and biodiversity	47%	45%	↘	80%
8.5 All dairy farmers actively managing noxious weeds where relevant				
- Noxious weeds identified as major land issue	37%	29%	↗	Not relevant
- Actively managing noxious weeds where a problem	28%*	28%	→	100%
8.6 Recycle water on farm	50%	75%	↗	100%

Understanding 2015 Performance

- improvement from last measurement
- no change from last measurement
- regression from last measurement
- no measurement in 2015 (latest available shown)
- ongoing target achieved in 2015
- ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established

Farmers maximising environmental gains

The Framework measures the extent to which farmers are improving nutrient, land and water management to minimise their environmental footprint.

Although this is the first Sustainability Framework NRM survey conducted, several metrics have been captured in past Dairying for Tomorrow (DfT) surveys (essentially the 2012 version) and where possible, trend data can be summarised.

8.1 90% of stock are excluded from waterways by 2020

Baseline performance measure: 73% of dairy farmers with waterways have some waterways fenced; 34% of dairy farmers have all waterways fenced — *Dairying for Tomorrow Survey* (DfT 2012).

2015 performance measure: 76% of dairy farmers with waterways have some waterways fenced; 35% of dairy farmers have all waterways fenced, 27% have most waterways fenced and 14% have some waterways fenced (*Sustainability Framework NRM Survey, 2015*).



8.2 80% of farmers implement nutrient management plans by 2020

Baseline performance measure: 30% of farms had nutrient plans (DfT 2012), with more than 80% undertaking soil tests before applying fertilisers.

2015 performance measure: 58% of farms now have a nutrient budget or Fert\$mart plan, with 87% undertaking soil tests before applying fertilisers, 42% doing annual soil tests and 88% of farmers sourcing advice from professionals (Sustainability Framework NRM Survey, 2015).

8.3 80% of dairy farms with irrigation having implemented some level of irrigation automation by 2020

Baseline performance measure: 47% of farms have at least some irrigation system automation (DfT 2012).

2015 performance measure: 54% of irrigation farms now using timers or other systems. (Sustainability Framework NRM Survey, 2015).

8.4 80% of dairy farms managing some land for conservation and biodiversity by 2020

Baseline performance measure: 47% of farms have areas on farm managed for conservation (DfT 2012).

2015 performance measure: 45% of dairy farms manage areas for conservation or biodiversity (Sustainability Framework NRM Survey, 2015).

8.5 Where relevant, all dairy farmers actively managing noxious weeds by 2020

Baseline performance measure: 37% of farmers identified noxious weeds as a land management issue (DfT 2012).

2015 performance measure: Noxious weeds were seen as a lesser land management issue in 2015 (29% identified it as an issue) and 28% were actively managing noxious weeds (Sustainability Framework NRM Survey, 2015).

8.6 100% of farmers have practices to recycle water on farm by 2020

Baseline performance measure: Around 50% of dairy farmers recycle some water (DairySAT).

2015 performance measure: 75% of dairy farms recycle water from the dairy shed and a further 5% intend doing so in the near future. 60% of all dairy shed water (including those reusing none) is reused on farm (Sustainability Framework NRM Survey, 2015).

WHAT WE'RE DOING

Informed decisions improve productivity and environmental outcomes

Different management practices can result in improved productivity and environmental outcomes and farmers now have a greater arsenal of tools at their disposal to help make informed decisions. (For example see <http://fertsmart.dairyingfortomorrow.com.au>; <http://dairyclimatetoolkit.com.au/>; <http://frds.dairyaustralia.com.au/>; <http://dairyingfortomorrow.com.au/>)

Farmers participating in Fert\$mart find that when they get soil and fertiliser management 'right', they can produce more feed at no extra cost. The average fertiliser saving for farmers participating in Gippsland Fert\$mart programs has been \$15,000 for the year.

DairySAT (see www.dairyaustralia.com.au/Environment-and-resources/DairySAT---Dairy-Self-Assessment-Tool.aspx) is an upgraded self-assessment tool which makes it easier for farmers to identify and deal with critical environmental issues facing their operation. New features allow farmers to work through 10 focus areas such as soils, fertilisers and effluent management, and then create an action plan.

Dairy Australia is continuing to facilitate the Unilever project to demonstrate continuous improvement against the Unilever Sustainable Sourcing requirements for dairy. Dairy Australia has also contributed to the FAO Working Group on dairy biodiversity.

The dairy industry has been active in contributing to policy reviews for water management regulation, with a focus on the Murray Darling Basin Plan arrangements and implementation. The dairy industry supports a Basin Plan which returns more water for the environment. However, this is not just a case of adding more water, it is about having the right balance of programs implemented in the right way at the right time.



WHAT WE'RE PLANNING

Tools helping farmers make smarter decisions

Dairy Australia is committed to further roll out of Fert\$mart with the introduction of a web based Fert\$mart app designed to streamline the Fert\$mart planning process for agronomists. Fert\$mart will be delivered in all dairy regions over the next 12 months with a waiting list of farmers wanting to take part in the program and strong interest from agronomists. A significant number of agronomists are now delivering Fert\$mart as part of their services to farmers.

As part of the cross-sector Smarter Irrigation for Profit project, Dairy Australia is facilitating the establishment of 'Optimised Irrigation' sites on commercial farms across Australia. The project will establish industry benchmarks for water and energy use for a range of irrigation systems and pasture/forage production systems. The outputs will be guidelines for farmers to assess the performance of their systems with the aim of improving dry matter production per litre of water while improving soil health and reducing nutrient loss.

Dairy Australia Regional Development Programs will continue to work with Regional NRM organisations to fence off and revegetate waterways. Examples of future activities include the Clean Rivers partnerships in Tasmania, the Franklin River and Corner Inlet program in West Gippsland and the water quality improvement program in the Hopkins River catchments of Western Victoria.

Dairy Australia is also working with the National Australia Bank (NAB) to identify links between management of natural capital and financial performance over the long term in dairy farming systems. DairySAT is being used as a way of demonstrating what action plans need to be taken on dairy farms.

The dairy industry will continue to seek policy changes and implementation arrangements that get the Murray Darling Basin Plan back on track. The dairy industry is seeking changes to the current arrangements to ensure more certainty for farmers and as much water as possible is retained in the irrigation pool, for example through full delivery of environmental offsets and better understanding of the socio-economic impacts of water recovery prior to adjusting the sustainable diversion limit.

OUR PEOPLE, PROJECTS



Fonterra is working with farmers and natural resource management agencies to improve water quality in northern Tasmania.

Fonterra links farmers with natural resource management agencies

Fonterra is using its unique position as a dairy processor to link up its farmers with natural resource management agencies. Farmers, NRM North and Fonterra have teamed up to develop a program aimed at improving water quality in northern Tasmania.

The partnership is based on a three way approach to managing the potential impacts of dairy farming on water quality. NRM North and Fonterra provide support to participating farmers through funding and advice for projects to improve on farm sustainability.

James McKee, CEO of NRM North said, "This is a great partnership which recognises we all have responsibilities in ensuring our water is clean and safe. The public, industry and farmers all contribute and have a role to play and this partnership is developed on that basis.

"This partnership is part of the bigger picture for us. And working with Fonterra gives us better access to a whole new group of landholders."

Matt Watt, Fonterra's General Manager of Australian Milk Supply said, "Dairy farmers take their environmental responsibilities seriously — they rely on the land and its resources to maintain their farms and look after their cows.

"The run-off of nutrients from farms not only impacts the environment, but is also detrimental to farm profitability, which is why this issue is a key focus of Fonterra's SupportCrew Sustainability program.



"We're delighted to partner with NRM North to support farmers in implementing positive changes on-farm that will benefit the environment and improve the profitability of dairy farming at the same time."

The fourth round of the program was launched in August 2015 at the Meander River farm of Brent and Alana Atkins.

Brent said, "It is much easier to do more innovative projects when we have such good support from both companies like Fonterra and organisations like NRM North, which are looking out for the broader public interest. We received incentive funding in Round 3 of the programme to rebuild our old dairy yards with best practice collection and drainage, which has multiple benefits for us and the environment".

Brent and Alana's project limits run-off of nutrients from effluent into waterways (via leaching or overland flow) and allows for controlled management of nutrients that are collected — as it is treated and spread safely to pasture via the shed effluent management system.

By the end of 2015 Fonterra's SupportCrew Sustainability program had implemented over 300 farm projects that improve environmental outcomes and farm profitability. These are mainly nutrient management, soil health and efficiency projects for water or energy.

Tatura farmers embrace nutrient management planning

One of the key planks of Bega Cheese's sustainability program in the Tatura, Victoria region is providing assistance with the development and implementation of on-farm nutrient management plans.

The plans are based on the industry recognised Fert\$mart model of planning and provide suppliers with the tools to make informed, profitable nutrient management decisions.

Fert\$mart, initiated by Dairy Australia, was developed to improve the efficiency and profitability of fertiliser use, and to improve soil health on Australian dairy farms.

The program provides easy-to-follow planning steps to guide farmers and advisors with fertiliser planning and decision making based on the 4Rs: Right rate of the Right fertiliser source applied at the Right time in the Right place.

The plans are developed in conjunction with the supplier and a qualified Fert\$mart consultant, and involve splitting the farm into management zones; with soil tests, historical management, effluent and fertiliser use all taken into consideration to maximise production, profitability and effective use of nutrients.

The soil testing allows targeted fertiliser strategies, potentially saving money. This, combined with viewing effluent as more than just a waste product and understanding its nutritional value, helps dairy farmers make decisions about using those nutrients.

By getting soil and fertiliser management 'right' suppliers are able to maximise feed production at no extra cost while ensuring health of the environment.

In the Tatura region, more than 20 plans have been completed, with at least another 20 signed up.

This program has been enthusiastically embraced by Bega Cheese's suppliers with the plans becoming a key tool in their farm planning. This compliments work being done with suppliers across the Bega Cheese Group.

WHAT OUR STAKEHOLDERS ARE SAYING

One of the great things about the (consultative) forum is that we were invited early. It was positive thing for the industry to take on. We can see evolution and improvement in the Framework. Improvement (continuous improvement) is far more important than achieving an end-goal.

Regarding Target 8, 'participation' targets like these are always challenging; over time you want Target 8 to be more like Targets 9–11 ('quantitative'); BHP has redone these over a series of cycles, it's iterative.

Something to consider in terms of targets is if you had something around participation in the DairySAT... perhaps you can show growth in farm participation.

The emerging environmental issues we see are land degradation, waste management, farm effluent management and water efficiency.

"Minimising our environmental impact; Why not say increasing biodiversity? Why not frame it as 'Improving our environmental performance'? As you progress, try and be more quantitative with targets (especially for Target 8) and think about data to be collected in the next reporting cycle; i.e. Target 8 begs the question about 'how much water was recycled?'"

Environmental group



Reducing environmental impact

Priority area 7: Minimising our environmental footprint

Target 9: Reduce the consumptive water intensity of dairy manufacturers by 20%



The dairy manufacturing industry continues to invest in more efficient equipment that reduces water use.

OUR STORY IN BRIEF

Manufacturers reducing reliance on water

The dairy industry relies heavily upon the availability of water for farming and manufacturing. Given the dry seasonal and cyclical drought conditions that are typical around Australia, dairy manufacturers are continually looking at options to reduce their water consumption. For many, this is a direct response to reduced access to primary water supplies. For others it is an attempt to ensure water supplies are maintained for as long as possible.

Consumptive water is defined as 'water in' which may include mains, ground and surface water. It includes 'fresh' water that includes municipal water, ground water, rivers/dams/streams, harvested rain water, treated waste water and other and 'recycled' water (which includes recycled water and any water treated on-site for reuse).

The type of dairy product heavily influences manufacturers' use of water. This is because

different manufacturing processes consume varying quantities of water, although low water use can also have unexpected environmental or sustainability consequences. Milk powder as an example consumes significantly less water during production than cheese. It also presents a much greater potential to recover water as part of the drying process. However, the drying process itself becomes less energy efficient when the equipment is under-utilised e.g. when smaller volumes of milk are available for drying due to drought-reduced supply.

Beyond the impact of product mix, individual dairy processing plants still use substantial volumes of water. Cleaning is the single largest water-consuming process used within all of these plants, driven by product safety requirements. Cooling towers, boilers and other service processes also consume water. The dairy manufacturing industry therefore continues to invest in more efficient equipment that reduces water use and helps meet its commitment to reduce consumptive water use.

In 2014/15, Australian dairy manufacturers, as reported by participating Dairy Manufacturing Sustainability Council (DMSC) members, consumed an estimated 1.58 litres of water per litre of milk processed.

Target 9: Reduce the consumptive water intensity of dairy manufacturers by 20%

Target
9



SUSTAINABLE DEVELOPMENT GOALS

The dairy industry is committed to managing water resources and to reducing consumptive water intensity. This commitment to water efficiency in Australia also has implications under global sustainability frameworks and activities. A number of the dairy industry's Sustainability Framework environmental targets reflect strong alignment with the UN Sustainable Development Goals:



2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.



6.b Support and strengthen the participation of local communities in improving water and sanitation management.



15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

HOW WE'RE TRACKING

Target 9: REDUCE CONSUMPTIVE WATER INTENSITY OF DAIRY MANUFACTURERS BY 20%

Indicator	Baseline	Performance		2020 Target
		2015	Progress	
9.1 Consumptive water intensity of dairy manufacturers (litres per litre of milk processed)	1.75	1.58	↗	1.40

Understanding 2015 Performance

- ↗ improvement from last measurement
- no change from last measurement
- ↘ regression from last measurement
- * no measurement in 2015 (latest available shown)
- ✓ ongoing target achieved in 2015
- ✗ ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established

Manufacturers on target to reduce water use

The Framework measures the extent to which dairy manufacturers are reducing their water intensity.

The consumptive water intensity of dairy manufacturers during 2014/15 equated to an estimated 1.58 litres of water per litre of milk processed. This represents a 1.3% increase in intensity from 2013/14 but a 10% reduction since 2010/11. The target reduction is 20% by 2020.

While the performance of the dairy manufacturing sector remains relatively flat since last year, it is pleasing that coverage of the industry is improving, with data reflecting an estimated 88% of milk volume across the whole industry (vs 86% in 2014).

9.1 20% reduction in consumptive water intensity of dairy manufacturers (on 2010/11 levels) by 2020

Baseline performance measure: In 2010/11, dairy manufacturers used an estimated 1.75 litres of water per litre of milk processed (Australian Dairy Manufacturing Environmental Sustainability Report 2010/11).

2014 performance data: Consumptive water intensity of dairy manufacturers is an estimated 1.56 litres of water per litre of milk processed (down 10.5% since 2010/11). Data was collected directly from dairy manufacturers, which collectively process approximately 86% of Australia's milk.

2015 performance measure: Consumptive water intensity of dairy manufacturers is an estimated 1.58 litres of water per litre of milk processed (down 10% since 2010/11). Data was collected directly from dairy manufacturers, who collectively process approximately 88% of Australia's milk.



WHAT WE'RE DOING

Understanding wastewater's effectiveness for irrigation

A large volume of wastewater is generated in dairy processing annually and a significant amount of work has been carried out to both minimise the generation and to maximise the reuse and recycling of this wastewater.

Although opportunities for water recycling in the dairy industry are well known and largely understood, the cost-effectiveness and sustainability of actually implementing these opportunities are less well understood. This is particularly true when considering the associated disposal and management of sodium and nutrients from recycling operations associated with irrigation³⁴.

In response to the uncertainties, CSIRO was commissioned by the Australian Water Recycling Centre of Excellence, Dairy Innovation Australia Ltd. and Bega Cheese, to undertake a project to evaluate the technical, environmental and regulatory issues when wastewater from a large dairy company is used for irrigation.

The findings and outcomes from this study will be used more broadly in the dairy sector so we can reduce our water footprint and contribute to a sustainable environment. The final report was released in October 2014. Bega Cheese continues to work on wastewater irrigation with the New South Wales Department of Primary Industries and specialist soil consultants.

WHAT WE'RE PLANNING

Innovative techniques reduce water consumption

The dairy manufacturing sector is evolving its thinking and attempting to increase its adoption of innovative techniques to reduce water consumption. The industry is aware that there are many opportunities to reduce usage that can be harnessed in the future.

As many regional areas fall once again into drought, the business case for water saving initiatives will continue to build. The industry recognises it needs to take greater responsibility for its water usage and reach agreement on issues of boundary, ownership and categorisation of water consumption data.

OUR PEOPLE, PROJECTS



Burra Foods has reduced the amount of water it uses, reducing the impact on its local community, Korumburra.

Burra Foods reduces water use

Burra Foods continue to implement systems to recover and reuse as much water as possible on site.

Water resulting from evaporating milk to produce powered milk products is collected, treated and re-used to decrease the amount of town water the site consumes.

More than 60 million litres of water was recovered and reused at the site last year — enough to provide almost three months of water for the entire population of Korumburra.

Separately, Burra released close to 200 million litres of treated water to environmental flow; assisting the health and sustainability of our local waterways.

In 2014/15, Burra Foods used 20% less town water per million tonnes of production. In the year ending June 2016, this trend is expected to continue with a further 25% reduction.

An additional project has also begun to look at expanding the recovery system by increasing water storage capacity at the site.

This project has the potential to recover an additional 140 million litres of water per year.

This is equivalent to 6.5 months of water use by the Korumburra community.

With climate forecasts predicting dry conditions ahead, this has significant benefits for both Burra Foods and the community.

WHAT OUR STAKEHOLDERS ARE SAYING

Water efficiency and farm effluent management are some of the emerging issues we see for the dairy industry. Resource scarcity is an issue and the dairy industry is reliant on water along the supply chain.

³⁴ CSIRO, 2014. Available at: www.australianwaterrecycling.com.au/food-project-case-studies/bega-cheese



Reducing environmental impact

Priority area 7: Minimising our environmental footprint

Target 10: Reduce greenhouse gas emissions intensity by 30%



Although dairy manufacturers are successfully reducing their greenhouse gas emissions, 95% of the industry's emissions are produced on farm. Industry programs have targeted power consumption in the dairy.

OUR STORY IN BRIEF

Dairy's role in reducing greenhouse gas emissions

The Australian dairy industry recognises it has an important role to play in saving energy and reducing greenhouse gas emissions (GHG). We acknowledge the Intergovernmental Panel on Climate Change's (IPCC) assessment of holding the increase in the global average temperature to below 2°C. We are also following closely the adoption of science-based reduction targets to 2030 by global food and beverage companies.

The agriculture, forestry and fishing sector accounted for about 18.3% of Australia's GHG emissions in 2013³⁵. The dairy industry accounts for 10% of these emissions, or 2% of total national emissions³⁶.

Dairy manufacturing in Australia is responsible for around 5% of the emissions from Dairy overall³⁷. The majority of these manufacturing emissions are carbon dioxide produced as a result of energy consumption. We acknowledge that GHG emissions arising from on farm activities are by far the most significant source of emissions in our sector. However, accurately measuring and accounting for those emissions on a regular basis is a challenge.

Our approach to date has been to focus our target setting and reporting on emissions arising from manufacturing, while continuing to fund projects and programs which have proven to reduce emissions arising from farming.

³⁵ Quarterly Update of Australia's National Greenhouse Gas Inventory: June 2015. Available at: www.environment.gov.au/system/files/resources/48f221e4-6613-4eb2-b279-18ad7061484a/files/economic-sector-2013.pdf

³⁶ Miyake, S., Gaffel, J., Pagen, B. UNEP Working Group for Cleaner Production in Food (2008) Greenhouse Gas Inventory for the Australia Dairy Industry 2006/2007 — Final Report, UniQuest Pty Ltd.

³⁷ As above.

Target 10: Reduce greenhouse gas emissions intensity by 30%

Target 10



The intensity of GHG emissions generated by dairy manufacturers, as reported by participating Dairy Manufacturing Sustainability Council (DMSC) members, in 2014/15 equated to an estimated 152.49 tonnes of carbon dioxide equivalent (CO₂-e) per million litres or megalitres (ML) of milk processed.

The amount of energy used in a dairy manufacturing plant depends on the product produced. The production of milk powder requires more energy (to evaporate water) compared with liquid milk production. Those plants that produce milk powders are therefore more likely to have higher energy consumption, although they are also capable of recovering much more water for re-use as a consequence.

Improvements in energy efficiency and reduction of GHG emissions are becoming key issues for dairy manufacturers. A number of national and state programs and related initiatives are also aimed at improving energy efficiency and dairy manufacturers are increasingly embracing the benefits from energy savings and the associated reduction in emissions.

On-farm emissions come from a range of sources, but are primarily made up of enteric (intestinal) methane and nitrous oxide emissions from dairy pastures. Reducing GHG gas emissions from cows and pastures is linked to many aspects of farming practice including cow productivity, feed quality, fertility and nutrient management (refer Target 8).

SUSTAINABLE DEVELOPMENT GOALS

The opportunity exists to engage with the United Nations Sustainable Development Goals as well as national greenhouse gas reduction commitments. The outcomes of the Paris Climate Change Conference (21st session of the Conference of the Parties (COP21)), and the subsequent targets agreed by the Australian government, will also inform the evolution of the Framework. Our next challenge is to explore our options to adapt and minimise the impacts of extreme weather patterns due to climate variability; for manufacturers as well as on the more obvious farm-based consequences. Potentially relevant UN Goals include:



2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.



13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

HOW WE'RE TRACKING

Target 10: REDUCE GREENHOUSE GAS EMISSIONS INTENSITY BY 30%				
Indicator	Baseline	Performance		2020 Target
		2015	Progress	
10.1 Emissions from dairy manufacturers (t CO ₂ -e per ML milk processed)	178.7	152.5	↗	125.8
10.2 Farm emissions abatement actions	Under review	Under review		Under review

Understanding 2015 Performance

- improvement from last measurement
- no change from last measurement
- regression from last measurement
- no measurement in 2015 (latest available shown)
- ongoing target achieved in 2015
- ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established



Manufacturers reduce greenhouse gas intensity

The Framework measures the extent to which dairy manufacturers are reducing their greenhouse gas intensity. The reduction at farm level is also part of the Framework but appropriate performance measures are still being developed.

The intensity of GHG emissions generated by dairy manufacturers in 2014/15 equated to an estimated 152.5 tonnes of carbon dioxide equivalent (CO₂-e) per million litres or megalitres (ML) of milk processed. This represents a 0.7% decrease in GHG intensity from 2013/14, and a 15.1% reduction since 2010/11. A 30% reduction by 2020 is the target set for the dairy industry.

While the performance of dairy manufacturing remains relatively flat since last year, it is pleasing that coverage of the industry is improving, with data representing 88% of the milk volume across the whole industry (vs 86% in 2014).

10.1 30% reduction in greenhouse gas emissions intensity measured through:

a. direct measurement of manufacturers' emissions

Baseline performance measure: Manufacturers' emissions were 178.7 tonnes of CO₂-e per ML milk processed in 2010/11 (Dairy Manufacturers Environmental Sustainability Report 2010/11). Manufacturers' emissions cover all scope 1 and 2 emissions associated with manufacturing operations.

This includes emissions from combusted stationary fuels (Scope 1), transport fuels (Scope 1) and emissions associated with grid electricity (Scope 2).

2014 performance measure: Manufacturers' emissions intensity was an estimated 153.6 tonnes of CO₂-e per ML of milk processed (down 14.5% since 2010/11). The data is based on information from dairy companies processing approximately 86% of Australia's milk production.

2015 performance measure: There was a minor improvement in emissions intensity performance reported in 2015. Manufacturers' emissions intensity were an estimated 152.5 tonnes of CO₂-e per ML of milk processed in 2015 (down 0.7% from 2013/14 and down 15.1% since 2010/11). The data is based on information from dairy companies processing approximately 88% of Australia's milk production.

b. output measures from farm abatement actions

Baseline performance measure: to be determined. From the 2012 Dairying for Tomorrow Survey, 20% of farms nationally have undertaken energy audits on dairy sheds; 48% of those had implemented an energy savings strategy; 40% of dairy farms have some renewable energy installation on farm.

2015 performance measure: The Sustainability Framework NRM Survey 2015 reported that there has been a significant increase in the proportion of dairy farms with solar panels installed (from 15% in 2012 to 24% in 2015). On average 10 kilowatts (kW) of power was generated, but there is substantial range — from less than 4kW to more than 40kW. Heat exchange units are found on 35% of farms (with a further 10% planning to install them in the short term) and variable speed drives installed on 25% of farms (with another 12% planning to do so). At least 44% of farms have some renewable energy installed on farm (up from 40% in 2012 — DfT Survey).

WHAT WE'RE DOING

R&D for climate adaptation

The next challenge for the food and agriculture sector is to explore our options to adapt and minimise the impacts of extreme weather patterns. Many opportunities exist to explore research and development for climate adaptation and the Framework is an effective tool to drive and communicate change.

In order to drive continuous improvement in data collection quality and consistency, we will be working with the dairy manufacturers through the DMSC to clarify the boundary of operations to be included. This will enable us to take responsibility for our energy consumption and GHG emissions and establish a consistent approach to data collection across the manufacturing sector.

In 2012 and 2013, Dairy Australia received Federal Government funding to provide 1400 Australian dairy farmers access to personalised on-farm energy assessments, workshops and information resources. By June 2015, 21% (1,399) of Australia dairy farmers completed an energy assessment through this project. The Dairy Australia program resulted from an initial project by Fonterra who undertook 60 energy assessments as a pilot, following collaboration with Dairy Australia on building the energy assessment tool. Other dairy companies have also undertaken energy assessments for their suppliers.



The Dairy Climate Toolkit (see www.dairyclimate toolkit.com.au) provides comprehensive knowledge of the practices that profitably reduce greenhouse gas emissions from dairy farm systems, embedded in the context of every-day farm management decisions. It is funded by the Australian Government through the Carbon Farming Futures Extension and Outreach Program.

The Dairy Greenhouse Gas Abatement Strategies Calculator (DGAS) allows farm managers and other users to calculate the impact of adopting different abatement strategies on their total farm GHG emissions, and GHG emissions intensity. The tool can help them work out the strategies best suited to their farming system.

Dairy Australia in conjunction with the Dairy Futures CRC, the Victorian Government and the Federal Government is investing in research related to reducing greenhouse gas emissions, for example through genetic improvement, diet and reactive nitrogen fertiliser management. The challenge for dairy farmers is balancing changes in any increased costs associated with changed practices against the potential production and environmental benefits.

There is growing potential to achieve reduction in on-farm emissions as research progresses, financial support increases, technologies and policies evolve and uptake increases. However, this is not a short term scenario. Much of the research and development that will provide effective and profitable solutions requires long-term investment in comprehensive research programs, and concerted adoption programs.

WHAT WE'RE PLANNING

A 'carbon confident' dairy community

Dairy Australia, Fonterra, Devondale Murray Goulburn and Bega Cheese have been working together to build industry understanding of how to reduce greenhouse gas emissions intensity as part of the [Australian Government funded Carbon Farming Futures Extension & Outreach Program](#).

With the aim of creating a 'carbon confident' dairy community the different projects have built industry understanding of the practices that profitably reduce greenhouse gas emissions, embedded in the context of every-day farm management decisions.

By 2017 over 3000 Australian dairy farmers and service providers will have attended farmer forums, carbon focus farm meetings, field days and workshops focusing on practices to reduce emissions. An additional 1000 farmers and service

providers will have received one-on-one support and training in how to reduce GHG emissions.

Another project, the Dairy Businesses for Future Climates research project (DBFC) is examining how different dairy farm systems may perform under predicted climate changes to the year 2040. The project, implemented in three regions (Gippsland, Tasmania and South Australia) uses real farms as a representative base level case study in each region. Three development options (intensify, adapt/reorganise and simplify) are being modelled for high, medium and low climate change scenarios in 2040.

Preliminary project findings are that climate change is manageable in the dairy regions studied out to 2040. Farmers have access to adaptive strategies to maintain milk flow through increased variability but will need increased skills in business risk management particularly with respect to climate risk. If businesses are resilient with respect to resource and business management the evidence suggests they will be able to cope with increased climate variability. The project is funded by the Australian Government and Dairy Australia.

OUR PEOPLE, PROJECTS



Parmalat won a National Energy Efficiency Award for its work in reducing energy consumption at its Lidcombe manufacturing facility in Sydney.

New investments help Parmalat cut carbon emissions

Effective measurement of energy consumption is the first step in identifying and controlling inefficiencies.

Award-winning work by Parmalat at its Lidcombe manufacturing facility in Sydney saw 19 electricity meters installed to measure consumption by refrigeration and air compressors, packaging moulding machines and other large equipment on the processing floor.



The manufacturer also installed five steam, natural gas and compressed air flow meters.

This equipment enables Parmalat to follow energy consumption and efficiency ratios of the main energy users on site being the boiler house, refrigeration system and compressed air. The ratios follow the energy input provided (natural gas or electricity) against energy output produced (refrigeration, steam, compressed air). The site also follows usage efficiency by recording daily steam and compressed air produced against finished product manufactured.

This project won a National Energy Efficiency award from the Energy Efficiency Council last year, and has enabled Parmalat to measure the reduction in carbon emissions from different projects.

Optimising boiler combustion, steam and water distribution systems can lead to increased capacity and considerable savings in water, energy and chemicals.

One of the energy efficiency projects Parmalat implemented recovers lost heat from boiler blowdown to pre-heat make up water. The boiler now produces steam more efficiently.

Another project looked at optimising the combustion efficiency of the boiler by controlling the amount of excess air to natural gas ratio. These additions saw Parmalat reduce its annual carbon emissions by 98 tonnes.

Parmalat in Lidcombe implemented a project on its refrigeration system which optimised the load applied on the compressors and the condensers according to outside temperature and humidity conditions.

This investment has seen a reduction in carbon emissions of 522 tonnes.

Energy assessments save Tasmanian farmers thousands

Tasmanian dairy farmers have saved thousands and could potentially save up to \$1 million more from their power bills, thanks to energy efficiency assessments conducted as part of the *Smarter Energy Use on Australian Dairy Farms* project.

While Tasmanian electricity is largely sourced from renewable hydro energy with no GHG emissions, the focus on dairy shed energy efficiency nationally has the potential for significant savings in carbon dioxide emissions from coal-fired power stations.

DairyTas coordinated the delivery of 200 dairy shed energy audits (close to 50% of Tasmanian dairy sheds) between December 2012 and February 2015 as part of a national Dairy Australia project funded by the Department of Industry and Science Energy Efficiency Information Grants Program.

The audits were done by tradesmen with a good practical knowledge of dairy sheds and involved a review of 12 months of billing data, a shed visit (typically during milking) and follow up visit/communication with specific recommendations.

Chris Whish Wilson, an independent refrigeration mechanic who carried out over 120 of the audits, said most savings could be achieved with just regular and targeted maintenance.

“We saw some really big differences between sheds,” Mr Whish Wilson said.

“There were some sheds where thousands of dollars could be saved very quickly with very little capital outlay, and others running very efficiently but they could still save money by switching to time of use contracts or by removing unnecessary extra meters which have an annual charge.

“Some sheds had both efficiency and billing savings, and if farmers implemented all the recommendations made, savings would average in the range of \$3000–\$5000 per farm.”

Energy efficiency savings alone saved each farm that undertook an audit an average of \$1080 per year.

Tasmanian Project Manager, Rachel Brown from DairyTas, believes there have been other benefits.

“We now have some of the best energy use benchmarking data in the country thanks to the results from 200 shed assessments.”

WHAT OUR STAKEHOLDERS ARE SAYING

Climate issues will affect the industry. Dairy, and agriculture, can demonstrate to the public how they are reducing their carbon footprint.

We have to stop looking at climate change in terms of mitigation. Now is the time to start R&D for adaptation. The Framework is a great way to engage producers in the fundamental shift in thinking.

For example, grasslands production, it is (could be thought of as) a ‘conservation’ industry. This is one of Australian agriculture’s priorities.



Reducing environmental impact

Priority area 7: Minimising our environmental footprint

Target 11: Reduce waste to landfill by 40%



A large contributor to waste on farms is the use of silage wrap. Only 35% of farmers currently recycle any of the wrapping material.

OUR STORY

Fine-tuning waste recycling

Australian dairy manufacturers have achieved a 46% reduction in landfill waste in the past three years by maximising the recycling of waste materials. In 2014/15, Australian dairy manufacturers, as reported by participating Dairy Manufacturing Sustainability Council (DMSC) members, produced an estimated 1.45 tonnes of waste per million litres or megalitre (ML) of milk processed. This equates to a 46% reduction in landfill waste since 2010/11 and exceeds the target of a 40% reduction by 2020.

However, the coverage of manufacturers' reporting has dropped to 33% of national milk supply (from a previous high of 51% in 2014). As a result, the landfill figure is quite sensitive to the small number of individual manufacturers reporting. Therefore it is important to note that, whilst the trend is good, it is difficult to draw meaningful conclusions until the coverage improves to represent the majority of milk processors.

An additional difficulty in interpretation is that although it is known some companies are maximising the recovery, reuse and recycling of their waste materials, the requirement for waste contractors to now weigh the waste more accurately is also having an impact on the reported number.

The cost of landfill and waste levy systems across most Australian states has continued to generate funds to support government, industry and community efforts to reduce waste. These landfill levies have also created a financial incentive to reduce waste.

Target 11: Reduce waste to landfill by 40%

Target
11



A large contributor to waste on farms is the use of silage wrap which is used on 77% of farms, but only 35% currently recycle any of the wrapping material. While this group recycles 82% of their silage wrap, it only represents 28% of all silage wrap used. An additional 16% of farms using silage wrap say they plan to recycle in the immediate future (Sustainability Framework NRM Survey, 2015). It will be important to ensure dairy farmers are aware of the options for recycling.

An area of interest and concern for our stakeholders that is not currently captured in the Framework is food waste. Most landfill waste created in the manufacturing process is non-food, but we recognise that the dairy industry has a role to play in creating a sustainable food system and want to understand how we can contribute to influencing food waste reduction. A good starting point will be to improve our understanding where food loss and food waste occurs through the many stages of the food supply chain.

SUSTAINABLE DEVELOPMENT GOALS

The Australian dairy industry has a role to play in reducing waste and is engaging with global frameworks such as the United Nations Sustainable Development Goals to better understand where it can contribute to change. With regards to commitments to reduce waste, SDGs #6 and #12 are particularly relevant for the Australian dairy industry:



6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.



12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

HOW WE'RE TRACKING

Target 11: REDUCE WASTE TO LANDFILL BY 40%

Indicator	Baseline	Performance		2020 Target
		2015	Progress	
11.1a Waste to landfill intensity of dairy manufacturers (tonnes of waste per ML milk processed)	2.69	1.45	↗	1.61
11.1b Manufacturers: signatories to Australian Packaging Covenant (APC)	9	17	↗	All manufacturers
11.2 On farm measurement to be developed from DairySAT tool	Under review	Under review		Under review

Understanding 2015 Performance



improvement from last measurement



no change from last measurement



regression from last measurement



no measurement in 2015 (latest available shown)



ongoing target achieved in 2015



ongoing target not achieved in 2015

"Under review" indicates where an appropriate baseline measure or target has yet to be established



The Framework measures the extent to which industry is minimising waste by monitoring the reduction in waste to landfill.

11.1 40% reduction in waste to landfill — manufacturer level measured by:

a. direct quantitative target

Baseline performance measure: Manufacturers produced 2.69 tonnes of waste per ML of milk processed in 2010/11 (Australian Dairy Manufacturers Environmental Sustainability Report 2010–11).

2014 performance measure: the waste to landfill generated by manufacturers equates to an estimated 1.63 tonnes of waste per ML of milk processed; 2013/14 waste to landfill data (as reported by DMSC members) is estimated to cover 51% of industry by milk production volume. This represents a 39% cut in waste to landfill.

2015 performance measure: the waste to landfill generated by manufacturers equates to an estimated 1.45 tonnes of waste per ML of milk processed; 2014/15 waste to landfill data (as reported by DMSC members) is estimated to cover 33% of industry by milk production volume. This represents a 46% cut in waste to landfill. Whilst the trend is good, it is difficult to draw meaningful conclusions until the coverage improves to represent the majority of milk processed.

b. All manufacturers being signatories of the Australian Packaging Covenant (APC)

Baseline performance measure: Out of 20 identified manufacturers, 9 were signatories to the APC in 2013.

2014 performance measure: No change to the number of manufacturers which are signatories (APC website).

2015 performance measure: Out of the 9 DMSC members, 8 were signatories to the APC in 2013 with a total of 17 dairy companies in Australia overall being signatories. It is estimated that the 8 DMSC members alone would have processed 90% of Australia's milk production. The APC is currently under review and this measure may need to be revised for future years.

11.2 40% reduction in waste to landfill — baseline for farm level waste reduction to be established:

Baseline performance measure: to be established using the Dairy Self-Assessment Tool (DairySAT) indicator — Farm Waste chapter.

2014 performance measure: The updated DairySAT was released in 2014. Sufficient data has not yet been collected to establish a baseline.

2015 performance measure: From the Sustainability Framework NRM Survey 2015, it was noted that silage wrap is used on 77% of farms, but only 35% currently recycle any of the wrapping material. While this group recycles 82% of their silage wrap, it only represents 28% of all silage wrap used. An additional 16% of farms using silage wrap say they plan to recycle in the immediate future. Separately, 35% of farms participate in Drum Muster — with an additional 29% saying they will do so next year. Approximately 28% of farms implement other recovery, reuse or recycle practices.

WHAT WE'RE DOING

Improving data collection

We will be exploring opportunities to continue to support improved data collection around waste generation in future reports. This will include a review of the operational boundary for the data to ensure accurate, complete and comparable data is reported.

The quality of data collection in this area has been limited to date, but improvements are encouraging. An opportunity also exists to expand data collection to include waste recycling information and to support initiatives to move waste from landfill streams to recycling streams. For example, Norco have decreased landfill by 13% by recycling returned milk bottles.

An on-farm recycling program is Drum Muster. This national program has been set up for the collection and recycling of empty, cleaned, non-returnable crop production and on-farm animal health chemical containers.

In 2015, 35% of respondents to the Sustainability Framework NRM Survey in 2015 had participated in the Drum Muster program and an additional 29% say they will do so in 2016. Survey results also reveal that 5% of dairy farms recycle their drums, but not through the Drum Muster program specifically. As a result, promoting Drum Muster depot sites will need to continue.



WHAT WE'RE PLANNING

Reducing food waste

An area of focus in the evolution of the Framework is to increase the coverage of manufacturers reporting waste data. We also intend to engage with the DMSC members to better understand the challenges they face in improving data collection and the different use of boundaries related to waste generated per unit of milk processed. For example, the Framework target is currently only focused on a reduction of waste to landfill, which means that other activities around waste reuse e.g. cardboard packaging or other recycling, are not captured in this report for sites that only do secondary processing.

Another key area of interest and concern for our stakeholders that is not currently captured in the Framework is food waste. The increased generation of food waste is a global and national problem. It has several facets, all of which can benefit from a clear understanding of the size and nature of food waste generated across all phases of the food production and consumption cycle.

Of most concern to many stakeholders is the impact food waste has on the generation of GHG such as methane and carbon dioxide; the economic and environmental viability of existing food waste disposal systems; and the opportunity for food waste to provide a resource input to agriculture.

The dairy industry is responding to interest and concern from stakeholders about food waste. It is exploring opportunities to further understand the nature of food waste across the food supply chain in Australia and understand the role the industry can play to measure, manage and reduce food waste.

OUR PEOPLE, PROJECTS

Plastic recycling good for environment and the bottom line

Bega Cheese has forged an alliance with small Melbourne recycling company Polymer Holdings to recycle plastic waste produced by its manufacturing facility at Strathmerton, Victoria.

Disposal of the diverse range of plastic waste generated at the Strathmerton facility has provided a challenge for Bega Cheese for several years.

However, the new alliance means no plastic waste produced at the Strathmerton site will go to landfill, which is good for Bega Cheese's bottom line and the environment.

Polymer Holdings, based in Melbourne, has been in business for 20 years. It employs six people and is looking to expand as more innovative ways to reuse the plastic waste streams they collect continue to be developed.

Polymer Holding sources and recycles many types of plastics from manufacturers of a varied range of products, as well as automotive suppliers of bumper bars and dashboards.

Primarily they separate, clean and chip the wastes they get to make a base material. This plastic raw material is sold to other manufacturing businesses that produce a range of products including plastic pallets, film sheets, stadium seats, plastic-wood decking and outdoor furniture.

All reclaimed product is used locally in Australia, and Bega Cheese is proud to be part of the creation of more Australian jobs. Expansion plans will centre on their investigations into recycling PET consumer plastics in Australia.

This will also benefit Bega Cheese, as the new grinder that will handle PET products will handle many of the waste films generated at the Strathmerton facility.

Bega Cheese is looking forward to developing a long-term partnership with Polymer Holdings that will enable it to manage plastic waste in an environmentally sound way now and into the future.



Jason Bake has found avenues for on-farm waste, reducing the amount that goes to landfill. Photo: Australian Dairyfarmer.

Parmalat project inspires immediate changes on NSW farms

Coffs Harbour couple, Jason and Michele Bake, don't dawdle when they see an opportunity to re-evaluate their farm management and investigate new ideas to improve their business — Bangalara Dairies, milking 400–420 cows.



One of two farms participating in the NSW based Parmalat On-Farm Sustainability Project, the couple undertook the DairySAT via webinar.

Dairy Australia's Marguerite White and Parmalat field officer, Andrew Taylor, took part in the webinar and the development of the couple's DairySAT Action Plan has spearheaded some immediate management changes.

The Bake family farm is in a prime tourism precinct of NSW and Jason is aware they are under the watchful eye of passers-by.

"It has always been difficult to manage our waste because we thought there was little option other than Council refuse. The DairySAT motivated me to investigate further."

Jason and manager Carleen Smith started by contacting the local council waste centre to utilise the Drum Muster Program.

They were able to dispose of 5L–110L triple rinsed dairy and agricultural drums, as well as any old oil drums, free of charge.

Most importantly, Jason used this opportunity to seek out a contact for other waste on the farm. Via a chain of four phone calls, Jason reached a company which was willing to have a look at his waste.

The couple drove to a recycling depot only 14km from the farm, armed with a dozen or so examples of materials which didn't have a home. The company 'bloke' agreed to take all remaining waste items, free of charge, as long as they were sorted into four categories on farm.

These waste products are now stored in clearly marked 1 tonne fertiliser bags, each located close to the point where the waste is generated.

"Before we began the implementation process into the workplace I gave each staff member a copy of the DairySAT module pertaining to waste management, asked them to read it and comment on how we could make it work," Jason said.

"From there we had a full staff meeting over lunch to unveil our current system. This has been an approach taken by everyone here to clean-up and find out what can be done to recycle waste material that is commonly left to pile up around the farm or burnt."

Jason's critical success factors:

- Have all bags clearly marked with explanatory notes close by to state what goes where
- Have bags close to where the waste is generated
- Change bags before they fill to avoid waste being stacked "pretty close"
- Ensure at the drop-off point it is clearly explained what is in each bag to avoid charge

WHAT OUR STAKEHOLDERS SAY

Reducing packaging is integral to reducing environmental impact. Waste management is an emerging priority for the dairy sector.

Reducing food waste in the supply chain is another important issue for dairy to address.



Section 3: Appendices



Appendix 1

Dairy Industry Sustainability Consultative Forum Members 2015

Carol Adams	Consultant	Ingrid Messner	Consultant
Elvis Amair	Bega Cheese	Heather Neil	RSPCA Australia
Angela Avery	Dept of Economic Development, Jobs, Transport and Resources (DEDJTR) (VIC)	Angela O'Sullivan	Department of Agriculture and Water Resources (DAWR)
Meredith Banks	Lion	Marc Oostdijk	Rabobank
David Barr	DMSC	Rose Philipzen	Moxey Farms
David Basham	Australian Dairy Farmers (ADF) and ADIC	Harriet Pile	Coles
James Bentley	National Australia Bank (NAB)	Kylie Ruth	Australian Food and Grocery Council (AFGC)
Patten Bridge	Bridge Logic	Daniel Salter	Devondale Murray Goulburn (DMG)
Sue Brumby	National Centre for Farmer Health	Mario Solomon	Unilever
Lindsay Bull	Department of Agriculture and Water Resources (DAWR)	Peter Stahle	Australian Dairy Products Federation (ADPF)
Lyndall Bull	Lynea Advisors	Yoland Sztarr	Sustainability Victoria
Laurie Buys	Queensland University of Technology	Mark Thomas	CSIRO Sustainable Agriculture Flagship
Todd Charteris	Rabobank	Justin Toohey	Cattle Council Australia (CCA)
Irene Clarke	Australian Dairy Farmers (ADF)	Cate Turner	Futureye
Carlene Dowie	Fairfax Media	Philip Wright	(St James) Ethics Centre
Louise Edwards	Ridley	Nancy Wei	Visy
Amy Fay	Murray Dairy	Kevin de Witte	Animal Health Australia (AHA)
Guy Fitzhardinge	Beef Industry	Melissa Cameron	Dairy Australia
Alexandra Gartmann	Foundation for Rural & Regional Renewal (FRRR)	Robin Condron	Dairy Australia
Chris Griffin	Chair Consultative Forum	Helen Dornom	Dairy Australia
Angus Hancock	Nestle	Shane Hellwege	DA/National Centre for Dairy Education
Jackie Healing	Coles	Julie Iommi	Dairy Australia
Tess Herbert	Australian Lot Feeders Association (ALFA)	Charlie McElhone	Dairy Australia
Jack Holden	Fonterra Australia	Erika Oates	Dairy Australia
Nick Katsanevakis	Sustainability Victoria	Ian Olmstead	Dairy Australia
Felicity Kelly	Devondale Murray Goulburn	Mark Pearce	Dairy Australia
Maurice King	Warrnambool Cheese and Butter (WCB)	Catherine Phelps	Dairy Australia
John McKillop	Sustainable Investment in Ag Fund	Kelly Ward	Dairy Australia
Alison Lansley	Australian Specialty Cheese Association (ASCA)		
Amanda Lee	Queensland University of Technology (QUT)	Support	
Mark Linton	Parmalat	Stephen Cooke	Currie Communications
Clare Luehman	Incitec Pivot Ltd	Robyn Leeson	STR Consulting
Ian McConnel	World Wildlife Foundation (WWF)	Mark Paterson	Currie Communications
Shona McPherson	Australian Dairy Farmers (ADF)	Gabrielle Sheehan	Currie Communications
Karensa Menzies	DEDJTR (VIC)	Amanda Nuttall	Think Impact



Dairy Industry Sustainability Steering Committee Members

Elvis Amair	Bega Cheese
Meredith Banks	Lion
David Basham	ADF/SADA
Irene Clarke	ADF
Chris Griffin	ADIC (Chair)
Felicity Kelly	Devondale Murray Goulburn
Maurice King	WCB
Jack Holden	Fonterra Australia
Mark Linton	Parmalat
Shona McPherson	ADF
Rose Philipzen	Moxey Farms
Peter Stahle	ADPF
Daniel Salter	Devondale Murray Goulburn
Melissa Cameron	Dairy Australia
Helen Dornom	Dairy Australia
Mark Pearce	Dairy Australia

Support

Stephen Cooke	Currie Communications
Mark Paterson	Currie Communications
Gabrielle Sheehan	Currie Communications
Robyn Leeson	STR Consulting
Amanda Nuttall	Think Impact



Appendix 2

GRI Content Index

The Dairy Industry Sustainability Framework Progress Report 2015 contains Standard Disclosures from the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines. The Content Index 2015 indicates the sections of our Report which aligns with the GRI G4 Guidelines. The Dairy Industry Sustainability Framework Progress Report 2015 is a sector-wide report, requiring a broad application of the GRI G4 Guidelines, outlined in the notes and omissions column where possible.

General Standard Disclosures

G4	Disclosure ^A	Location	
		Progress report	Notes and omissions
Strategy and analysis			
G4-1	Statement from the most senior decision maker	Statement from the Chairs — pages 3–4	
Organisational profile			
G4-3	Name of the organisation	Statement from the Chairs — pages 3–4 Back page — page 82	
G4-4	Primary brands, products & services	About the Australian Dairy Industry — page 10	
G4-5	Location of headquarters	Back page — page 82	
G4-6	Countries of operations	About the Australian Dairy Industry — page 10	
G4-7	Nature of ownership	Statement from the Chairs — pages 3–4 About the Australian Dairy Industry — page 10	
G4-8	Markets served	About the Australian Dairy Industry — page 10	
G4-9	Scale of the organisation	About the Australian Dairy Industry — page 10	
Organisational profile			
G4-10	Number of employees	About the Australian Dairy Industry — pages 8–9	
G4-11	Employees covered by collective bargaining agreements		This information is not available across the entire dairy sector.
G4-12	Description of supply chain	Issues across our value chain — page 16	
G4-13	Significant changes to the organisation	Statement from the Chairs — pages 3–4 About the Australian Dairy Industry — page 10 Determining the issues — page 13 Engaging Stakeholders — pages 14–16	
G4-14	Use of the precautionary principle	Principles and Guidance — pages 11–12	The report is sector-wide in scope, consisting of multiple entities. The approach to the precautionary principle varies across the sector.
G4-15	List of charters, principles or initiatives subscribed	Principles and Guidance — pages 11–12	The report is sector-wide in scope, consisting of multiple entities. Some entities are formally engaged with external charters.

^A The description of the disclosures has been summarised. For the full text of disclosures see www.globalreporting.org



General Standard Disclosures

G4	Disclosure ^A	Location	
		Progress report and website	Notes and omissions
Identified material aspects and boundaries			
G4-16	Memberships of associations		The report is sector-wide in scope, consisting of multiple entities. Some entities are members of specific associations. The interests of the ADIC Board members provides some information. www.australiandairyfarmers.com.au/adic-board
G4-17	Entities included in financial statements		As a sector-wide report, the scope includes both farmers and dairy manufacturers. There is no single financial statement available.
G4-18	Defining report content	Determining the issues — page 13	
Identified material aspects and boundaries			
G4-19	Material aspects identified	2015 Executive Summary — pages 7–8 Determining the issues — page 13 Engaging Stakeholders — pages 14–15	
G4-20	Aspect boundary within the organisation	Issues across our value chain — page 16	Boundaries have been noted in the narrative where each aspect is discussed as well as where data is presented.
G4-21	Aspect boundary outside the organisation	Issues across our value chain — page 17	Boundaries have been noted in the narrative where each aspect is discussed as well as where data is presented.
G4-22	Restatements of information		Re-statements have been clarified in the text where they appear. Many re-statements are based on data provided by 3rd parties which were reviewed post publication.
G4-23	Significant changes to scope and aspect boundaries		There were no significant changes to scope or aspect boundaries in this reporting cycle.
Stakeholder engagement			
G4-24	List of stakeholder groups engaged by the organisation	Engaging Stakeholders — pages 14–15	
G4-25	Basis for identification of stakeholders	Engaging Stakeholders — pages 14–15	
G4-26	Approach to stakeholder engagement	Engaging Stakeholders — pages 14–15	
G4-27	Topics raised by stakeholders	Engaging Stakeholders — pages 14–15	
Report profile			
G4-28	Reporting period	Defining report content — pages 13–16	
G4-29	Date of previous report	Defining report content — pages 13–16	
G4-30	Reporting cycle	Defining report content — pages 13–16	
G4-31	Contact point for questions	Back page — page 83	
G4-32	In accordance option of GRI	Defining report content — pages 13–16	
G4-33	Assurance		Information in this report has not been externally assured. Specific data provided by third parties may have been the subject of external assurance or verification for other purposes by those agencies.
Governance			
G4-34	Governance structure	Governance — pages 12–13	
Ethics and integrity			
G4-56	Values, principles, codes of conduct	Principles and Guidance — pages 11–12	

^A The description of the disclosures has been summarised. For the full text of disclosures see www.globalreporting.org



Specific Standard Disclosures

Material aspect	DMA and indicators	Location		
		Progress report and website	Notes or omissions	
Enhancing livelihoods 	G4-DMA	Enhancing livelihoods — pages 19–39		
	G4-EC1	Direct economic value generated & distributed	Increase the resilience and prosperity of dairy communities — pages 25–29	Baseline information is under development.
	G4-EC8	Indirect economic impacts	Increase the resilience and prosperity of dairy communities — pages 25–29	Baseline information is under development.
	G4-LA6	Type of injury and rates of injury	Provide a safe work environment for all dairy workers — pages 30–34	
Improving well-being 	G4-DMA		Improving well-being — pages 40–53	
	G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health & safety impacts of products and services.	All dairy products and ingredients sold are safe — pages 40–43	
	G4-DMA	Animal welfare [^]	Provide best care for all animals — pages 49–53	
Reducing environmental impact 	G4-DMA		Reducing environmental impact — pages 54–72	
	G4-EN18	Greenhouse gas emissions intensity	Reduce greenhouse gas emissions intensity by 30% — pages 63–67	
	G4-EN23	Total weight of waste by type and disposal method	Reduce waste to landfill — pages 68–72	

[^] Outlined in GRI's Food Processing Sector Disclosures document which cover key aspects of sustainability performance that are meaningful and relevant to the Food Processing sector and which are not sufficiently covered in the G4 Guidelines.



References and abbreviations

Internal references and surveys

Animal Husbandry Survey (AHS)

Conducted every two years with Australian dairy farmers to foster and encourage responsible animal husbandry, and to monitor performance in key priority areas. While self-reported, survey results are validated through independent mechanisms (e.g. focus groups). Funded by Dairy Australia, the most recent survey was conducted in October 2014 and surveyed over 400 dairy farmers nationally.

www.dairyaustralia.com.au/Home/Standard-Items/~media/Documents/Animal%20management/Animal%20welfare/Welfare%20overview/18082015_Animal%20husbandry%20survey%20brochure_8pgs_LR%20WEB.pdf

Dairy Monitor Survey — (DM)

Annual tracking survey conducted amongst 1600 metro and regional respondents to gauge community perceptions of dairy foods and the dairy industry and their dairy consumption behaviour. It covers a range of industry perceptions from animal welfare through to economic, environmental and social impacts of the industry from non-dairy members of the community. It is conducted in March/April each year. The survey is funded by Dairy Australia, but conducted by an independent organisation.

Survey participants are asked to rate their responses from 1 (Strongly Disagree) to 5 (Strongly Agree). Ratings of 4 and 5 are deemed to be agree, ratings of 3 are deemed to be neutral and ratings of 1 and 2 are deemed to disagree.

Dairying for Tomorrow (DfT) Survey

A survey currently conducted every six years amongst 800 dairy farmers nationally to determine key issues facing farmers in relation to accessing and managing natural resources. It covers aspects such as irrigation water access, fertiliser and effluent management, waterways and native vegetation. As such it provides indicators of on farm practice change over time. The survey is funded by Dairy Australia, but conducted by an independent organisation. It was last conducted in 2012.

www.dairyingfortomorrow.com.au/wp-content/uploads/Dft-2012-report-FINAL.pdf

DairySAT

The Dairy Self-Assessment Tool (DairySAT) is an environmental self-assessment and action planning tool for Australian dairy farmers.

www.dairysat.com.au

National Dairy Farmer Survey (NDFS)

A bi-annual survey conducted amongst 1400 dairy farmers nationally (n=1000 for main survey and n=400 for supplementary survey) to understand their current views of the industry, the challenges they are facing and the impact of these on their businesses. It also provides information on production, herd sizes and future intentions. The main survey is conducted in February each year and a smaller supplementary survey takes place in August each year amongst a portion of respondents interviewed in the main survey. The survey is funded by Dairy Australia, but conducted by an independent organisation.

www.dairyaustralia.com.au/Markets-and-statistics/Market-situation-and-outlook/National-Dairy-Farmer-Survey.aspx

Sustainability Framework NRM Survey 2015

The Sustainability Framework NRM Survey was commissioned by Dairy Australia in 2015. It provides data on practices being undertaken on dairy farms to minimise impacts on land, soil and water due to farming practices.

Data included in the report is based on responses from 601 dairy farmers who participated in a Computer Assisted Telephone Interview (CATI) between August and September 2015. Survey respondents were chosen randomly from the Dairy Australia levy payer database. Quotas were set by NRM sub region and data was weighted at computer stage to ensure the national result is not disproportionately affected by regions with smaller numbers of dairy farmers.

www.dairyingfortomorrow.com.au).

The Power of People on Australian Dairy Farms Survey (POP)

This independent telephone survey of 400 dairy farmers was conducted for the first time in 2014 and complemented with an online forum. It was not conducted in 2015, but will be conducted in 2016.



External references and surveys

Australian Animal Welfare Standards and Guidelines for Cattle

The development of the Australian Animal Welfare Standards and Guidelines for Cattle are an important project under the Australian Animal Welfare Strategy (AAWS) — a previous Australian Government initiative that guides the development of new, nationally consistent policies to enhance animal welfare arrangements in all Australian states and territories. The development process began in 2009 and has been supported and funded by all governments, Australian Dairy Farmers, Australian Lot Feeders Association and Cattle Council of Australia.

In late 2015 the Animal Welfare Task Group (AWTG) presented the final standards and guidelines to The Agriculture Senior Officials Committee (AgSOC) and the Agriculture Ministers (AGMIN) for endorsement. In mid January 2016, all State and Territory governments have agreed to the Standards and Guidelines and they will now be progressively implemented by each State and Territory.

www.animalwelfarestandards.net.au/cattle

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)

ABARES is the science and economics research bureau within the Australian Government Department of Agriculture and Water Resources. ABARES research products take a variety of forms, including publications, data, data tools, workshops, briefings and presentations and much of the research is made publically available. The Progress Report draws on ABARES data to determine and track performance measures for farm profitability.

Australian Dietary Guidelines

The Australian Dietary Guidelines are developed by the National Health and Medical Research Council's (NHMRC). The Guidelines use the best available scientific evidence to provide information on the types and amounts of foods, food groups and dietary patterns that aim to:

- promote health and wellbeing
- reduce the risk of diet-related conditions
- reduce the risk of chronic disease.

The Guidelines are for use by health professionals, policy makers, educators, food manufacturers, food retailers and researchers.

www.eatforhealth.gov.au/guidelines

Australian Health Survey 2011–13

The 2011–13 Australian Health Survey (AHS) is the largest and most comprehensive health survey ever held in Australia. The survey, conducted throughout Australia, collected a range of information about health related issues, including health status, risk factors, health service usage and medications. The 2011–13 AHS incorporated the National Nutrition and Physical Activity Survey (NNPAS).

www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.008~2011-12~Main%20Features~Key%20findings~100

Australian Milk Residue Analysis (AMRA) survey

This survey is an independent, national, government-coordinated monitoring program for potential agricultural and veterinary chemical residues, and environmental contaminants in the Australian milk supply. The survey provides evidence that the Australian dairy industry's food safety system and quality assurance programs effectively manage the food safety and trade related risks associated with the use of agvet chemicals. The Survey also meets the export requirements of the Department of Agriculture under the Export Control (Milk and Milk Products) Orders 2005 and provides assurance to importing countries that Australian dairy commodities comply with importing country requirements with respect to managing the risks from the use of agvet chemicals.

www.dairyaustralia.com.au/Industry-information/Food-safety-and-regulation/Regulatory-Framework/Regulatory-overview/Australian-Milk-Residue-Analysis-Survey.aspx

Australia's National Greenhouse Gas Inventory Report (2013)

Australia's National Greenhouse Accounts are made up of a series of comprehensive reports and databases that estimate, and account for, Australia's greenhouse gas emissions. These publications fulfil Australia's international and domestic reporting requirements. The June 2015 Quarterly Update is the most recent available.

www.environment.gov.au/system/files/resources/48f221e4-6613-4eb2-b279-18ad7061484a/files/economic-sector-2013.pdf



CDP

CDP works to transform the way the world does business to prevent dangerous climate change and protect our natural resources. By leveraging market forces including shareholders, customers and governments, CDP has incentivised thousands of companies and cities across the world's largest economies to measure and disclose their environmental information.

www.cdp.net/en-US/Pages/About-Us.aspx

Global Dairy Agenda for Action

The Global Dairy Agenda for Action was launched by the dairy sector in September 2009 to address climate change — notably through greenhouse gas emissions reduction — and to continually improve the sustainability of the milk supply process. Through this world-wide cooperation, the dairy sector shares information, adopts strategies and changes practices to achieve more efficient and sustainable dairy production for an increasing global population. The Dairy Sustainability Framework is the GDA program for aligning and connecting sustainability initiatives to demonstrate leadership and progress globally.

<http://dairysustainabilityframework.org/faqs/what-is-the-link-between-the-global-dairy-agenda-of-action-gdaa-and-the-dairy-sustainability-framework-dsf/>

International Labour Organisation Declaration on Fundamental Principles and Rights at Work

Adopted in 1998, the Declaration commits Member States to respect and promote principles and rights in four categories, whether or not they have ratified the relevant Conventions. These categories are: freedom of association and the effective recognition of the right to collective bargaining, the elimination of forced or compulsory labour, the abolition of child labour and the elimination of discrimination in respect of employment and occupation.

www.ilo.org/declaration/lang-en/index.htm

Product Safety Recalls Australia

The Australian Competition and Consumer Commission (ACCC) manages a national internet database, the Recalls Australia website, for all product safety recalls directed at consumers.

www.recalls.gov.au/content/index.phtml/itemId/952826/fromItemId/952823

Regional Wellbeing Survey (CU RWS)

The Canberra University Regional Wellbeing Survey is an annual survey of residents living in Australia's rural and regional areas. First conducted in 2013, it examines the wellbeing of people in rural and regional communities, and how this wellbeing is influenced by the many social, economic and environmental changes occurring in these communities. The results of the CU RWS enable the provision of insights that support the development of strategies to build wellbeing, resilience and adaptive capacity in rural and regional Australia. The 2014 CU RWS report was launched in June 2015 and has been used in the 2015 Australian Dairy Sustainability Framework Progress Report.

www.canberra.edu.au/research/faculty-research-centres/ceraph/regional-wellbeing/survey-results/2014-survey-results

Safe Work Australia

Safe Work Australia is an independent statutory agency responsible to improve occupational health and safety and workers' compensation arrangements across Australia.

www.safeworkaustralia.gov.au

Sustainable Development Goals

In September 2015, United Nations Member States adopted the Sustainable Development Goals as part a new sustainable development agenda. The 17 Sustainable Development Goals (SDGs) and 169 targets demonstrate the scale and ambition of this new universal Agenda. The SDGs and targets will stimulate action over the next 15 years in areas of critical importance for humanity and the planet.

www.un.org/sustainabledevelopment/development-agenda

United Nations Guiding Principles on Business and Human Rights

The "Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework", were developed by the Special Representative of the United Nations Secretary-General on the issue of human rights and transnational corporations and other business enterprises.

The Human Rights Council endorsed the Guiding Principles in its resolution 17/4 of 16 June 2011.

www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf



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