



Australian Dairy Industry  
**Sustainability  
Report 2018**



# About this report

**This report shows the progress of the Australian Dairy Industry Sustainability Framework from the period 1 January 2017 to 30 June 2018 unless otherwise stated. The previous report was for 2016, released in August 2017.**

The Framework outlines the industry's commitment to creating a vibrant industry that produces nutritious, safe, quality food while providing best care for our animals and being good stewards of the environment.

The Framework and goals were agreed by industry in 2012 under the auspices and direction of the Australian Dairy Industry Council (ADIC) and supported by Dairy Australia. Targets, indicators and baseline data measurements were agreed in 2013, with a time horizon of 2020. We have publicly reported our progress against these in 2014, 2015 and 2016 (released in August 2017). This report shows our progress against the 2020 goals and targets, and presents the 2030 goals and targets being adopted for future reporting.

The original scope of the Framework was on those areas the industry could directly influence, namely its farming and manufacturing sectors. However, expectations have changed since the Framework was first developed. Industries are now expected to consider sustainability along the whole value chain, from issues such as the labour and materials used to create inputs, through agricultural production and manufacturing, and including consumer food waste and packaging disposal. In response, the Framework has expanded its scope for some issues. In general, it covers all aspects of the Australian dairy industry with specific focus on farm and manufacturing activities. See pages 6–7 for more information.

This report references disclosures from the Global Reporting Initiative's (GRI) Standards 2016, specifically: GRI 101 Foundation 2016; GRI 102 General Disclosures 2016; GRI 305-4 Emissions 2016 and GRI 416-2 Customer Health and Safety 2016 (see Appendix 6 for a GRI Content Index).

This report has not been externally assured. A policy on external assurance for the Framework and associated performance reporting is yet to be developed. Some data provided by third party agencies may have been assured for other purposes.

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# Message from the Chairs

**Our Dairy Promise spells out the Australian dairy industry's sustainability commitments to our customers, communities, investors and to our own people.**

We promise to provide nutritious food for a healthier world. To do this, we are committed to: creating a vibrant industry that rewards dairy workers and families, their related communities, business and investors; providing nutritious, safe, quality dairy food; striving for the health, welfare and best care for all our animals throughout their lives; and meeting the challenge of climate change and providing good stewardship of our natural resources.

The Australian Dairy Industry Sustainability Framework allows us to measure and publicly report against these commitments. This supports continuous improvement and practice change where necessary, and increases our capacity to address new and emerging issues.

When the Framework was first endorsed in 2012, we were focused on goals for 2020. Following a materiality review in 2016/17, and the launch of Our Dairy Promise and its underpinning commitments in 2017, we began the process of reviewing our goals and targets. It was time to lift the bar and demonstrate our industry's maturity and commitment to sustainability.

In 2018, we have focused on where we want to be by 2030. We have reset our goals and targets to reflect changing expectations of our customers, emerging issues, technological advances, and changes in the regulatory environment.

We are conscious of the role dairy plays in Australia's contribution to the United Nations Sustainable Development Goals (SDGs) – also set for achievement by 2030. Dairy contributes to several of the SDGs and we have taken these into account in refining our own priorities.

To reset our goals and targets, we have worked closely with our stakeholders – from both within and outside the industry – and

we thank them sincerely for their input and guidance.

However, we have not lost sight of the original aims of the Framework as we transition to the new goals, and continue to report on our 2020 goals. The Framework supports our industry's commitment to continuous improvement, and highlights where we have made progress and where additional effort is required. In this our fifth report, we detail our current activity and performance against the Framework's four commitment areas.

It is a challenging time for the industry with a serious drought biting in several of our dairy regions – flow-on effects are impacting the industry overall. However, the Framework is about keeping dairy in business for the long term, and improving our resilience to meet challenges as they come, including a changing climate. To ensure our industry has a strong future, we must keep our eye on the horizon. Our internationally recognised Sustainability Framework allows us to do this.



**Chris Griffin**

Chair, Dairy Sustainability Steering Committee and Consultative Forum



**Terry Richardson**

Chair, Australian Dairy Industry Council

# Promise and commitments

Our Dairy Promise

## To provide nutritious food for a healthier world

### Underpinned by our commitments

#### Enhancing economic viability and livelihoods

Creating a vibrant industry that rewards dairy workers and families, their related communities, business and investors



#### Improving wellbeing of people

Providing nutritious, safe, quality dairy food



#### Providing best care for all our animals

Striving for health, welfare and best care for all our animals throughout their lives.



#### Reducing environmental impact

Meeting the challenge of climate change and providing good stewardship of our natural resources.



We publicly report our progress and support the UN Sustainable Development Goals (SDGs)

# Progress snapshot



## Commitment 1

### Enhancing economic viability and livelihoods

**84%** of dairy farmers made capital investments over the past 2 years (see pg 17)

**57%** of dairy farmers underwent training in 2017, up from 39% in 2014 (see pg 29)

**85%** of consumers agree that industry provides products to meet a range of needs (see pg 17)

**35%** of dairy farmers who participated in Taking Stock support sessions increased their profits by an average of \$16k between July 2016 and June 2018 (see pg 18)



## Commitment 2

### Improving wellbeing of people

**78%** of consumers agree dairy foods are essential for good health and wellbeing (up 7%) (see pg 41)

**8** product recalls; majority due to labelling errors (see pg 37)



## Commitment 3

### Providing best care for all our animals

**8%** National target for percentage of cows able to be induced within a herd reduced from 10% in 2018 to 8% in 2019 (see pg 50)

✓ New industry policy - all calves to be disbudded prior to 8 weeks of age **with pain relief** (see pg 51)

**95%** of farmers do not use routine calving induction (see pg 51)



## Commitment 4

### Reducing environmental impact

**81%** of farmers are managing some land for conservation and biodiversity (see pg 58)

**38%** of dairy farmers have a documented biodiversity plan (down 7%) (see pg 58)

**51%** reduction in dairy companies waste to landfill on 2010/11 baseline (see pg 70)

**5.7%** increase in the consumptive water use by dairy companies since 2010/11 (see pg 62)

## Framework highlights

Established industry working group to tackle packaging waste

Held three Consultative Forum meetings with key stakeholders since 2016 report released

# Changing our goals 2020–2030

A summary of the changes at the goals level is outlined in the following table. A comparison of the 2020 and 2030 goals and targets can be seen in Appendix 5. There are minimal changes at the goal level, with most of the changes occurring at the target level.

| 2020 Goals   |   | 2030 Goals  |
|--|---|---|
|  <p><b>1</b><br/>Increase the future competitiveness and profitability of the Australian dairy industry</p> | → |  <p><b>1</b><br/>Increase the competitiveness and profitability of the Australian dairy industry</p> |
| <p><b>2</b><br/>Increase the resilience and prosperity of dairy communities</p>  | → | <p><b>2</b><br/>Increase the resilience and prosperity of dairy communities</p>   |
| <p><b>3</b><br/>Provide a safe work environment for all dairy workers</p>  | → | <p><b>3</b><br/>Provide a safe work environment for all dairy workers</p>   |
| <p><b>4</b><br/>Attract, develop and retain a skilled and motivated dairy workforce</p>  | → | <p><b>4</b><br/>Provide a productive and rewarding work environment for all dairy workers</p>   |
|  <p><b>5</b><br/>All dairy products and ingredients sold are safe</p>                                     | → |  <p><b>5</b><br/>All dairy products and ingredients sold are safe</p>                              |
| <p><b>6</b><br/>Dairy contributes to improved health outcomes for Australian communities</p>   | → | <p><b>6</b><br/>Dairy contributes to improved health outcomes for all Australians</p>   |
| <p><b>7</b><br/>Provide best care for all animals</p>  | → |  <p><b>7</b><br/>Provide best care for all animals for whole of life</p>                           |
|  <p><b>8</b><br/>Improve nutrient, land and water management</p>  | → |  <p><b>8</b><br/>Improve land management</p>   |
| <p><b>9</b><br/>Reduce the consumptive water intensity of dairy companies by 20%</p>   | → | <p><b>9</b><br/>Increase water use efficiency</p>   |
| <p><b>10</b><br/>Reduce greenhouse gas emissions intensity by 30%</p>  | → | <p><b>10</b><br/>Reduce greenhouse gas emissions intensity</p>  |
| <p><b>11</b><br/>Reduce waste to landfill by 40%</p>   | → | <p><b>11</b><br/>Reduce waste</p>   |



# Resetting our goals and targets

**The Australian Dairy Industry Sustainability Framework and goals were agreed in 2012 by industry. Targets, indicators and baseline data measurements were agreed in 2013, with a 2020 time horizon for achieving the targets. We have publicly reported our goals in 2012, our targets and baselines in 2013 and our progress in 2014, 2015 and 2016.**

The tracking of emerging issues and a shifting sustainability landscape together with insights from extensive stakeholder consultation has led the industry to refresh the Framework goals and update many of the targets that sit behind them. The refreshed goals and targets uphold Dairy's Promise to provide nutritious food for a healthier world.

The new targets are forward-looking and extend to 2030 – although several are ongoing targets and others are set to be reached well before 2030. They reflect a renewed sense of purpose for continuous improvement. We know there are many challenges the industry still needs to face and that we still have a lot of work to do – but the new goals for 2030 confirm our ambition to continue to make changes for the better.

The reset reveals where the Australian dairy industry stands on key material sustainability risks: climate change, animal welfare, human health and nutrition, food waste and industry profitability.

In resetting the goals, we took into account:

Increasing sustainability requirements from large domestic and global customers, who are responding to global issues and initiatives

Increasing pressure from investment analysts and environmental, social and governance (ESG) ranking tools to assess companies in the food and agriculture sector for their exposure to risks (such as water stress, climate change and energy security) and the measures being taken to mitigate these

The increasing challenges of climate change on Australian agriculture in a landscape subject to water scarcity and extreme weather events

The Australian Government's target for all packaging to be recyclable, compostable or reusable by 2025 or earlier

Australian governments adopting global initiatives and approaches on sustainability (e.g. the Australian Commonwealth and NSW governments' moves to introduce modern slavery acts)

The emergence and development of similar frameworks in Australian agriculture for sectors including beef, pork, sheep, eggs, horticulture and cotton. The recently released *National Farmers Federation 2030 Roadmap* contains a number of targets for agriculture similar to the Australian dairy industry's targets. New Zealand dairy has also released its strategic vision including sustainability – *Improving lives with every drop of New Zealand milk* – supported by commitments

Emerging food trends and competition from plant-based substitutes to animal-based dairy milk, butter, cream, yoghurt and cheese products

Increasing sustainability requirements from large global and domestic customers, who are also responding to global issues and initiatives (e.g. *Woolworths' Zero Food Waste to Landfill by 2020*, **McDonalds' zero gross deforestation in their supply chains** and increasing focus on antimicrobial stewardship)

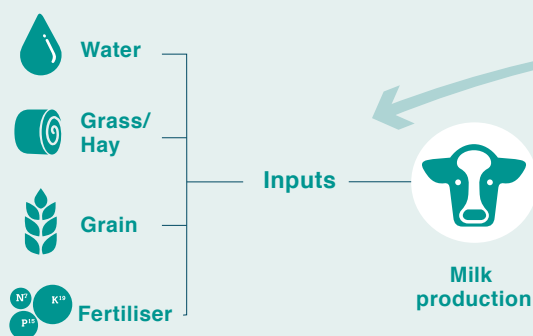
# Addressing the key issues

A materiality review in 2016 identified four sustainability issues posing significant challenges to the industry. They include industry profitability, human health and nutrition, animal health and welfare, and climate change including water scarcity. More information on our materiality process can be found in Appendix 3.

In addition to the four material issues, food waste, human rights and antibiotic resistance have been identified as emerging issues, and the industry is currently formulating a response.

The diagram opposite shows:

- the extended dairy supply chain
- the material and emerging issues and scope of these issues
- where in the supply chain these issues impact (the shaded boxes indicate this, with the darker shading showing where the issue has the greatest impact)
- the alignment of the issues with the relevant UN SDGs.



## Where the material issues impact the supply chain

| Material issues                                | Scope  |
|--|--|
| <b>Industry profitability</b>                  | The profitability of Australian dairy farms and the overall dairy industry   |
| <b>Human health and nutrition</b>              | The safety of Australian dairy products and their contribution to health outcomes  |
| <b>Animal health and welfare</b>               | All aspects of animal welfare on Australian dairy farms and adherence to accepted standards  |
| <b>Climate change including water scarcity</b> | Greenhouse gas emissions and mitigation activities arising from the industry as well as responses to climate change through adaptation |
| Emerging issues                                |  |
| <b>Food waste</b>                              | Food loss and food waste, specifically the decrease in quantity or quality of food through the dairy value chain                       |
| <b>Human rights</b>                            | Human rights as defined by the articles of the UN Declaration of Human Rights  |
| <b>Antibiotic resistance</b>                   | Antibiotics as used by dairy farmers to protect the health and welfare of dairy herds  |

**Note:** Darker shading indicates where in the value chain the industry has the most impact.



|  |  |  |  |  |  |  |  | Framework action area | UN SDG alignment                                     |  |
|--|--|--|--|--|--|--|--|-----------------------|--|--|
|  |  |  |  |  |  |  |  |                       | Enhancing economic viability and livelihoods (pg 13) |  |
|  |  |  |  |  |  |  |  |                       | Improving wellbeing of people (pg 33)                |  |
|  |  |  |  |  |  |  |  |                       | Providing best care for all our animals (pg 47)      |  |
|  |  |  |  |  |  |  |  |                       | Reducing environmental impact (pg 55)                |  |
|  |  |  |  |  |  |  |  |                       | Reducing environmental impact (pg 55)                |  |
|  |  |  |  |  |  |  |  |                       | Enhancing economic viability and livelihoods (pg 13) |  |
|  |  |  |  |  |  |  |  |                       | Providing best care for all our animals (pg 47)      |  |

# Consultation on new targets

## Our 2030 goals and target resetting process has been an inclusive one and continues a long tradition of industry and stakeholder consultation.

Following the materiality review, new goals and targets were drafted by the Steering Committee for wider consultation. Industry representative organisations such as Australian Dairy Farmers (ADF), Australian Dairy Products Federation (ADPF), individual dairy companies and state dairy farmer organisations were consulted directly.

Other relevant industry groups were consulted, and, in some instances, specific working groups were formed to address specific targets.

In-depth discussions were held with the Dairy Manufacturers' Sustainability Council (DMSC) on the goals relating to dairy company environmental sustainability.

The viewpoints of our non-industry stakeholders were sought at two Consultative Forum meetings during 2017 and at one-on-one meetings with several interest groups. The proposed targets were presented at the May 2018 Consultative Forum meeting and members were encouraged to provide their input through discussion and through an interactive survey mechanism. Their input indicated a high level of comfort with most proposed targets, and identified where work was still required.

Further refinement delivered a final set of goals and targets discussed at the October 2018 Consultative Forum Meeting. Stakeholder feedback on the refreshed goals and targets can be found in Appendix 4.

## Our sustainability journey

| Australian Dairy Industry Council direction and Steering Committee guidance |  |   |  |   |   |  |
|---|--|---|--|---|---|--|
| 2012  | 2013   | 2014  | 2015                                       | 2016  | 2017                                      | 2018   |
| Discussion papers   | Consultative forum   | Consultative forum                              | Consultative forum                         | Consultative forum                          | Consultative forum                        | Consultative forum                                 |
| Materiality study   | Key stakeholder meetings                                   | Key stakeholder meetings                        | Key stakeholder meetings                   | Key stakeholder meetings                    | Key stakeholder meetings                  | Key stakeholder meetings                           |
| Face-to-face consultation   |  |   |  | Materiality review                          | Framework review                          |  |
| Consultation focus  |  |   |  |   |   |  |
| Priority areas  | Targets  | Further work on targets, measures and baselines |  | Targets                                     | Updating goals and targets                | Finalising goals and targets to 2030               |
| Goals   | Measures   |   |  | Performance indicators                      | The Dairy Promise                         |  |
| Objectives  | Baselines  | Reporting                                       |  |   |   |  |
| Outcomes  |  |   |  |   |   |  |
| Endorsed Framework publicly released  | Agreed targets, measures and 2013 Progress Report released | 2014 Progress Report released                   | 2015 Progress Report (released March 2016) | 2016 Progress Report (released August 2017) | 2017 Dairy Story (released December 2017) | 2018 Sustainability Report (released January 2019) |

# About the Australian dairy industry 2017/18

F Zdk^tqi hkrf Zkd^rhd  
 @k^Zrhdk:algZ 230,364 tonnes  
 CZi Zg 107,271 tonnes  
 Ltj` Zi hk 7,443 tonnes  
 F ZeZr l bZ 60,113 tonnes  
 B] hg^l bZ 56,400 tonnes



**8** major dairy companies process approx. **85%** of total milk produced



**Dairy companies: 140**  
 (including those who source milk direct from farms and who source from other companies)



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**64%** for domestic use  
**36%** exported

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Dairy industry workforce  
**42,600**



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 ; nm k 92,698 tonnes



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Source: Dairy Australia Annual Report 2017/18

# Australia's Sustainability Framework in the global context

**Food is at the centre of many sustainability challenges facing the world and, as a result, the world's food production systems are changing. Land degradation, biodiversity loss, food security, climate change, population growth, water scarcity, public health, human rights and technological disruption are changing the way food is made.**

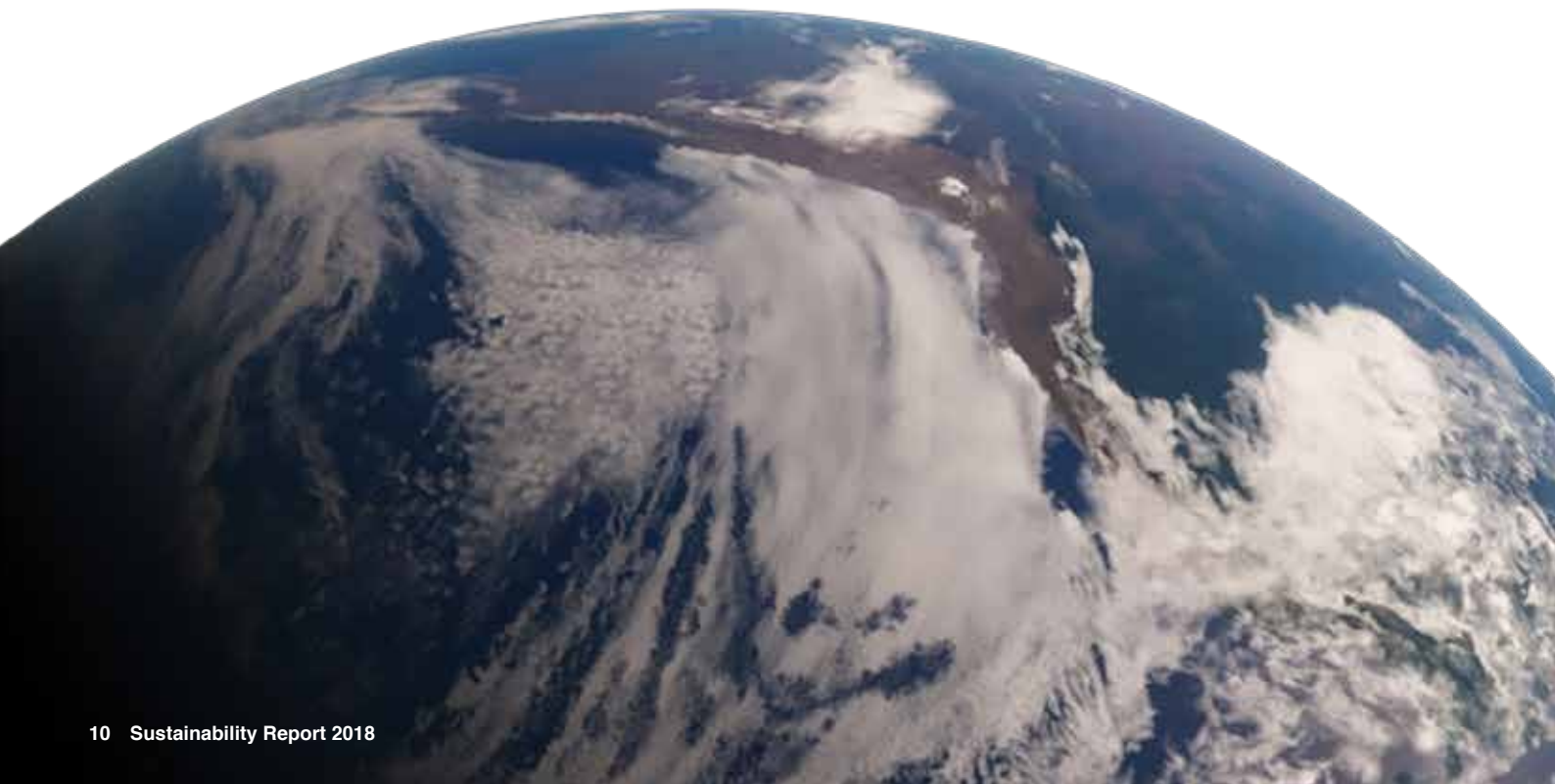
As an industry that requires land, water and animals, and employs people to provide human nutrition, the Australian dairy industry has been redefining its position in the global food chain.

Our longer-term commitment to 2030 shows the Australian dairy industry intends to be an integral part of the national and global effort to address the world's biggest sustainability challenges. The resetting of the targets to a 2030 timeline recognises:

- The international **Paris Agreement on Climate Change** to keep a global temperature rise this century well below 2 degrees Celsius
- The dairy sector's global approach to sustainable development, represented by the internationally-recognised **Global Dairy Sustainability Framework**
- **The United Nations 2030 Agenda** for sustainable development

Our new goals and targets also guide the Australian dairy industry's work with the **Sustainable Agriculture Initiative (SAI) Dairy Working Group** Business-to-Business (B2B) project. The project is using the Global Dairy Sustainability Framework to develop an approach that encourages dairy buyers to recognise the sustainability programs of dairy companies and dairy industry organisations worldwide. The aim is to and reduce the need for duplicative on-farm sustainability audits.

The new Australian dairy industry 2030 goals and targets are forward-looking and reflect a renewed sense of purpose for continuous improvement. We know there are many challenges the industry still needs to face and that we still have a lot of work to do – but the new goals for 2030 confirm our ambition to continue to make changes for the better.



## Sustainable Development Goals — Dairy's global agenda for action

The future of food production is being shaped by a global agenda to set the world on a more sustainable path — the United Nations **2030 Agenda** — which is underpinned by the United Nations Sustainable Development Goals (SDGs). The 17 SDGs and 169 targets are set for achievement by 2030 and are guiding a global effort to meet sustainability challenges, including climate change, population growth, water scarcity, responsible consumption and rewarding work.

Signed off by 194 countries, the SDGs are a universal call to action that aims to unite organisations and sectors with a shared language, a common purpose and a global barometer with which to measure progress. The goals challenge businesses, governments and civil society to do their part towards ensuring our planet is prosperous, healthy and peaceful.

Global dairy's contribution to the SDGs is recognised in the **2016 Dairy Declaration of Rotterdam**, a joint-declaration of the Food and Agriculture Organization (FAO) and the International Dairy Federation (IDF). The **European Dairy Association (EDA)** has also demonstrated how it contributes to the UN SDGs as has the **Global Dairy Sustainability Framework**. These documents recognise the SDGs as the overarching framework for sustainable development to 2030 and the critical contribution the dairy sector makes towards reaching these goals.

We're proud to be playing our part in advancing the SDGs and in this report, we show how our efforts align with the global goals.









# 1

## Commitment

Creating a vibrant industry that rewards dairy workers and families, their related communities, business and investors

### 2030 goals and targets

#### Goal 1 Increase the competitiveness and profitability of the Australian dairy industry

- Target 1.1** New target under development – will be in place in time for first report against 2030 goals (end 2019).
- Target 1.2** Increase the Australian dairy industry's share of global dairy trade to 10% by volume by 2030
- Target 1.3** Increase RD&E expenditure in the dairy sector by 2% per annum
- Target 1.4** Provide consumers with greater choice and access to a variety of dairy products and/or ingredients to meet their specific nutritional needs

#### Goal 2 Increase the resilience and prosperity of dairy communities

- Target 2.1** Increase the contribution the dairy industry makes to supporting the economy of dairy regions
- Target 2.2** Increase the recognition of the benefit of the dairy industry to regional communities by 10% by 2030
- Target 2.3** Increase the contribution people in dairy make to social capital in their community

#### Goal 3 Provide a safe work environment for all dairy workers

- Target 3.1** 100% of dairy workers to be implementing good safety practices
- Target 3.2a** More than 90% of dairy workers working less than 50 hours per week
- Target 3.2b** 30% reduction in Lost Time Injury Frequency Rate (LTIFR) for farm and manufacturing workplaces
- Target 3.3** Zero workplace fatalities on farm and in manufacturing

#### Goal 4 Provide a productive and rewarding work environment for all dairy workers

- Target 4.1** Less than 25% of dairy workers report low levels of life satisfaction
- Target 4.2** Rates of dairy remuneration are similar to or higher than for other regional industries
- Target 4.3** 80% of dairy employees are retained within the industry year-on-year
- Target 4.4** Less than 20% of dairy employers report difficulty in sourcing suitable applicants
- Target 4.5** More than 70% of dairy farm owners have an agreed farm transition/succession plan by 2030
- Target 4.6** Human rights – target and indicators to be developed, following industry discussion

## Our challenge

**What started as a reasonable season in 2017 has quickly deteriorated for most dairy farm businesses. The annual National Dairy Farmer Survey (NDFS) undertaken in February 2018, found that 67% of farmers anticipated a profit in 2017/18 and over half intended to grow their businesses over the next three years<sup>1</sup>. However, the drought conditions in northern Australia have impacted virtually all dairy regions via rising feed prices and access to feed. The shortage of feed, high costs of irrigation water and challenging seasonal conditions have led to an increase in culling rates for herds in 2018, with an associated prediction of reduced farmer confidence and farm exits may also increase as a result. This is flowing through to dairy companies with suboptimal throughputs in some of their processing plants, creating competition for milk.**

The wider dairy market has been relatively more settled – with the Australian domestic market showing growth in milk, cheese and yoghurt sales – both volume and value. Globally, slightly weaker commodity prices have been moderated by lower global production in 2018.

Ongoing tensions between dairy farmers and dairy companies, and increasing competition for milk, have also added to the volatility. The Australian Government has launched a mandatory dairy code of practice to address contract terms between suppliers and dairy companies that: unreasonably reduce the ability or incentive for farmers to switch to other dairy companies; allow dairy companies to vary key terms of the contract unilaterally; and provide an effective, independent and cost-effective dispute resolution process. All of this means there are increasing challenges for the dairy industry to collectively address our commitment to creating a vibrant industry that rewards dairy workers and families, their related communities, business and investors.

## What's changed and how are we addressing it

**Banks, investors and market analysts are becoming more aware of the sustainability risks associated with investments in livestock-based food production. They want to see proof these risks are being managed. The industry also wants to ensure all sectors can remain profitable in the long run, despite increasing volatility.**

The dairy industry also understands the increasing focus on human rights. Our Goals 3 and 4 recognise this and we are considering how best to ensure the industry has a transparent supply chain with no human rights abuses. While anecdotally, we believe the industry is doing the right thing, we need to investigate how inputs are produced and ensure no workers' rights are ignored or violated at any stage along our supply chain. While new legislation has been introduced on modern slavery, we need to be ahead of this and put systems in place with appropriate actions to support whatever position the industry takes on human rights.

On the home front, the dairy industry is also focusing on ensuring a safe work environment for dairy farm workers. Agriculture has among the highest number of fatalities and injuries of any sector. Every dairy worker has the right to come home safely – and the industry is helping unpack the reasons why farms are not safe and what needs to happen to make them safe. Dairy companies continue to place a high priority on worker safety and there has been a big improvement in their Lost Time to Injury Frequency Rate (LTIFR).

<sup>1</sup> [Australian Dairy Industry In Focus 2018, Dairy Australia](#)



## Human rights and modern slavery

### An emerging issue

#### The challenge

Modern slavery, where one person removes another person's freedoms, is the subject of new Australian Commonwealth Government legislation. The legislation requires companies with an annual turnover of \$100 million or more to report annually on risks in their operations and supply chain. The dairy industry will have to adjust to the changes that legislation will bring and is already seeing large dairy customers request social audits, investors and analysts increase their scrutiny of business risks, and organisations like Sedex seek information from suppliers on their human rights practices. Individual companies are already taking steps to manage this issue.

#### Our approach

The dairy industry is currently developing a discussion paper on human rights to explore whether an industry policy, position or principles on human rights is required and what that would entail.



## **Towards Goal 1** Increase the future competitiveness and profitability of the Australian dairy industry

**The profitability of our farms and our dairy companies underpins the sustainability of the Australian dairy industry. It is a key material issue for the industry. We will continue to focus on this goal with appropriate targets for 2030 – and use industry tools like DairyBase to support our approach.**

### **How we performed against our 2020 targets**

A key achievement in this area is dairy companies continued efforts to evolve their product ranges and explore new markets. Consumers are seeking greater choice and access to a variety of dairy products and/or ingredients to meet their specific nutritional needs. In response, companies are introducing new products to meet demands to support gut health, for food on-the-go, and for snackable portions that enable consumers to integrate healthy amounts of dairy into their diets. Other companies have set their sights on the growing yoghurt market in China, which has grown 20% annually over the last five years<sup>1</sup>.

Much of the activity in this area was concerned with developing a new measure of consumers' perceptions. The Dairy Trust Tracker will be used to determine whether industry is providing a range of products to meet different needs. Results showed 75% in 2017 and 85% in 2018 agreed their needs were being met.

<sup>1</sup> [Source: Dairyreporter.com, 'Now more popular than milk, China's yogurt market lures international newcomers', 7 November 2018](#)



## 1 Increase the future competitiveness and profitability of the Australian dairy industry

| 2020 Targets  | Baseline     | 2014                                   | 2015 | 2016 | 2018             | 2020 Target  | Progress |
|---|--------------|--|------|------|------------------|--------------|----------|
| 1.1 X% increase in the number of profitable dairy farms<br>The target percentage was not determined for 2020  | 55%          | 51%                                    | 47%  | 50%  | 52% <sup>1</sup> | Under review | ●        |
| 1.2 X% increase in the market preference for buying Australian dairy products, compared with our top 3 international competitors (NZ, EU and US)    | Under review |  |      |      | No data          | Under review |          |
| 1.3 Ensuring sustainability criteria (eg carbon, animal welfare, environmental impact) do not impede market access                                  | Under review |  |      |      | No data          | Under review |          |
| 1.4 Increase adoption of new technologies and innovative practices within the dairy industry – measured by % of farmers planning capital investment | 40%          | 51%                                    | 52%  | 49%  | 79% <sup>2</sup> | Under review | ●        |
| 1.5 Provide consumers with greater choice and access to a variety of dairy products and/or ingredients to meet their specific needs                 | Under review | This wasn't reported on in 2016 report |      |      | 85% <sup>3</sup> | Under review | ●        |

1 ABARES — See appendix 7 (pg 93)

2 NDFS 2018 — See appendix 7 (pg 92)  
Different Question in NDFS 2018 about farmers intention to invest in next 2 years. 79% said they intend to invest and 84% said they had made investments over past 2 years. NDFS 2018 was undertaken in February/March 2018 and farmer confidence has changed since then

2 Dairy Trust Tracker 2018 — new question about whether dairy products were meeting consumer needs. 75% agreed in 2017 and 85% agreed in 2018

Progress towards 2020 Target against baseline ●

Result maintained or marginal change ●

Regression ●

## Key initiatives to support Goal 1

**Policy direction** The Australian Dairy Farmers' 'Farming Systems and Herd Improvement Policy Advisory Group's (PAG)' focus is to drive sustainable farm profitability. The PAG supports ADF's policy and advocacy work on issues ranging from dairy research, development and extension (RD&E) strategy, farm decision-making tools, farm business management, Genetic Modification (GM) delivery to farm, herd improvement, and agricultural and veterinary (Agvet) chemicals. The ADF's 'Markets, Trade and Value Chain PAG' is committed to improving dairy farm profitability and ensuring sustainable growth for Australian dairy production. Both PAGs are strongly supported with technical input from Dairy Australia.

**DairyBase** is a web-based tool that enables dairy farmers to measure and compare their farm business performance over time. In particular it identifies opportunities to drive profit and reduce risk, as well as make more informed business decisions. In 2017/18 an additional 269 farms registered with the program, bringing the total to 1,567<sup>1</sup> farmers nationally. Dairy companies are actively encouraging their farmer suppliers to use DairyBase. Aggregate data generated through DairyBase will help track industry performance. DairyBase also contains information from the Dairy Farm Monitor Project (DFMP), now in its tenth year of data reporting, and the Queensland Dairy Accounting Scheme (QDAS). The DFMP and QDAS data record financial and production data of participating dairy farms in all major dairying regions across Australia.

**Taking Stock** helps farmers manage high feed costs and limited fodder availability. Around 1,130<sup>1</sup> farmers participated in the one-on-one sessions between July 2016 and June 2018 to map out a plan for the season ahead with support from a farm consultant who reviewed their farm business. As a result, 35% of these farmers made changes that increased their profits by an average of \$16,000.

The **Feed Shortage 2018** microsite was launched as part of the industry-wide drought response initiated to support farmers impacted by the dry conditions prevailing in Australia this year. A range of dairy feed tools are assisting farmers to plan and cost feed inputs. Regular hay and grain reports are provided as an independent and timely assessment of hay and grain markets in each dairying region.

The **Dairy Feedbase** program aims to improve pasture performance, animal nutrition and the cost competitiveness of the feedbase. Dairy Australia, the Victorian Government and the Gardiner Dairy Foundation have jointly committed \$54 million for the program over six years.

**DataGene** is an independent and industry-owned organisation. It is responsible for developing modern tools and resources to drive genetic gain and herd improvement in the Australian dairy industry, through research, development and extension activities. Late in 2017, DataGene released a new Australian Breeding Value for heat tolerance which allows farmers to breed animals with improved tolerance to hot, humid conditions. This characteristic is likely to become increasingly important in a warming climate, and can also have benefits for animal welfare.

**Project 20:20 Pathways to Change** is a collaborative project launched in 2017 by Dairy NSW, Subtropical Dairy, Dairy Australia and the Department of Primary Industries. Aiming to grow the industry in NSW, Project 20:20 works with five feature farms to develop their unique business management plans and share the learning through the region.

<sup>1</sup> Dairy Australia Annual report 2017/18



## Case study

### Benchmark for self-improvement on-farm

An industry's ability to boost profitability across the board starts with the willingness of individual members to measure and monitor their own outcomes, Victorian dairy farmer John Verstedden says.

"Benchmarking is always helpful," Verstedden says. "Doing your finances is fine, but actually pulling apart and sorting out where the business can improve its performance is the key part of it. Doing the financials and then putting them on the shelf really doesn't achieve anything. It's all about interrogating those figures to a point where you can say, 'We did this last year and it didn't work that well, so how can we get a better result this year?'"

John recommends that fellow farmers join a local discussion group – just as he and his wife Lyn did when they took up dairying at Longwarry, in west Gippsland, in 1984.

While Dairy Australia produces a wealth of information to support productivity advancement, selecting and adopting relevant material must be done at farm level. "It's something you as a farmer have to work through for yourself to make sure it applies to your circumstances," John said. He says his operation benchmarks itself on three fronts: financial, production and natural resources.

"Farming in a fully commercial way and having a rewarding lifestyle go hand-in-hand. If a farm's not a business, it's more than likely not going to support a reasonable lifestyle – that's when you'll find yourself working seven days a week. That's not the way it needs to be anymore."



## **Towards Goal 2**

### **Increase the resilience and prosperity of dairy communities**

**Dairy makes an enormous social and economic contribution to the eight regions in which it operates across Australia.**

#### **How we performed against our 2020 targets**

A key achievement in this area has been the creation of new targets and indicators for measuring the impact of dairy activity on economic output, community recognition and social capital. These targets will enable the industry to better report progress on this goal.





## 2 Increase the resilience and prosperity of dairy communities

| 2020 Targets  | Baseline     | 2014 | 2015 | 2016 | 2018             | 2020 Target | Progress     |
|---|--------------|------|------|------|------------------|-------------|--------------|
| 2.1 Understand the contribution the dairy industry makes to supporting the economy of dairy regions   | Under review |      |      |      |                  | No update   | Under review |
| 2.2 The contribution of dairy is recognised in relevant local and state government strategies (especially growth and investment strategies) | Under review |      |      |      |                  | No update   | Under review |
| 2.3 Increase consumers' and dairy communities' recognition of the value of the dairy sector   |              |      |      |      |                  |             |              |
| Dairy industry is an essential part of the community  | 71%          | 70%  | 68%  | 67%  | 88% <sup>1</sup> | 78%         | ●            |
| People in my region appreciate the role that dairy farmers like myself play in our community  | 76%          | 76%  | 79%  | 78%  | 67% <sup>2</sup> | 87%         | ●            |

1 Dairy Trust Tracker 2018, 88% of respondents agreed although the exact question differed in 2018 compared to previous years.

2 NDFS 2018

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●

## Key initiatives to support Goal 2

**Legendairy Capital** Australia's Legendairy Capital program is a biannual regional community grants, public relations and communications program that celebrates the contribution of dairy farmers and the dairy industry to local communities.

Launched in 2015, Dairy Australia's Legendairy Capital program celebrates regional communities around the country by highlighting how dairy farmers contribute to their town, their industry and the Australian economy.

Australian regional dairy communities are invited to nominate their town to share their stories of what makes their community Legendairy. Communities submit a project idea that benefits the entire community, which is independently judged by Australia's state dairy organisations against a set of criteria which includes:

- Social capital
- Innovation and resilience
- The project idea

In 2017 the following towns were recognised as the regional finalist in their dairy region:

- 1 Poowong (Gippsland)
- 2 Cohuna (Murray Region)
- 3 Hannam Vale (New South Wales)
- 4 Mount Schank (South Australia)
- 5 Beaudesert (Subtropical Region)
- 6 Ringarooma (Tasmania)
- 7 Cowaramup (Western Australia)
- 8 Simpson (Western Victoria)

The national Australia's Legendairy Capital for 2017 was named as Ringarooma, located in Tasmania's north-east.

Nominations for the next Australia's Legendairy Capital will open in early 2019.





## Case study

### Measuring community perceptions

**Since 2013 community perceptions have been used as a proxy for measuring the contribution dairy farmers and dairy companies make to the resilience and prosperity of dairy communities.**

The challenge for the dairy industry was to identify less subjective measures and, as a result, more credible targets and indicators for increasing the prosperity and resilience of dairy communities.

Following research by social scientists and intensive consultation with stakeholders, new targets and indicators for community resilience and prosperity in dairy communities have been set for 2030 – refer Appendix 5 for more details.



## Towards Goal 3

### Provide a safe work environment for all dairy workers

People are the most important part of every dairy business. Our sustainability targets assist in defining industry work place culture.

#### How we performed against our 2020 targets

More can be done in the area of farm safety. The **2017 Power of People in Dairy (POP)** survey showed no significant improvement in injury data compared with 2014.

Overall some data suggests a decline, however this may be due to an improved understanding. Farmers' perceptions on safety may have been reset and the 2017 results may be more reflective of practices<sup>1</sup>.

**Safe Work Australia** injury and fatality statistics reveal that the Lost Time to Injury Frequency Rate (LTIFR) for dairy companies has decreased substantially from the 2016 report, with farm decreasing slightly. There were two fatalities on dairy farms in the 2017 calendar year.



### 3 Provide a safe work environment for all dairy workers

| 2020 Targets   | Baseline | 2014 | 2015    | 2016    | 2018              | 2020 Target | Progress |
|--|----------|------|---------|---------|-------------------|-------------|----------|
| <b>3.1 100% of on-farm and dairy company workers completed OH&amp;S training</b> |          |      |         |         |                   |             |          |
| On-farm workers  | 46%      | 46%  | no data | no data | 38% <sup>1</sup>  | 100%        | ●        |
| Dairy company workers  | 100%     | 100% | 100%    | 100%    | 100%              | 100%        | ●        |
| <b>3.2 30% reduction in Lost Time Injury Frequency Rate (LTIFR)</b>              |          |      |         |         |                   |             |          |
| Dairy farming  | 5.8      | 8.9  | 6.7     | 14.3    | 13.7 <sup>2</sup> | 3.6         | ●        |
| Dairy companies  | 8.2      | 8.6  | 13      | 12.1    | 5.6 <sup>2</sup>  | 6.1         | ●        |
| <b>3.3 Zero workplace fatalities<sup>3</sup></b>                                 |          |      |         |         |                   |             |          |
| Dairy farming  | 2        | 1    | 3       | 6       | 2 <sup>3,4</sup>  | 0           | ●        |
| Dairy companies  | 0        | 0    | 0       | 0       | 0 <sup>3</sup>    | 0           | ●        |

1 **POP Survey 2017** — See Appendix 7 (pg 92) (Formal plans in place)

2 Source: 2016/17 National Data Set for Compensation-based Statistics, Safe Work Australia (See [safeworkaustralia.gov.au/](http://safeworkaustralia.gov.au/))

3 Source: Safe Work Australia's Work-related Traumatic Injury Fatality (TIF) data; and media monitoring reports (See [safeworkaustralia.gov.au/](http://safeworkaustralia.gov.au/))

4 Dairy Australia monitors media reports and 2 fatalities were reported in calendar year 2017. Safe Work Australia's work-related Traumatic Injury Fatality (TIF) data collection has listed 1 fatality for 2017.

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●



## Case study

# Farmers welcome safety kit

**To assist farmers make a sustainable improvement to the safety of farm owners, employees, families, contractors, service providers and visitors on dairy farms, Dairy Australia has supported the development of the Farm Safety Starter Kit.**

Developed by dairy farmers for dairy farmers, the kit provides practical, easy-to-use resources to enable dairy farmers to get their farm safety system started or improve their existing system. The kit contains:

- **Farm Safety Induction:** a checklist on the key areas to be covered for new employees, roles and responsibilities for farm managers and employees
- **Safety System Snapshot:** a 'traffic lights' format which compares an individual farm system to the legal requirements
- **Quick Safety Scans:** a set of one-page scans on the key hazard areas on a dairy farm
- **Injury and Incident Register:** a ready-to-use template to record incident information
- **Action plan:** to assist farmers to follow up on the areas that need to be fixed or improved

Feedback from farmers has been very positive. Kathie Harvey from Narrung, Victoria, found it a useful tool to engage with staff on safety, and get their feedback on any findings or problems.

Mount Compass, South Australia, dairy farmer Michael Connor said: 'It's not 'here's what you have to do'; it's more like 'how can we best do this?' – and it's written up and built into a manual.'

To date 2,600<sup>1</sup> farm safety starter kits have been provided to farmers.

<sup>1</sup> Dairy Australia 2017/18 Annual Report

### Key initiatives to support Goal 3

**Workplace safety inspectors** are increasing the number of dairy farm inspections in a bid to improve farm safety. Dairy Australia has created a guide to help farmers through these inspections and to improve farm safety.

**White Card Accreditation Program** is a new national scheme for milk tanker drivers focussed on farm safety that will allow drivers to follow the same protocols regardless of which company they deliver to. Previously each dairy company had different requirements. It streamlines training for drivers and improves farm safety. The program was launched in March 2018 by Dairy Australia and Goulburn Ovens Institute of TAFE.

**Power of People in Dairy (POP) survey** is conducted every three years and is a key source of benchmark, program and impact data about farmers' attitudes and practices relating to a number of areas including farm safety. The October 2017 survey contained expanded questions on farm safety.

**Farm Safety Adventure** The Farm Safety Adventure complements the Farm Safety Program. It is intended to educate school students and their families about farm safety, with a pilot program currently running in 24 regional schools across Australia. This will help ensure the next generation of farmers is more safety conscious.





## **Towards Goal 4**

**Attract, develop and retain a skilled and motivated dairy workforce**

**The dairy industry is committed to developing a skilled and motivated workforce and creating a safe workplace for all dairy people.**

## **How we performed against our 2020 targets**

More farms are engaged with training and education. The 2017 Power of People in Dairy (POP) survey found that 57% of farms have people that attended formal or informal training in the past 12 months, up 18% on 2014. Farmers believe involvement in training and education is creating a positive impact on staff efficiency and effectiveness – 59% of those engaged have noticed some or a significant improvement in staff effectiveness, an increase of 38% since 2014. As a result of industry training, 40% of farm owners reported they had made changes to the way they run their farms.





## 4 Attract, develop and retain a skilled and motivated dairy workforce

| 2020 Targets  | Baseline     | 2014                  | 2015                        | 2016 | 2018                                     | 2020 Target                 | Progress |
|---|--------------|-----------------------|-----------------------------|------|--|-----------------------------|----------|
| <b>4.1 30% increase in the number of suitable applicants for dairy industry jobs</b>  |              |                       |                             |      |  |                             |          |
| Measured by % dairy farmers who expect to recruit new staff in the next 12 months   | 20%          | 22% expect to recruit | Not Reported in 2016        |      | <b>16%<sup>1</sup> expect to recruit</b> | 30% increase (under review) | ●        |
| Dairy companies   | Under review |                       |                             |      |  | Under review                |          |
| <b>4.2 Increase participation in development activities</b>   |              |                       |                             |      |  |                             |          |
| Extension   | 20%          | 39%                   | Not reported in 2016 report |      | <b>57%<sup>1</sup></b>                   | 100% increase               | ●        |
| <b>4.3 Retain an experienced and motivated dairy workforce – 20% increase in the number of experienced employees retained</b> | 75%          | 75%                   | Not reported in 2016 report |      | <b>71%<sup>2</sup></b>                   | 90%                         | ●        |
| <b>4.4 50% of dairy farmers have a well-developed business transition plan</b>  | 8%           | 8%                    | Not reported in 2016 report |      | <b>21%<sup>3</sup></b>                   | 50% - under review          | ●        |

- POP Survey 2017 – also noted 74% of dairy farmers have no intention to recruit new staff in the next 12 months
- POP Survey 2017 – of the 29% who left employment, 76% stayed in the dairy industry
- POP Survey 2017 – 21% had an agreed plan, but a further 30% know what they are going to do but haven't formalised it

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●

### Key initiatives to support Goal 4

**Policy direction** The ADF's 'People and Human Capacity Policy Advisory Group (PAG)' drives farm sector policy development and advocacy in the crucial area of people and workforce capacity. The PAG's scope includes policy areas supporting the attraction, development and retention of a highly skilled workforce for the dairy industry. Key functions include developing strategies to promote dairy industry participation, build leadership capacity, and address workforce and skills shortages.

**Industry extension and training programs** Dairy Australia offers a range of extension services focused on making good on-farm decisions. Some of these include Cool Cows, InCalf, Countdown and the People in Dairy. DA also recently launched two high-priority farm business management programs: Farm Business Fundamentals; and Dairy Business Analysis.

**Rural Veterinary Resident Training Program** is an industry training program to attract, upskill and retain veterinarians in the Australian dairy industry. The program for young vets provides advanced clinical training-skills in diagnosis and treatment of dairy cattle; develops expertise in whole-farm production programs; supports farm-based research relevant to dairy industry; and exposes them to skilful practitioners in clinical practice.

**DairyLearn Module** Transitioned from the National Centre for Dairy Education, the DairyLearn model for dairy education links training providers with industry- approved resources and tools. This provides greater choice in training providers and the opportunity to engage with many more dairy students across Australia.





## Case study

# Vet residents build capacity across industry

The Rural Veterinary Resident Training Program is a joint initiative of the University of Melbourne, the Gardiner Foundation and Dairy Australia. It aims to attract, upskill and retain veterinarians in the Australian dairy industry.

Inaugural program coordinator and experienced dairy vet, Assoc Prof Michael Pyman, said it's becoming increasingly difficult to attract and retain veterinarians in rural practice. "It's a global issue," he said.

"However, retaining experienced practitioners in rural clinics is critical to farm productivity, and enables local practices to provide timely clinical care, and competent animal health advice.

"The program set out to demonstrate to young vets the benefits of advanced medicine, networking and research to aid and improve their careers, and encourage them to remain within the agricultural industry."

The program has nine graduates so far with a 100% completion rate. All graduates from the program are working with the dairy industry in some capacity. The majority are in rural veterinary practices, one is with a dairy manufacturer working with farmer-suppliers, and another is in the veterinary pharmaceutical industry.

A further four residents are currently in the program and six new residents are commencing soon. Five veterinary practices at six locations have been involved.

Current program coordinator, Dr David Beggs, who is also the Senior Lecturer in Cattle at the University of Melbourne said the program has also delivered new research into mastitis, calf rearing, reproduction and more that can be practically applied on farm.

Dr Andrew Hancock completed the program in 2015 through The Vet Group in Timboon, Victoria. His research project focused on

dairy herd bull breeding soundness and management, with findings incorporated into the latest InCalf manual for farmers.

"Participation in the Resident Program opened up a whole new world for me, and new career pathways to explore," Dr Hancock said.

"I learned so much about the dairy industry in Australia through the course work which covered programs such as Countdown and InCalf, as well as visiting other dairy regions.

"The skills I learned and the people I met have set me up for a great career in the dairy industry."

Dr Hancock also had the opportunity to share his knowledge with a new generation of vets. The program included a requirement to teach clinical skills to University of Melbourne vet students who visited the Timboon practice as part of a compulsory dairy placement. Teaching and monitoring students, and introducing them to rural life, became a highlight of the program.

"Hopefully we inspired a few students to consider moving to a rural area and working in large animal practice."

Dr Hancock is now the Veterinary Operations Manager (Livestock) with animal health company Zoetis. Working across beef, sheep and dairy, he is the dairy expert of the vet team. Knowledge gained through the program is integral to his job.

And the lasting impact of his time as a dairy resident?

"As a result of the program, I became deeply involved in and passionate about dairy, and inspired to work in the dairy industry specifically. I think that it has also made me more employable in the dairy industry."





# 2

## Commitment

### Providing nutritious, safe, quality dairy food

#### 2030 goals and targets

##### Goal 5

##### All dairy products and ingredients sold are safe

- Target 5.1** Zero non-compliant chemical residues found during the Australian Milk Residue Analysis (AMRA) Survey
- Target 5.2** Zero product recalls due to food contamination
- Target 5.3** 15% increase in the number of consumers who agree Australia produces safe, high quality dairy products (based on 2018 figures)
- Target 5.4** Food Safety Culture embedded into the dairy food business

##### Goal 6

##### Dairy contributes to improved health outcomes for all Australians

- Target 6.1** Improve consumers' perception of the health and nutrition benefits of dairy foods
- Target 6.2** The National Health and Medical Research Council (NHMRC) Australian Dietary Guidelines continue to recommend milk, cheese and yoghurt as part of a healthy diet
- Target 6.3** Australians meet recommended daily serves for dairy
- Target 6.4** All dairy companies adopt a stated position on responsible consumption by 2020 and publicly report on progress by 2030

## Our challenge

**Sixty-seven percent of Australian adults are overweight or obese and on average, 35% of energy intake comes from discretionary foods. Non-communicable diseases and sustainability are major influences on health and nutrition around the world. This focus has significant impacts on our domestic and international health and nutrition policy/regulatory decisions and on our international export markets.**

The Australian Dietary Guidelines recommend that adults consume an average of three serves of milk, cheese, yoghurt and/or alternatives each day. However only 10% of adults and 20% of children get enough dairy foods and as a result, are missing out on the associated health benefits. Importantly, an economic analysis conducted by the University of South Australia in 2011 determined that if Australians increased their intake of dairy foods to the recommended levels, at least \$2 billion could be saved from the annual health-care budget<sup>1</sup>.

An emerging issue in food regulation is the focus on added sugar (including proposed changes to food labels and the Health Star Rating), alongside reformulation targets for dairy foods. These issues present both challenges and opportunities for dairy.

Dairy foods are nutrient rich and readily available in affordable, convenient and appealing forms that are produced locally in Australia. The evidence for consuming milk, cheese and yoghurt has strengthened in recent years, with adequate dairy consumption being linked with reduced risk of many chronic diseases. The dairy industry supports policy and regulatory decisions where there is a clear public health benefit and we are working hard to ensure that all types of milk, cheese and yoghurt (regardless of fat, sugar or sodium content) are accurately recognised for the health benefits they provide.

## What's changed and how we are addressing it

**Safe food production is key to industry growth and ongoing access to domestic and international markets. According to Food Standards Australia New Zealand (FSANZ), a 'food safety culture' comes from people understanding the importance of making safe food and committing to doing whatever it takes, every time<sup>2</sup>. The Australian dairy industry recognises the need for a strong food safety culture in its production sector. Introducing a specific target (5.4) into the Framework under our food safety goal (5) will increase focus on this issue.**

Other food safety targets under this goal remain unchanged. Chemical residues and food safety recalls continue to be important indicators of food safety. We are also continuing to monitor consumer perceptions of dairy food. The baseline has been moved to 2018 as the Dairy Trust Tracker was introduced in 2017 to replace the Dairy Monitor Survey, and question wording has been updated slightly.

We have updated some of the wording in our nutrition-related targets to align with questions in the Dairy Trust Tracker. As there is increasing focus on the importance of a healthy diet and the responsibility of food producers to provide healthy choices, we have also set a target for all dairy companies to adopt a stated position on responsible consumption by 2020, and publicly report on progress by 2030.

<sup>1</sup> University of South Australia  
<http://w3.unisa.edu.au/news/2011/021211.asp>

<sup>2</sup> Food Standards Australia New Zealand  
[www.foodstandards.gov.au](http://www.foodstandards.gov.au)





## Towards Goal 5

### All dairy products and ingredients sold are safe

Consumers take food safety for granted and expect that all dairy products are safe. Meeting this expectation is essential to ensuring the health and wellbeing of our customers, and maintaining our reputation as a supplier of safe, quality dairy products.

#### How we performed against our 2020 targets

The Australian dairy industry continues to demonstrate a high standard of food safety. In 2017/18, no milk samples tested in the **Australian Milk Residue Analysis (AMRA) survey** were found to exceed the residue standards. There were eight food safety recalls in 2017, the majority of which were due to incorrect labelling about allergens in the products. More work is being done to ensure a culture of food safety continues to be embedded across the industry.

In the Dairy Trust Tracker 2018, 81% of consumers agreed that Australia produces safe dairy products (up from 70% in 2017). Approximately 83% of consumers agreed that the dairy industry produces high quality products (up from 76% in 2017).





## 5 All dairy products and ingredients sold are safe

| 2020 Targets   | Baseline | 2014 | 2015 | 2016 | 2018             | 2020 Target | Progress |
|--|----------|------|------|------|------------------|-------------|----------|
| 5.1 Zero non-compliant chemical residues found during the AMRA Survey                                      | 0        | 0    | 0    | 0    | 0                | 0           | ●        |
| 5.2 Zero product recalls due to food contamination   | 7        | 8    | 9    | 7    | 8 <sup>1</sup>   | 0           | ●        |
| 5.3 15% increase in the number of consumers who agree Australia produces safe, high quality dairy products |          |      |      |      |                  |             |          |
| The dairy industry produces safe products  | 67%      | 69%  | 67%  | 68%  | 81% <sup>1</sup> | 77%         | ●        |
| The dairy industry produces high quality products  | 77%      | 74%  | 75%  | 74%  | 83% <sup>2</sup> | 88%         | ●        |

1 Product Safety Recalls Australia — See Appendix 7 (p94)

2 Dairy Trust Tracker 2018

Progress towards 2020 Target against baseline ●

Result maintained or marginal change ●

Regression ●

## Key initiatives to support Goal 5

### **Australian Milk Residue Analysis (AMRA) survey**

This annual survey is the national residue monitoring program for agricultural and veterinary chemicals and environmental contaminants in milk. It is funded by industry through the Department of Agriculture and Water Resources (DAWR) and co-ordinated by Dairy Food Safety Victoria (DFSV). The survey involves testing randomly selected milk samples at the tanker level for a range of residues. The survey has a key role in promoting the dairy industry's reputation and facilitating ongoing market access as it provides evidence that the dairy industry's food safety systems are operating effectively. Throughout each year around 1000 samples of raw milk are collected from farms across all dairying regions of Australia. These samples are used to conduct around 13,000 analyses for nearly 70 different compounds covering such things as antimicrobials, animal parasite control chemicals, feed contaminants and environmental contaminants. The results tell an overwhelmingly positive story for Australia's dairy industry, with close to 100% compliance over the history of the survey. In 2017/18, 100% compliance was achieved.

**PASE program** The Federal Government's Package Assisting Small Exporters (PASE) program funded Dairy Australia to manage a project aimed at helping small to medium dairy enterprises (SMEs) to: embed a food safety culture within their business continuity

plans; demonstrate this culture is being effectively implemented; be trade ready and able to trade into markets of choice, promoting export markets especially; and protect the dairy industry's reputation internationally as a producer of safe, quality dairy products. The dairy resources developed through PASE complement the materials in FSANZ's **Food Safety Culture Hub** and help reinforce the need for food businesses, especially SMEs, to prioritise food safety culture throughout their business. They can also be accessed via the Dairy Manufacturing Resource Centre.

The **Dairy Manufacturing Resource Centre** housed on the Dairy Australia website provides a range of resources to support dairy companies including materials relating to trade (insights from successful export SMEs, China insights, indicative costs of a food recall), learning materials (online courses relating to food recalls), food safety programs, product testing, and webinar information (technology, manufacturing, regulations).

### **Food Safety Culture Maturity Model**

Dairy Food Safety Victoria (DFSV) is developing a model for assessing food safety culture performance across the dairy industry. Companies will be able to use the results to better understand the maturity level of food safety culture in their own businesses to help implement actions as required.



## Case study

# People and culture critical for safe food

In a business, food safety culture is how everyone (owners, managers, employees) thinks and acts to make sure that the food they make or serve is safe.

Poor hygiene practices or mistakes by people producing or handling food can make food unsafe. Having a strong food safety culture focuses a business on the actions needed to protect consumers from foodborne illness. It also safeguards brand reputation and helps avoid financial loss.

“Safe production is key to industry growth and ongoing access to domestic and international markets,” said Amanda Hill, CEO of Dairy Food Safety Victoria (DFSV).

“Food businesses need to focus on people as well as processes and procedures. It’s about everyone doing the right thing, all the time. The challenge is closing the gap between knowledge and behaviour.”

Supported by industry funding, DFSV is working with technical experts at Cultivate to develop a validated self-assessment tool to measure the maturity of behaviours to support food safety across the dairy industry. It is also developing programs that will help connect incentives to a business’ food safety maturity level, recognising positive food safety culture.

“By using the Food Safety Culture Maturity model, individual businesses will be able to assess how mature they are in terms of their food safety culture,” said Ms Hill.

“The model will consider such things as employee behaviour, the ability of a business to adapt, and consistency of standards and procedures.”

Use of the model will be voluntary but will help businesses identify areas where a change in behaviour may be required to improve food safety culture. It will also support the food safety audit process, and potentially reduce audit costs.

Working with industry, DFSV will develop a suite of support materials and tools to strengthen food safety culture for both farmers and processors.

The model is also expected to deliver performance data at the industry level, providing additional assurance against standards for both domestic and export markets.

“This aggregate information will also help prioritise resource development and training needs so we can have a better food safety culture across the industry,” said Ms Hill.

The model will be adapted from a global food safety maturity model and tailored for the Australian dairy context in partnership with industry. Trials will initially be done in Victoria but the model will be applicable nationally.



## **Towards Goal 6**

### **Dairy contributes to improved health outcomes for Australian communities**

**The dairy industry's approach to health and nutrition sustainability is informed by the Australian Dietary Guidelines. Human health and nutrition have been identified as a material issue for the industry.**

#### **How we performed against our 2020 targets**

In the 2018 Dairy Trust Tracker, 81% of respondents believe that the dairy industry contributes to a healthy Australia through the products it offers (up from 70% in 2017); and 78% of respondents believe dairy foods are essential for good health and wellbeing (up from 71% in 2016). Milk, cheese and yoghurt continue to maintain their recognition as a five food groups food in the Australian Dietary Guidelines and are perceived by 65% of respondents to the Dairy Trust Tracker 2018 to play an extremely or very important role in a healthy balanced diet. Despite this, only 10% of Australians are eating enough milk, cheese, yoghurt and/or alternatives. There is still a misapprehension amongst approximately a third (31%) of respondents to the Dairy Trust Tracker 2018 that consuming dairy foods could increase their weight.



## 6 Dairy contributes to improved health outcomes for Australian communities

| 2020 Targets   | Baseline     | 2014                 | 2015       | 2016       | 2018             | 2020 Target         | Progress     |
|--|--------------|----------------------|------------|------------|------------------|---------------------|--------------|
| <b>6.1a Improve recognition that dairy (milk, cheese and yoghurt) is a key element of a healthy diet</b>   |              |                      |            |            |                  |                     |              |
| Increase the % of individuals who agree dairy foods are essential for good health and wellbeing  | 72%          | 68%                  | 69%        | 71%        | 78% <sup>1</sup> | 85%                 | ●            |
| Decrease in the % of individuals who agree "I'm concerned consuming dairy foods will increase my weight"   | 32%          | 30%                  | 31%        | 32%        | 31% <sup>1</sup> | 20%                 | ●            |
| <b>6.1b NHMRC Australian Dietary Guidelines continue to recommend milk, cheese and yoghurt as part of a healthy diet</b>   | Recognised   | Recognised           | Recognised | Recognised | Recognised       | Ongoing recognition | ●            |
| <b>6.2 Increase the proportion of Australians meeting their recommended daily intake of the milk, cheese, yoghurt and/or alternatives food group as outlined in the 2013 Australian Dietary Guidelines</b> | Under review | Not reported in 2016 |            |            |                  |                     | Under review |

1 Dairy Trust Tracker 2018

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●

## Key initiatives to support Goal 6

**Encouraging good nutrition** The popularity of plant-based diets is increasing and as a result, so too are the number of plant-based beverages and products, such as soy and nut ‘milks’. While these are not nutritionally equivalent to dairy foods, they are often marketed as dairy substitutes although these beverages do not contain the same natural package of nutrients and associated proven health benefits as cow’s milk. Consumers believe dairy foods can be easily replaced in the diet, further exacerbating low consumption of the dairy food group amongst Australians.

Dairy Australia has developed a communications strategy to address public concerns and expectations of the dairy industry and nutrition. The strategy, due to launch in FY19, aims to provide objective and transparent information to help engaged members of the community and those who influence them to make informed decisions about the health and nutrition of dairy and industry practices.

### **Dairy’s place in low GHG emissions diets**

Low GHG diets have already been developed, but the nutritional aspects also need to be considered. The dairy industry has commissioned CSIRO research to investigate the place of dairy in higher quality/lower GHG emission diets in Australia.

**Aged care fracture trial** Dairy is a nutrition powerhouse and having enough milk, cheese and yoghurt may have a range of health benefits, such as reducing the risk of heart disease, diabetes, hypertension, stroke, osteoporosis and obesity. A study funded by Dairy Australia and other dairy organisations around the world and published in [British Journal of Nutrition](#) last year, reports providing the recommended amount of dairy foods is likely to be a simple and cost-effective method that may reduce the very significant malnutrition risk in institutionalised elderly.

**Healthy Bones Action Week** This annual program calls on Australians of all ages to take three actions to build and maintain healthy bones including increasing daily serves of calcium through milk, cheese or yoghurt. In 2017/18 it had an audience reach of almost one million<sup>1</sup>.

**Obesity policies** The Federal Government has a strong focus on improving the food supply and implementing policy and regulation that helps consumers to eat healthier. To that end, there has been a proliferation of consultations for improved labelling of foods and beverages; added sugars, health star ratings, voluntary reformulation targets for flavoured milks and yoghurts and cheese. Further to this, the Senate called an inquiry in to the Obesity Epidemic and the dairy industry responded, also giving evidence at a hearing.

Following a Deakin University study on obesity, dairy companies are developing public statements of responsible consumption in line with Australian Dietary Guidelines and customised to each business. Dairy Australia may develop a template for smaller companies to use.

1 2017/18 Dairy Australia Annual Report, p 7



## Case study

### Healthy nutrition without the assumed adverse effects

After decades in the dietary doldrums, cheese is set to sweep back into vogue on tables across Australia.

One of the world's oldest foods, it had in recent years been thought to compromise cardiovascular health due to its relatively high salt and saturated animal fat content.

However, international researchers collaborating on a series of projects supported in part by funding from Dairy Australia have now produced compelling science-based evidence to dispel this myth.

"In 2011–12 a number of dairy organisations, including Dairy Australia, decided to look at gaps in existing science relating to cheese," Dairy Australia's Nutrition Research and Science Program Manager, Dr Anita Lawrence, says.

In fact, clinical trials have demonstrated that cheese does not have the harmful effects that are often predicted on measures such as blood cholesterol, blood pressure and body weight.

The explanation is simple: rather than be absorbed as it would be if eaten in isolation, cheese's fat and salt is now known to pass straight through the digestive system, bound up in a type of "soap-like" substance, while nutrients such as calcium, protein, zinc, phosphorus, magnesium and vitamins A, B2 and B12 remain available to the body to absorb or utilise.

Dr Lawrence says the findings are a major breakthrough in terms of human nutrition – particularly as nine out of ten Australians don't currently meet the government-recommended daily minimum intake of dairy foods.

This new evidence is being used to encourage Australians to resume eating cheese as part of a safe, affordable, sustainable, balanced diet.



Image: Lion Dairy and Drinks





## Case study

### Lion promises goodness in dairy

Lion Dairy and Drinks' **'Our Goodness Promise'** is an initiative to celebrate and share the nutritional benefits of their products. As well as promoting the inherent goodness of Lion Dairy and Drinks dairy and juice products, this initiative showcases the company's commitment to improving the health and nutrition of the people who buy their products.

Established in 2014, the initiative sets around 20 public targets that address key areas in which they can improve – such as nutritional value, portion size and consumer information. Lion Dairy and Drinks has produced specific nutrient criteria to help guide the development of their products and communication, based upon local and international scientific and government standards. These criteria have been independently reviewed and approved by scientific experts at the CSIRO and Deakin University.

In 2017, 76% of Lion Dairy and Drinks' sales volume was in their 'best' and 'good' categories (up from 74% in 2016) which are based on independently assessed nutrient criteria. Reformulations should result in an 897 tonne reduction in added sugar this year which represents 62% of their 2019 target (1440 tonnes, 10% of their 2014 volume).





# 3

## Commitment

Striving for health, welfare and best care for all our animals throughout their lives

### 2030 goals and targets

#### Goal 7

Provide best care for all animals for whole of life

- Target 7.1** 100% ongoing compliance with legislated animal welfare standards
- Target 7.2** All of industry adopting relevant recommended industry practices for animal care
- No routine use of calving induction
  - No tail docking
  - All calves disbudded with pain relief prior to two months of age
  - All farmers implementing a lameness strategy
  - All farmers, where relevant, have cooling facilities
  - Bobby calves managed appropriately
  - All farms are implementing a documented biosecurity plan
- Target 7.3** 25% increase in the number of consumers who believe dairy farmers do a good job caring for animals
- Target 7.4** Antimicrobial Stewardship (AMS) – the dairy industry uses antibiotics responsibly — as little as possible, as much as necessary — to protect the health and welfare of our animals
- All dairy farmers access antibiotics from a registered vet and are using them responsibly under veterinary direction
  - Antibiotics that are of high importance to human AMR in Australia are only used to treat dairy livestock in exceptional circumstances where no other alternatives exist

## Our challenge

**Milk is sourced from animals and the dairy industry recognises the importance of community acceptance of the way the industry farms if we want to continue operating.**

Over the past 12 months to September 2018, non-dairy substitutes accounted for 7.9% of total supermarket sales, up from 5.8% in 2015<sup>1</sup>. Soy drinks make up roughly 43% with almond beverages having grown to 35%. Australia's coffee culture has also seen sales of regular milk grow 1.2% over the past year, while non-dairy substitutes have also grown through the food service sector.

Dairy animals in Australia are reared in a range of environments that vary from subtropical to temperate regions, predominantly extensive pasture-based systems with a few intensively-managed indoor systems. It is vital that all sectors of the dairy industry take responsibility and play their part to ensure good animal welfare practices are adopted and continue to be reviewed in line with community and consumer expectations.

## What's changed and how we are addressing it

**Increasingly, critics are challenging the dairy industry's sustainability credentials in a bid to deter consumers from purchasing animal-based protein. This means that the dairy industry must ensure not only that it strives for best care and welfare for all our animals, but that it tells consumers how we farm with animals so that perceptions of welfare are not a barrier to consumption.**

Similarly, animal welfare is an increasingly important issue for community and investors. The Responsible Investment Association of Australia found that people do not want to invest where there is animal cruelty. It is essential that the Australian dairy industry encourages the adoption and implementation by all dairy farmers of its recommended practices. The industry also needs to demonstrate transparently and honestly what the issues are and how it is tackling them.

Seven multinational companies, among the largest names in the food business, which jointly service 3.7 billion customers daily, have formed the Global Coalition for Animal Welfare (GCAW). Representatives from the member companies are seeking to work with animal welfare experts on tackling a range of issues like cage-free, conditions for broiler chickens and farmed fish, antimicrobial resistance, and the transportation and slaughter of animals. The multinational companies want to take a leadership position and work with their suppliers to improve practices.

Key issues for the Australian dairy industry are around painful husbandry procedures, calf welfare and concerns around antimicrobial resistance. The dairy industry has recently adopted an Antimicrobial Stewardship (AMS) policy and is developing an enhanced strategy to support its target of using antibiotics – as little as possible, as much as necessary – for good animal health and welfare outcomes.

<sup>1</sup> Dairy Situation and Outlook October 2018, Dairy Australia



# Antimicrobial Resistance

## An emerging issue

### The challenge

Antibiotics are a vital tool in both human and animal medicine. In dairy cattle, antibiotics are critical for the health and welfare of animals in our care. Antibiotics have been used by dairy farmers to protect the health and welfare of their herds for many decades. Although the industry is committed to using effective animal health treatments, it is acutely aware of the potential for antibiotic resistance in both animals and humans.

While use of antibiotics in Australian agriculture is relatively low in global terms, the industry has implemented a number of strategies to control their use including improvements in farm biosecurity, hygiene practices and animal husbandry.

### Our approach

To align with the **Australian Animal Sector National AMR Plan 2018**, the dairy industry has developed a statement of commitment and a comprehensive strategy to ensure best practice management of antibiotics and avoid methods of use that may lead to resistance.

### Our target

Antimicrobial Stewardship (AMS) – the dairy industry uses antibiotics responsibly – as little as possible, as much as necessary – to protect the health and welfare of our animals.

### Our principles

The dairy industry is committed to ensuring access to effective animal health treatments

- We are committed to advancing and refining efforts to implement good antimicrobial stewardship (AMS) practices
- We will prioritise AMS activities based on risk assessment and risk management principles
- Our focus is disease prevention and optimisation of antimicrobial use
- Managing antibiotic risks is a shared responsibility through the dairy supply chain and beyond
- Our strategy is integrated and coordinated with the national approach—we seek to play our part in the global challenge posed by antibiotic resistance through the *Australian Animal Sector National AMR Plan 2018*.

### Our indicators

- All dairy farmers access antibiotics from a registered vet and are using them responsibly under veterinary direction.
- Antibiotics that are of high importance to human AMR in Australia are only used to treat dairy livestock in exceptional circumstances where no other alternatives exist.

| Watch  | Measure  | Manage  | Engage   | Be open   |
|--|--|---|--|---|
| Monitor AMR risk for dairy cattle and humans (a role for government) | Adopt appropriate methodology for measuring Australian dairy industry antibiotic use | Optimise and – where feasible – reduce antibiotic use (herd health, biosecurity, AMS) | Increase collaboration with key stakeholders (farmers, vets, governments, IDF, other livestock industries) | Communicate the Australian dairy story around antibiotics |



## Towards Goal 7

### Provide best care for all animals

**The health and wellbeing of animals is essential to the success of every dairy farming business and underpins our social licence. Animal health and welfare has been identified as a material issue for the industry.**

#### How we performed against our 2020 targets

Practice change takes time and the industry will continue to work to achieve this change to meet the expectations of industry, the community and consumers, on how livestock should be treated on Australian dairy farms.

While there was no new data collection for animal welfare practices via an Animal Husbandry Survey in 2018, 96% of dairy farmers agreed that complying with animal welfare standards is part of having a sustainable dairy business<sup>1</sup>.

The ADF Policy is for all calves to be disbudded prior to 2 months of age. In 2018, the ADF endorsed a new policy for disbudding requiring pain relief to be used.

The dairy industry is phasing out routine calving induction and has set a target for 2019 of 8% for the number of animals to be induced in any one herd. Less than 5% of dairy farmers are using calving induction.

<sup>1</sup> NDFS 2018



## 7 Provide best care for all animals

| 2020 Targets  | Baseline | 2014 | 2015 | 2016 | 2018                        | 2020 Target | Progress |
|---|----------|------|------|------|-----------------------------|-------------|----------|
| <b>7.1 All of industry complying with legislated animal welfare standards</b>                                 |          |      |      |      |                             | 100%        |          |
| Awareness of new Animal Welfare Standards   | 56%      | 56%  |      | 47%  | <b>No data</b>              | 100%        |          |
| <b>7.2 All of industry adopting relevant recommended industry practices for animal care</b>                   |          |      |      |      |                             | 100%        |          |
| Reduce use of routine calving induction   | 80%      | 80%  | 88%  | 90%  | <b>95%</b> <sup>1</sup>     |             | ●        |
| Don't dock tails  | 80%      | 85%  |      | 91%  | <b>No data</b>              |             |          |
| Disbud prior to 2 months of age   | 57%      | 63%  |      | 63%  | <b>No data</b> <sup>2</sup> |             |          |
| Have a lameness strategy  | 87%      | 95%  |      | 95%  | <b>No data</b>              |             |          |
| Where relevant, have cooling facilities   | 94%      | 98%  |      | 92%  | <b>No data</b>              |             |          |
| Bobby calves fed within 6 hours prior to transport  | 97%      | 97%  |      | 96%  | <b>No data</b>              |             |          |
| <b>7.3 25% increase in the number of consumers who believe dairy farmers do a good job caring for animals</b> | 60%      | 62%  | 59%  | 58%  | <b>72%</b> <sup>3</sup>     | 75%         | ●        |

1 In 2018 survey of veterinarians, approximately 5% of dairy farms were using routine induction on less than 10% of animals in a herd — down from 10% of dairy farms in 2016

2 Policy has changed to 'Disbud with pain relief before 8 weeks'

3 Dairy Trust Tracker 2018

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●

## Key initiatives to support Goal 7

**Animal health and welfare policy** The ADF's 'Animal Health and Welfare Policy Advisory Group (PAG)' aims to maintain and improve Australia's animal health and welfare system, as well as the industry's emergency response capability, through cooperative programs aligned with other industries and governments. The PAG provides guidance on current issues and regulations. Dairy Australia provides policy support for improving animal health and welfare.

### **Monitoring animal husbandry practices**

Since 2005, the industry has undertaken the 'Dairy Animal Husbandry' survey to monitor dairy farmers animal health and welfare practices. It moved to a biennial cycle in 2008. The survey has highlighted many significant improvements being made on dairy farms related to the implementation of recommended industry practices, as well as identifying where further improvement is required. A new monitoring program is currently being developed to obtain more detailed information across all dairy farmers. The data will be analysed to determine trends that will inform the development of future RD&E programs and extension services and priorities.

The **Australian Animal Welfare Standards and Guidelines for Cattle** must be met by all dairy farmers (and often, they are exceeded) and cover the full range of on-farm management practices for cows and their welfare considerations.

**Industry workshops** were held (predominantly through the Regional Development Programs) on lameness (Healthy Hooves); healthy calves; rearing newborn and young stock; fertility program (Heifers on Target discussions); low stress calving; heat detection; transition cow management; bull management; sexed semen; mastitis and milk quality; Cups On Cups Off; drying-off cows; humane euthanasia of livestock; and safe stock handling.

### **Promoting responsible antimicrobial use**

A flagship project within Countdown – the program to reduce mastitis and improve milk quality – is the advisor training short course, which has now evolved into a year-long Countdown MQ course. The course upskills all dairy advisors (veterinarians, field

services and milking machine technicians) in milk quality investigations and on-farm communication to change practices on farm, including promoting responsible antimicrobial use.

**Dry Cow Consult tool** The development of the **Dry Cow Consult Tool** (through the Dairy Australia Countdown project) assists farmers and their veterinarians avoid blanket herd treatment by adopting selective treatment of cows with antibiotic therapy through the dry period.

**Keeping cows cool** Changing weather patterns have created a trend towards higher temperatures in some Australian dairying regions. Heat stress can have a significant impact on animal welfare, and can affect feed intake and therefore milk production, milk composition and fertility. Dairy Australia's **Cool Cows program** contains practical information on how to reduce the impact of high temperatures on cow productivity with practical advice on providing cooler conditions.

**DataGene** Late in 2017, DataGene released a new Australian Breeding Value for heat tolerance which allows farmers to breed animals with improved tolerance to hot, humid conditions. This characteristic is likely to become increasingly important in a warming climate, and can also have benefits for animal welfare.

**Mastitis Focus Report** This report enables dairy farmers, advisors and organisations to effectively keep track of udder health in the herd, assess key mastitis management areas and detect emerging problems. Free reports can be generated online via **mastitisfocus.com.au**. Around 400 reports were generated during the year.

**Biosecurity app** Agriculture Victoria is developing an app that will create a customised farm biosecurity plan including actions required to implement the plan. The plans will also meet Livestock Production Assurance (LPA) program requirements and help reduce the chance of disease spreading.





## Case study

### Tighter calving means no induction at White-water, Tasmania

**The Australian dairy industry does not support routine calving induction and is working to phase it out through improved genetics, herd management practices, tools and technologies.**

A survey of dairy farmers' animal husbandry practices in 2016 indicated that only 10% used routine calving induction as a management tool, and of those, it was used on less than 15% of their herd. This represented less than 1% of the national herd. A 2018 survey of veterinarians showed that approximately 5% of dairy farms were using routine calving induction and for these, less than 10% of animals in their herds were being induced. The industry is working to phase out routine use of calving induction. The target agreed for 2019 is a maximum 8% of animals within a herd without dispensation.

White-water Dairy at Edith Creek in Tasmania has around 1000 cows. Tony Clarke, part-owner and manager, decided to stop using calving induction and last year was the first time that no cows were induced. Until then, White-water Dairy induced approximately 80 out of 1000 cows each year. Tony's decision to stop inducing cows was prompted by the industry phase-out of the practice. Following on from the industry's policy, Tony wanted to take a proactive stance and has changed fertility management practices in the herd. And there's really no down-side.

'Financially, we don't think stopping calving induction will make much of a difference,' Tony said.

Using inherently fertile crossbred cattle, good rumen adaptation prior to calving, short gestation sires and ensuring good reproductive health at joining time have contributed to a tight calving pattern which reduces the need for induction.





# 4

## Commitment

Meeting the challenge of climate change and providing good stewardship of our natural resources

### 2030 goals and targets

#### Goal 8 Improve land management

- Target 8.1a** 100% of stock excluded from waterways
- Target 8.1b** 100% of riparian zones actively managed and maintained
- Target 8.2** 100% of farmers complete and implement a soil and nutrient management plan
- Target 8.3** 100% of farmers have and implement a documented biodiversity action plan
- Target 8.4** Zero net deforestation by 2020

#### Goal 9 Increase water use efficiency

- Target 9.1** Reduce the consumptive water intensity of dairy companies by 30% (on 2010/11 levels)
- Target 9.2** Improve water use and water productivity to utilise 2.0 tonnes of dry matter per ML used
- Target 9.3** 100% of farmers recycling water from dairy sheds
- Target 9.4** 100% of farmers monitoring water consumption
- Target 9.5** 100% of farmers have a water security risk management plan by 2020 and are implementing it by 2030

#### Goal 10 Reduce greenhouse gas emissions intensity

- Target 10.1** Reduce greenhouse gas emissions intensity by 30% across the whole industry (from a baseline of 2015)

#### Goal 11 Reduce waste

- Target 11.1a** 100% diversion rate from landfill (for dairy companies)
- Target 11.1b** 100% of silage wrap recycled (for farm)
- Target 11.2** All dairy companies participate in the Australian Packaging Covenant (APC) or equivalent scheme
- Target 11.3** 100% of Australian dairy packaging to be recyclable, compostable or reusable by 2025 or earlier
- Target 11.4** Halve food waste by 2030

## Our challenge

The CSIRO report '[Climate change impacts on Australia's dairy regions](#)' says projections based on results from 40 different climate models indicate that Australia will become hotter, with less winter-spring rainfall and more droughts in southern Australia, uncertain rainfall changes in northern Australia, more extreme daily rainfall (except in south-western Australia), higher evaporation and lower soil moisture. It highlights the likely consequences to Australia's eight dairying regions by the year 2030 under a high emission scenario. [An article from the University of Melbourne](#) adds that the major finding, across each of the regions and climate scenarios studied, is that there is no one-size-fits-all approach to dairy farming under future climates.

An increase in heatwaves, storms and drought will affect animal welfare and milk production, and limit pasture growth. A drying climate is likely to place increasing pressure on already stressed water resources. According to the Department of the Environment and Energy ([Australia's Emissions Projections, Dec. 2016](#)), agriculture contributes 15% of Australia's total greenhouse gas emissions (GHGs) with the dairy industry as a whole contributing 12% of Australian agriculture's emissions. Of this, approximately 90-95% is from farms and 5-10% from manufacturing.

Climate change, including water scarcity, has been identified as a material issue for the industry and a significant long-term response to climate change impacts is required. As part of this response we will mitigate our own GHG emissions, and increase water use efficiency in manufacturing and on farms. In addition to GHG emissions, key issues include nutrient management, water management and waste reduction.

Australian dairy farmers undertake various practices to reduce their environmental footprint including fencing-off waterways to improve water quality, nutrient management

to reduce nutrient runoff, managing land for conservation and biodiversity, and managing weeds. Efficient irrigation practices and recycling water used in dairy operations also contribute to better outcomes for the environment.

These practices are monitored through the periodic [Natural Resource Management \(NRM\) survey](#) undertaken with dairy farmers. It was last conducted in 2015 and not scheduled to be undertaken again until 2019.

Farmers can measure and monitor their land management practices, and generate tailored programs to improve performance. A range of industry programs have been developed to support farmers to address key issues.

The Dairy Manufacturers' Sustainability Council (DMSC) is now using the sustainability environmental targets and indicators to focus their attention on reducing their environmental impact.

## What's changed and how are we addressing it

Increasingly, NGOs like WWF, are calling for Science-Based Targets (SBTs) for GHG emissions. The dairy industry has reviewed its position using the current methodology for SBTs for GHG emissions. At this stage, the methodology is still being developed and the dairy industry agreed to set a 30% GHG emissions reduction goal for the whole dairy industry – recognising that the goal will need to be constantly reviewed in light of any developments with the SBT methodology. Much research is underway at farm level to reduce emissions – but the industry has recognised that closing the gap on the highest and lowest dairy farm GHG emissions has the potential to reduce on farm GHG emissions by approximately 21% by 2030. The beef industry has committed to being carbon neutral by 2030, and the [NFF 2030 Road Map](#) also commits the agricultural sector to trending to carbon neutral by 2030.

Nutritionists are increasingly recommending diets on the basis of their GHG emissions. Dairy companies regularly report on their GHG emissions intensity, consumptive water use and waste sent to landfill through data collected by the DMSC— and are committed to reducing all of these measures to support the industry’s targets as well as contributing to the UN Sustainable Development Goals. We measure and monitor the aggregate environmental performance of the members of the DMSC, that brings together the largest Australian dairy companies, to improve sustainability practices and spearhead collaborative action across the industry. Eight member companies of the DMSC are responsible for processing over 85% of the national milk supply.

Increased focus is required on the farm sector which produces the bulk of industry emissions. Continued work on benchmarking, measurement and mitigation at farm level is required.

Food waste has also emerged as a key issue and the dairy industry is considering what it can do to reduce waste throughout its supply chain, as well as reducing product waste by consumers. The Government’s commitment to all packaging being recyclable, compostable or reusable by 2025 has increased the urgency of addressing food waste.



## Food waste An emerging issue

### The challenge

Annually, around \$8 billion worth of food purchased by Australians is wasted and 4.2 million tonnes ends up in the bin and landfill (NSW State Government 2012). This wasted food also represents lost resources that were used to produce, package and transport it, and a lost opportunity to feed the vulnerable sections of society who are in most need. The creation of a new Fight Food Waste Cooperative Research Centre, and National Food Waste Strategy along with various other retailer – and consumer-led initiatives on the food waste topic has brought into sharp focus the nation’s and world’s wasteful food habits.

Food waste is an issue in the dairy sector. In Australia, up to \$129 million of milk is either lost or wasted annually.

### Our approach

The industry views the issue of food waste as an opportunity to improve efficiency, resource use and industry competitiveness. We first identified food waste as an issue in 2016. Since then we have been researching food loss (the intentional or unintended reduction in food within the supply chain prior to consumption) and food waste (purposeful discarding of uneaten food by consumers) in the dairy value chain. We have included a new target in the Framework to halve food waste by 2030, and are in the process of developing a suitable indicator.



## **Towards Goal 8**

### Improve nutrient, land and water management

**Australian dairy farmers are committed to managing land and water responsibly.**

#### **How we performed against our 2020 targets**

According to the 2018 National Dairy Farmer Survey, approximately 81% of dairy farms are managing some land for conservation and biodiversity. Over the past two years, 81% of respondents (1000 farmers) have either planted vegetation and shelter belts (41%), fenced off waterways (39%) and/or controlled pests (64%), and 38% of farmers have a documented biodiversity plan in place.



## 8 Improve nutrient, land and water management

| 2020 Targets  | Baseline | 2014 | 2015 | 2016 | 2018             | 2020 Target  | Progress |
|---|----------|------|------|------|------------------|--------------|----------|
| 8.1 90% of stock excluded from waterways  | 73%      |      | 76%  |      | No data          | 90%          |          |
| 8.2 80% of farmers implement nutrient management plans                                      | 30%      |      | 58%  |      | No data          | 80%          |          |
| 8.3 80% of dairy farms with irrigation have implemented some level of irrigation automation | 47%      |      | 54%  |      | No data          | 80%          |          |
| 8.4 80% of dairy farms managing some land for conservation and biodiversity                 | 47%      |      | 45%  |      | 81% <sup>1</sup> | 80%          | ●        |
| 8.5 Where relevant, all dairy farmers actively managing noxious weeds                       |          |      |      |      |                  |              |          |
| Noxious weeds identified as major land issue  | 37%      |      | 29%  |      | No data          | Under review |          |
| Actively managing noxious weeds where a problem   | 28%      |      | 28%  |      | No data          | 100%         |          |
| 8.6 100% of farmers have practices to recycle water on farm                                 | 50%      |      | 75%  |      | No data          | 100%         |          |

1 NDFS 2018

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●

## Key initiatives to support Goal 8

**Dairying for Tomorrow** This is a practical natural resource management program to secure the future of Australia's dairy farms. It supports dairy farmers and the industry to reduce their environmental footprint by enabling activities such as reduced on-farm fertiliser loss, improved effluent systems, retaining native bush and the fencing of waterways.

**Update DairySat** Dairy Australia has won a national Landcare grant that it will use to update DairySat to enable it to facilitate digital reporting and capture sensor data. The new project (Sustainable Dairy Products) will build a natural capital and climate risk reporting platform for dairy farmers, replacing DairySAT. It will help create awareness of good environmental stewardship practice and the business imperative for adoption. Once complete, the upgraded program will provide information on water management, act as a repository for industry data and link to animal welfare data.

**Farm trials show way forward for smarter irrigation** A three-year project called '**Smarter Irrigation for Profit**', co-founded through the Rural R&D for Profit program and led by the Tasmanian Institute of Agriculture (TIA), has demonstrated how major improvements in irrigation efficiency can be achieved with relatively minor tweaks. Overall, an estimated 20–50% increase in productivity can be achieved through a greater focus on optimising irrigation.

**Nutrient management** Soils are managed in line with best practice to ensure nutrient loads do not pose a run-off risk. Farmers use **Fert\$mart** tools, adhere to nutrient management plans, conduct soil sampling and access government soil mapping data or the services of agronomists to ensure risks are managed.

Dairy companies incorporate Fert\$mart and nutrient management principles into their own supplier support programs. Examples include the **Bega Environmental Management Systems (BEMS)** program, **Lion's Dairy Pride Program** and **Fonterra's Farm Source program**.

**Protecting biodiversity** Dairy Australia has created a web-based **dairy farm biodiversity action plan** template that is available for farmers to complete. In addition, farmers are involved in a number of feral animal and weed control programs being delivered by various federal, state and local governments, statutory authorities and community action groups.





## Case study

# DairyTas takes out National Landcare Awards

Faced with a rapidly expanding dairy industry boasting the biggest average herd size in the country, Tasmanian dairy farmers and DairyTas banded together in two award-winning initiatives to protect local rivers from the impacts of fertiliser use and effluent.

Local farmers embraced DairyTas's Fert\$mart and Clean Rivers initiatives, both of which were recognised at the National Landcare Awards in October taking out the award for Australian Government Excellence in Sustainable Farm Practices.

Over 350 of the state's 430 dairy farmers, along with DairyTas and financiers, have jointly invested over \$4 million in sustainable projects under these initiatives, including fencing and effluent infrastructure, soil testing and nutrient budgeting.

This investment has been supported by technical training in effluent design and establishing independent trained Fert\$mart advisors.





## Towards Goal 9

### Reduce the consumptive water intensity of dairy companies by 20%

**Reducing our water-use footprint is a priority for the framework. With climate risk, especially water scarcity, noted as a material risk for the dairy industry, we are committed to using water efficiently.**

#### How we performed against our 2020 targets

For dairy companies, water intensity increased from 1.62 megalitres (ML) per ML of milk processed in 2015/16 to 1.85 ML per ML of milk processed in 2016/17. This represents an increase of 13.6% over the year. Wastewater intensity also increased over this period from 1.65 ML per ML of milk processed to 1.7ML per ML of milk processed. This represents an increase of 2.7% over the year.

The consumption of natural resources (energy, water) in dairy manufacturing is influenced by the product mix, which in turn will have an impact on performance trends. The decrease in milk supply to some dairy companies in the reporting period means that a number of factories have been operating significantly below capacity and therefore using resources far less efficiently. The data supplied for the 2016/17 DMSC Report represents less of the industry than in the previous reporting periods which can also influence data trends. In 2016/17, for example, the coverage of water intensity data represented 75% of the milk volume

processed nationally, while in 2015/16 the data represented 89% of national milk volume processed.

Data integrity remains a challenge and at least some of the range of results in reported consumption is a function of shifting data management, on-ground monitoring, completeness of water mapping and assumptions.

A new question was introduced into the NDFS in 2017. Farmers were asked “Do you have a water security or water management plan to ensure you have sufficient water in drier seasons?”. In 2018, 60% said yes (down from 65% in 2017). There is significant variation by dairy region (70% in DairyTas and 48% in DairyNSW) and by farm size (75% of the extra-large farms to 48% for small farms). Respondents aged 60+ are significantly more likely to have a plan (64%) than those aged 18-39 years (49%).



## 9 Reduce consumptive water intensity of dairy companies by 20%

| 2020 Targets  | Baseline | 2014 | 2015 | 2016 | 2018              | 2020 Target | Progress |
|---|----------|------|------|------|-------------------|-------------|----------|
| 9.1 Reduce the consumptive water use intensity of dairy companies by 20% (on 2010/11 levels) (litres/litre of milk processed) | 1.75     | 1.56 | 1.58 | 1.62 | 1.85 <sup>1</sup> | 1.4         | ●        |

1 DMSC 2016/17 Scorecard Report

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●

### Key initiatives to support Goal 9

#### Murray Dairy Water Trading Toolkit

Helps farmers in the Murray Dairy Region improve their understanding of factors influencing their access to water, assists in developing practical water purchasing strategies and makes informed water management decisions. First produced in 2015, the toolkit is reviewed annually with the input of farmers, government agencies, industry stakeholders and Dairy Australia.

#### Dairy companies' measurement and benchmarking

Participants in the **DMSC** submit their water consumption and wastewater data for inclusion in an annual 'scorecard'. The collection and reporting of aggregate data helps determine what specific projects may help the entire sector on issues such as water consumption.

## Dairy Manufacturers Sustainability Council

The Dairy Manufacturers Sustainability Council DMSC was initiated in 1995 and is vital to achieving the Framework's vision to embed sustainability across the entire supply chain.

An industry-recognised body, DMSC assists members to improve their environmental sustainability by enabling knowledge-sharing on best practice and by publicly reporting on collective outcomes.

The DMSC is primarily made up of environmental and sustainability managers from Australian dairy companies. Its role is to work towards achieving environmental sustainability targets, to influence the transference of key skills and knowledge into the industry and to guide research activities.

DMSC members collectively submit data on milk volume processed, product output, water consumption, greenhouse gas emissions, energy consumption, waste generation, waste diversion and waste water generation, which is reported on an annual basis. The **latest scorecard** for 2016/17 was released in June 2018.

The collection and reporting of data informs internal benchmarking by DMSC members, builds the capacity of participating DMSC members in data collection and reporting, progressively improves the integrity of data and provides a source of information for dairy industry and other stakeholders interested in the performance of the sector. It also helps to inform the design and delivery of DMSC projects aimed at specific areas of environmental performance which impact on the entire sector such as energy and water consumption.



Image credit: Bega



## Case study

### Saving wastewater and energy

**At Bega Cheese's Lagoon Street site in North Bega, New South Wales, significant modifications were made during the past year to improve the efficiency of the evaporation process.**

These modifications included:

- Introduction of a drying step, using less energy in evaporation
- Improvements to process control parameters and the return of usable hot water to the boiler
- Recovery and processing of buttermilk
- Use of reverse osmosis in water utilisation.

As a result of these improvements, energy intensity (GJ/tonne) was reduced by 11%, while solids concentration increased from 54% to 60%. The site has also decreased the generation of wastewater by 10% and chemical oxygen demand (COD) of the wastewater was reduced by 46.7%.



## Towards Goal 10

### Reduce greenhouse gas emissions intensity by 30%

**International scientific consensus links climate change with GHG emissions. The dairy industry has a responsibility to reduce its emissions in both the farm and manufacturing sectors.**

#### How we performed against our 2020 targets

In 2016/17, the DMSC reported that GHG emissions intensity increased from 140 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>~e) per ML of milk processed to 159.6 per tCO<sub>2</sub>~e of milk processed. This represents an increase of 14% over the year but a decrease of 10.7% compared to the baseline of 2010–2011.

Several factors influenced these results including product mix, a change in the dairy companies supplying data, and reduced milk supply to some dairy companies which means factories have been operating significantly below capacity and therefore using resources far less efficiently.



## 10 Reduce greenhouse gas emissions intensity by 30%

| 2020 Targets  | Baseline     | 2014  | 2015  | 2016 | 2018               | 2020 Target  | Progress |
|---|--------------|-------|-------|------|--------------------|--------------|----------|
| 10.1 30% reduction in GHG emissions intensity on 2010/11 levels measured by a direct measurement of dairy companies emissions | 178.7        | 153.6 | 152.5 | 140  | 159.6 <sup>1</sup> | 125.8        | ●        |
| 10.2 Farm emissions abatement actions   | Under review |       |       |      |                    | Under review |          |

1 DMSC 2016/17 Scorecard Report

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●

## Key initiatives to support Goal 10

**'Land, water, carbon'** is Dairy Australia's strategic program supporting the industry goal to cut farm GHG emissions. Its scope is to build industry capability at the farm level to manage land, water and energy resources to minimise environmental impact while enhancing profit and improving industry capacity to mitigate climate risk. Investment areas include increasing understanding of nitrogen use efficiency and supporting enteric methane technologies.

The **Dairy Climate Toolkit** helps farmers and service providers understand GHG emissions and measures they can take to reduce them while making money for their business.

The **Dairy Self Assessment Tool** or **DairySAT** is an environmental self-assessment and action planning tool for Australian dairy farmers.

The **Australian Dairy Carbon Calculator** helps farmers identify potential GHG emissions reductions within their business.

### **Energy and Climate Change Policy**

Australia Dairy Farmers (ADF) recognises that farmers have an important role in reducing GHG emissions and supports Australia's international commitments under the Kyoto Protocol and the Paris Agreement. In addition, ADF supports an emissions intensity target methodology approach for dairy farms.

### **Victorian dairy producer signs 10-year wind farm PPA**

Victorian dairy producer Burra Foods will soon get a portion of its energy needs from cheap Australian wind energy, after signing a 10-year power purchase agreement to source electricity from the Ararat Wind Farm, also located in Victoria.

### **Organic waste from dairy processing to be converted into power**

Organic waste from Bulla Dairy Foods, the Australian Lamb Company and AKD Softwoods in Colac will be converted into electricity, gas and water at Barwon Water's nearby treatment plant. The major project – now in its development stage and tipped to have a price tag of about \$80 million – has been kick-started with \$240,000 in funding from the Victorian Government to develop a business case.





## Case study

# Burra Foods commits to long-term sustainability through renewable energy

**Gippsland-based dairy processor Burra Foods has entered into a large-scale Renewable Corporate Power Purchase Agreement (PPA) with Melbourne-based energy retailer Flow Power.**

The deal will bring Burra Foods closer to meeting its energy efficiency goals, and give the business direct access to secure low-cost renewable energy over a ten year period. The renewable power, sourced from Ararat Wind Farm, is expected to deliver annual savings in excess of 20 per cent and can be used in real time to offset grid electricity consumption.

Burra Foods supply chain and manufacturing general manager Stewart Carson said Burra Foods has bold sustainability targets and has invested heavily in renewable energy solutions that fit their usage demand.

“Partnering with Flow Power and sourcing a steady supply of clean, renewable energy is a major step toward our facility being powered by 100 percent renewable energy,” Mr Carson said.

“We remain committed to playing our part in sustainable dairy manufacturing.”

Last year, Flow Power announced the availability of its Renewable Corporate PPAs, giving Australian businesses the opportunity to tap into a globally recognised trend that lowers energy costs and benefits the environment and economy.

During peak periods, Burra Foods can receive up to 1.5 million litres of fresh farm milk for processing every day. The dairy manufacturer required an energy solution that would support its rigorous production schedule, improve its energy efficiency and provide price certainty.

“We look forward to working with Burra Foods and are pleased to welcome them as a customer,” Flow Power managing director Matthew van der Linden said.

“Traditionally, the dairy industry is a heavy power user that requires a significant amount of power at all stages of the supply chain. This agreement will deliver secure cost-efficient power for the long term, without compromising on Burra Foods’ sustainability goals.

“Above all else, Australia’s dairy industry needs cost-effective, sustainable energy. PPAs deliver this.”

Renewable Corporate PPAs allow businesses to contribute to a lower carbon economy and reduce overall emissions, while potentially saving hundreds of thousands of dollars in energy costs.

Burra Foods has recently installed 600 square metres of solar panels – expected to deliver 2.4 per cent of its electricity needs.



## Towards Goal 11

### Reduce waste to landfill by 40%

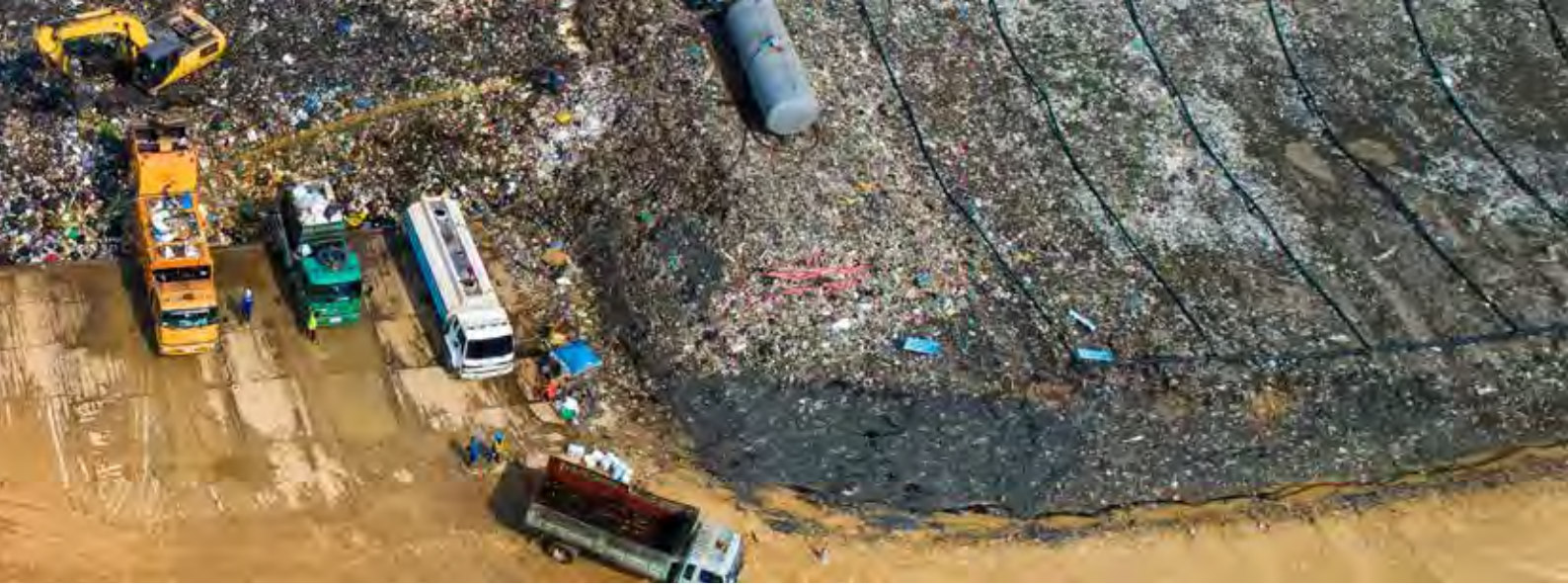
The industry is seeking to cut waste along the value chain to make more efficient use of resources and reduce environmental impact. Food waste has been identified as an emerging issue for the industry (see page 57).

#### How we performed against our 2020 targets

For dairy companies, waste intensity decreased from 1.39 tonnes of waste sent to landfill per ML of milk processed in 2015/16 to 1.32 tonnes in 2016/17. This represents a decrease of 4.6% over the year, and an overall 50.8% reduction compared with the baseline in 2010/11, exceeding the 40% target. Over the same period, the rate of waste diverted from landfill also decreased from 72% to 66%.<sup>1</sup> While some of this reduction is due to increased efforts to reduce waste, some improvement is also likely to be due to changes in how waste is measured. More companies are requiring contractors to weigh waste more accurately to improve waste accounting and reduce costs.

At the farm level, there are no measures of estimating waste to landfill as yet, so national performance cannot be tracked. However, the revised DairySAT program will address this.

<sup>1</sup> DMSC 2016/17 Scorecard Report, p8



# 11 Reduce waste to landfill by 40%

| 2020 Targets  | Baseline     | 2014 | 2015 | 2016 | 2018              | 2020 Target         | Progress |
|---|--------------|------|------|------|-------------------|---------------------|----------|
| 11.1a 40% reduction in dairy company waste to landfill on 2010/11 levels  | 2.69         | 1.63 | 1.45 | 1.39 | 1.32 <sup>1</sup> | 1.61                | ●        |
| 11.1b Dairy companies: Signatories to Australian Packaging Covenant (APC) | 9            | 9    | 8    | 8    | >15 <sup>2</sup>  | All Dairy companies | ●        |
| 11.2 Farm level waste reduction   | Under review |      |      |      |                   | Under review        |          |

1 DMSC 2016/17 Scorecard Report  
 2 See [APC Website](#) — List of members

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●

## Key initiatives to support Goal 11

**New freeze-dried snacks** Crunchy cubes of freeze-dried cheddar cheese are appearing on supermarket shelves as snack food as an Australian dairy company tackles the problem of fresh food waste. Freeze Dry Industries started by transforming strawberries, apples, mangoes and banana seconds with minor skin imperfections that made them unsuitable for supermarkets. Tiny cubes of perfectly preserved cheese are the company's latest value-adding idea, aimed at the lucrative international snack market.

**Industry working group to tackle packaging waste** Australia's ambitious new National Packaging Target will require leadership from industry-led initiatives like the one between Dairy Australia and the DMSC. A newly formed working group is examining how dairy companies can achieve 100% recyclability of packaging, incorporate more recycled content and reduce post-consumer packaging going to landfill. The group will first seek to understand dairy's role in the packaging challenge and business implications before developing a strategic response.

**Nestle** announced it will label all its packaging with recycling information by 2020, including its Australian operations. Their vision is that none of their packaging, including plastics, ends up in landfill or as litter.<sup>1</sup>

**Farm level recycling initiatives** The dairy industry remains a significant sponsor of the Australian silage wrap and plastic recycling scheme, Plasback.



**Bega, Nutrition Innovation turn to Monash to help create new powdered products** Major dairy industry players such as Bega and Saputo have joined forces with Monash University to utilise new drying technologies to extend the life and improve the quality of powdered dairy products.

**Behaviour change programs** within dairy companies have also had an impact, particularly at site level where waste is arguably more visible than energy and water consumption. The success of domestic waste reduction and recycling initiatives also play a role in translating culture change in the workplace.<sup>2</sup>

**Food waste** Industry is reviewing current research and developing a position on food waste. Refer to the emerging issue on page 57.

<sup>1</sup> [nestle.com/csv/impact/environment/packaging](https://www.nestle.com/csv/impact/environment/packaging)

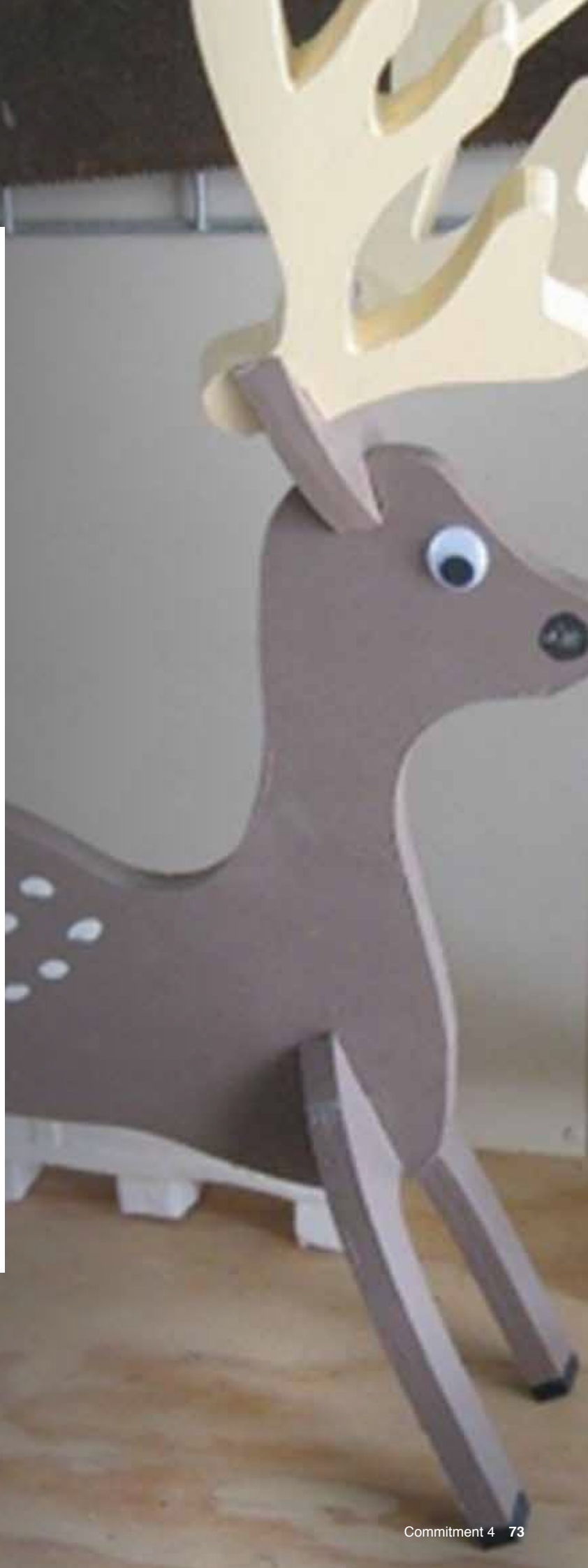
<sup>2</sup> DMSC Scorecard 2016/17, p 8



## Case study

### Fonterra — Wooden crates recycled for Stanhope Men's Shed

Fonterra's new cheese plant at Stanhope in Victoria opened in August 2017 after a \$140 million upgrade. The upgrade followed a fire which destroyed the primary cheese plant in 2014. The cheese site produces mozzarella, cheddar, parmesan, pecorino, romano, ricotta and gouda, as well as ingredient cheddar for domestic and export markets. Fonterra Australia Regional Operations Manager Jason Wright said the site was a hive of activity with all the building, equipment arriving and the beginning of the assembly process. With so much equipment, came the potential for a lot of waste material as the equipment is transported in large wooden crates inside shipping containers to keep it safe and stable. Discussions with the Stanhope and District Men's Shed resulted in the large wooden crates being recycled to build toys and Christmas decorations for local children which were given away as Christmas presents. Des Crittin from Stanhope and District Men's Shed said that getting so much recyclable material meant that the Men's Shed could make wonderful wooden toys, like cars, trains, dolls and animals.



# Appendix 1

## Governance

The Australian Dairy Industry Council (ADIC), comprised of Australian Dairy Farmers (ADF) and Australian Dairy Products Federation (ADPF), the dairy industry’s two peak policy bodies, has overall responsibility for the Framework — setting and reporting progress against the Framework targets and performance measures (see Figure 1).

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 quarterly and includes representatives from farmer organisations as well as dairy companies. The Steering Committee seeks endorsement from the ADIC on any major recommendations. Representation and members of the Steering Committee are listed in Appendix 4.

The Dairy Sustainability Consultative Forum was established in 2013. Consisting of industry and 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 and has met 12 times, with the most recent meeting on 4 October 2018.

The Board members of the governing bodies serve on multiple bodies. For full list see:

- ADIC [australiandairyfarmers.com.au/adic-board](http://australiandairyfarmers.com.au/adic-board)
- ADF [australiandairyfarmers.com.au/adf-council](http://australiandairyfarmers.com.au/adf-council)
- ADPF [adpf.org.au/members.asp](http://adpf.org.au/members.asp)
- Dairy Australia [dairyaustralia.com.au/about-dairy-australia/about-the-organisation/who-we-are/board](http://dairyaustralia.com.au/about-dairy-australia/about-the-organisation/who-we-are/board)



**Figure 1** The governance model of the Australian Dairy Industry Sustainability Framework

# Appendix 2

## Framework 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 2). 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.

Our approach has also been influenced by the United Nations Sustainable Development Goals (UN SDGs). The UN SDGs outline 169 targets across areas including poverty reduction, food security and energy and will directly influence national policy settings (see pg 11).

The Framework is also informed by the **Global Dairy Sustainability Framework** of which Dairy Australia is a Governor and Aggregating Member, and ADPF is an affiliate member; and by Dairy Australia’s membership of the **Sustainable Agriculture Initiative (SAI) Platform’s Dairy Working Group (DWG)**.



**Figure 2** Dairy industry's agreed principles to guide the development of the Sustainability Framework

# Appendix 3

## Materiality process

**Defining and prioritising the sustainability issues material to the dairy industry is critical to the ongoing strategic development of the Framework. Material 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 initial development of the Framework. In preparing the 2014 progress report, a limited review of material issues was repeated to test their currency and relevance. A more comprehensive refresh of the material issues was undertaken in 2016 to support the evolution of the Framework and to inform the content of the 2016 Progress Report. We have not completed a materiality review since 2016.

The materiality review aimed to check on the issues which formed the basis of the Framework, determine emerging issues not yet covered in the Framework and prioritise issues for action.

The review consisted of a number of tests including:

- An examination of peers including Dairy UK, Bord Bia (Irish Food Board), Innovation Center for US Dairy, Nestle and Friesland Campina.
- A review of Dairy Australia's issues register for the sector and internal risk register.
- Analysis of key drivers in the changing context of sustainability such as the UN Sustainable Development Goals, incorporation of sustainability reporting requirements in the ASX Corporate Governance Guidelines for companies and increasing interest in sustainability from investors and large global customers.

- As part of this review, participants in the Dairy Sustainability Consultative Forum meeting in May 2016 were asked to then prioritise issues based on the dairy sector's key impacts and interest to stakeholders. The most important issues were found to be:
  - Care for all animals (highest interest to stakeholders)
  - Industry competitiveness and profitability (highest impact on the industry)
  - Climate change ie. GHG emissions, adaptation, drought and water (moderate for both stakeholders and impact on the industry)
  - Human health and nutrition – improved health outcomes and responsible consumption (high interest to stakeholders)

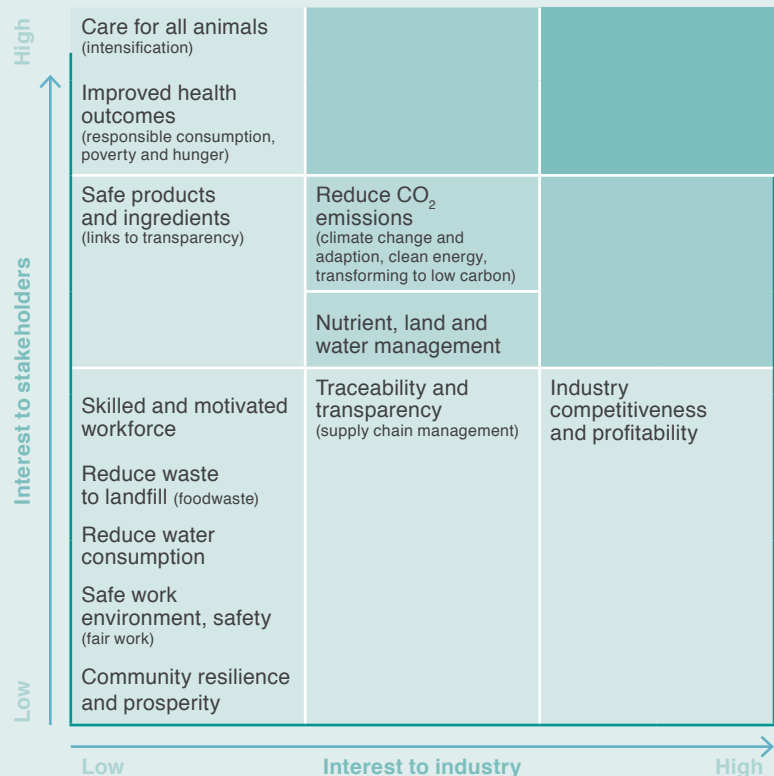


Figure 3 Key outcomes from the 2016 Materiality Review

**Note:** Dairy farmers care for their animals. This is implicit and considered part of normal business, so it was not identified as a key issue for industry.



# Appendix 4

## Stakeholder engagement

Engagement with our stakeholders within and beyond the dairy industry has been a cornerstone of the development and implementation of the Framework and is critical to ensuring it remains robust and relevant.

Our stakeholders include the dairy industry (farmers and dairy companies), customers, suppliers, government, primary industries, non-government groups, special interest groups and others.

The criteria we used to determine stakeholders is as follows:

**Dependency** – groups or individuals who are directly or indirectly dependent on the organisations’ activities, products or services and associated performance, or on whom the organisations is dependent in order to operate.

**Responsibility** – groups of individuals to whom the organisation has, or in the future may have, legal, commercial, operational or ethical/moral responsibilities

**Tension** – groups or individuals who need immediate attention from the organisation with regard to financial, wider economic, social or environmental issues

**Influence** – groups or individuals who can have an impact on the organisation’s or a stakeholder’s strategic or operational decision-making

**Diverse perspectives** – group or individuals whose different views can lead to a new understanding of the situation and the identification or opportunities for action that may not otherwise occur

Engagement takes place through the formal mechanisms of the Steering Committee and the Consultative Forum, as well as consultation with industry representative bodies and other stakeholders on specific issues facing the industry. Throughout the

year we engage with our stakeholders via our monthly eNews which features updates on our sustainability progress, links to relevant articles and events and goes to a targeted list of over 300 recipients.

| Stakeholders                     |   |  | Stakeholder interests                       |
|----------------------------------|---|--|---|
| Industry                         | → | Producers, dairy companies, dairy industry organisations               | • The profitability of dairy farmers        |
| Customers                        | → | Major Australian retailers/ multinational companies                    | • Consumer and community perceptions        |
| Suppliers                        | → | Financial institutions   | • Animal health and welfare                 |
| Government                       | → | Federal departments, state departments                                 | • Managing people                           |
| NGOs and special interest groups | → | Community development groups, environmental NGOs Animal welfare groups | • Provenance                                |
| Other primary industry           | → | Beef   | • Modernisation                             |
| Other                            | → | Sustainability practitioners, researchers                              | • Health and nutrition                      |
|                                  |   |  | • Climate change and water                  |
|                                  |   |  | • Food waste                                |
|                                  |   |  | • Ethical investment / responsible sourcing |

**Figure 4** The key stakeholder groups engaged and the issues identified during the Consultative Forums.

## How engagement informed the 2030 target-setting process

During 2018, we sought feedback on proposed targets from the Consultative Forum. This is how we responded to what we heard:

| Feedback from Consultative Forum  | Our response   |
|---|--|
| <b>Community resilience indicators</b> Community indicators are difficult to measure, yet vital for social licence                                      | Targets have been set to measure social capital, size of economic impact and the level of community recognition for each dairy region  |
| <b>People in dairy</b> People are mission critical, targets assist in defining industry culture   | Set two new targets to drive worker safety and fewer working hours per week  |
| <b>Food safety</b> Food safety is non-negotiable, a point of difference, = social licence<br>Investigate a target, plan to foster a food safety culture | Maintained existing targets for monitoring chemical residues and product recalls; started to discuss development of a Target for Food Safety Culture   |
| <b>Nutrition</b> Responsible marketing to children  | Set a target for all dairy companies to adopt a stated position on responsible consumption by 2020, and publicly report on progress by 2030  |
| <b>Water efficiency</b> to increase our level of ambition in targets for water use, productivity and recycling  | Adopted stronger targets   |
| <b>Animal health and welfare</b> 100% compliance targets unlikely to satisfy community; industry needs to lead standards                                | Increased focus on explaining how industry is performing with adopting relevant recommended practices. A new AHW monitoring program aims to provide evidence of AHW practices benchmarked against the AHW Standards and Guidelines and industry recommended practices, rather than only relying on the outcomes from a self-reporting survey |
| <b>Greenhouse gas emissions</b> Keep targets for GHGs intensity, align with Paris deal; don't wait years for holistic, science-based targets            | Set a target to reduce GHG emissions intensity across industry by 30% by 2030 (from a baseline of 2015), with a renewed focus on what can be achieved on-farm. This target will be reviewed every three years against science-based targets methodology.   |
| <b>Reducing waste</b> That we should align targets with government (federal for packaging; local for recycling) and the re-use market                   | Set a target of 100% of Australian packaging to be recyclable, compostable or reusable by 2025 or earlier (in line with the Australian Government's commitment)  |
| <b>Human rights/ modern slavery</b> (emerging issue)<br>Industry should have a position   | Started to investigate a possible industry position on human rights  |
| <b>Antimicrobial stewardship</b> Need to act  | Preparing a statement on antimicrobial stewardship (AMS)   |
| <b>Food waste</b> Research the scope and extent of food waste in the sector   | Began research into food loss and waste in pre-consumer stages of the dairy value chain  |

## Dairy Sustainability Consultative Forum Members (as at October 2018)

| Name             | Organisation                                    |
|------------------|---|
| Kate Andrews     | NRM Regions Australia                           |
| Briannon Avery   | Ridley  |
| Glenn Bake       | Bega Cheese                                     |
| Melissa Balas    | Bega Cheese                                     |
| Pip Band         | Meat & Livestock Australia                      |
| Meredith Banks   | Metcash   |
| Terry Batey      | EcoDev  |
| Fiona Baxter     | Coles   |
| Jeremy Bayard    | Ace Farms                                       |
| James Bentley    | NAB   |
| Nicholas Bond    | Aldi  |
| Patten Bridge    | Consultant                                      |
| Jason Briffa     | Lion  |
| Lyndall Bull     | Lynea Consultants                               |
| Mark Callow      | Norco   |
| Allan Cameron    | GippsDairy                                      |
| Bryce Camm       | Beef Sustainability Framework                   |
| Evan Campbell    | DDLDP   |
| Sarah Carter     | Fonterra  |
| Rod Channon      | Department of Agriculture and Water Resources   |
| Barry Cosier     | AFGC  |
| Susanne Craig    | McDonalds                                       |
| Bruce Donnison   | Australian Dairy Farmers                        |
| Carlene Dowie    | Fairfax Media                                   |
| Guy Fitzhardinge | Beef farmer                                     |
| Chris Griffin    | Australian Dairy Industry Council (Forum Chair) |
| Tess Herbert     | Australian Lot Feeders Association              |
| Jack Holden      | Fonterra  |
| David Inall      | Australian Dairy Farmers                        |
| Jenny Jago       | DairyNZ   |
| Ben James        | Warakirri Dairies                               |
| Adam Jenkins     | United Dairyfarmers Victoria                    |
| Maurice King     | Saputo  |
| Alison Lansley   | Australian Specialist Cheesemakers Association  |
| Belinda Lee      | David Jones                                     |
| Mark Linton      | Parmalat  |
| Donald Mackay    | Beef Sustainability Framework                   |
| Ian McConnel     | WWF   |
| Lauren McKenzie  | Coles   |

| Name              | Organisation  |
|-------------------|---|
| Lisa Menhenett    | Murray Dairy Regional Development Program                   |
| Lachlan Monsbough | Rabobank  |
| Heather Neil      | RSPCA   |
| Ben Pearson       | World Animal Protection                                     |
| Rose Philipzen    | Moxey Farm  |
| Ian Porter        | Parmalat  |
| Geoff Raven       | Dairy Safe SA   |
| Terry Richardson  | Australian Dairy Farmers /Australian Dairy Industry Council |
| Brad Ridoutt      | CSIRO   |
| Jessica Roth      | Blue River  |
| Andrew Rouse      | WWF   |
| Maree Sarkis      | Saputo  |
| Peter Stahle      | Australian Dairy Products Federation                        |
| Melanie Tensen    | RSPCA   |
| Justin Toohey     | Cattle Council  |
| John Verstedden   | Australian Dairy Farmers                                    |
| Nancy Wei         | Visy  |
| Monique White     | DairySA   |
| Christel Wieck    | Consultant  |
| Deedee Woodside   | Consultant  |
| Philip Wright     | Ethics Centre   |
| Susannah Wright   | Alltech   |

### Dairy Australia

|                |                  |
|----------------|------------------|
| Amber Beaumont | Melissa Cameron  |
| Tamara Dawson  | Helen Dornom     |
| Shane Hellwege | Susan Hunter     |
| Alison Kelly   | Alexandra Kury   |
| Alex Leamy     | Charles McElhone |
| David Nation   | Georgia Nichols  |
| Ian Olmstead   | Louise Sunderman |
| Kelly Ward     | Cassie Whelan    |

### Support

|                   |                       |
|-------------------|-----------------------|
| Gillian Doig      | Currie Communications |
| Robyn Leeson      | STR Consultants       |
| Mark Paterson     | Currie Communications |
| Gabrielle Sheehan | Currie Communications |

## Dairy Industry Steering Committee Members

| Name              | Organisation                              |
|-------------------|---|
| Melissa Balas     | Bega/Tatura                               |
| Jeremy Bayard     | ACE Farms                                 |
| Patten Bridge     | Bridge Logic                              |
| Jason Briffa      | Lion                                      |
| Mark Callow       | Norco                                     |
| Melissa Cameron   | Dairy Australia                           |
| Sarah Carter      | Fonterra                                  |
| Tamara Dawson     | Dairy Australia                           |
| Bruce Donnison    | Australian Dairy Farmers                  |
| Helen Dornom      | Dairy Australia                           |
| Chris Griffin     | Australian Dairy Industry Council (Chair) |
| Jack Holden       | Fonterra                                  |
| David Inall       | Australian Dairy Farmers                  |
| Maurice King      | Saputo                                    |
| Mark Linton       | Parmalat                                  |
| Ian Olmstead      | Dairy Australia                           |
| Catherine Phelps  | Dairy Australia                           |
| Rose Philipzen    | Moxey Farms                               |
| Ian Porter        | Parmalat                                  |
| Rob Randall       | Norco                                     |
| Peter Stahle      | Australian Dairy Products Federation      |
| Maree Sarkis      | Saputo                                    |
| Louise Sundermann | Dairy Australia                           |
| Susannah Tymms    | Dairy Australia                           |
| Kelly Ward        | Dairy Australia                           |

| Support           |                       |
|-------------------|-----------------------|
| Gillian Doig      | Currie Communications |
| Robyn Leeson      | STR Consulting        |
| Mark Paterson     | Currie Communications |
| Gabrielle Sheehan | Currie Communications |

## Appendix 5

# Explanation of new targets and data sources

A comparison of old and new Goals and Targets can be seen in the following table, together with the proposed data sources. We have reported progress against the 2020 Goals and Targets in this report. In future Reports we will report against the 2030 Goals and Targets.



### Commitment 1

### Enhancing economic viability and livelihoods

#### Goal 1

| 2020 goal   | 2030 goal  |  |                   |
|---|--|--|-------------------|
| Increase the future competitiveness and profitability of the Australian dairy industry  | Increase the competitiveness and profitability of the Australian Dairy Industry  |  |                   |
| 2020 targets  | 2030 targets, indicators and data sources  |  | Change            |
| <b>1.1 X% increase in the number of profitable dairy farms</b><br>The target percentage was not determined for 2020   | <b>New Target under development – will be in place in time for first report against 2030 Goals (end 2019).</b><br><br>Currently ABARES data is used to determine profitability. DairyBase, incorporating the Dairy Farm Monitor Project (DFMP) and the Queensland Dairy Accounting Scheme (QDAS), will be used to provide metrics/indicators for the 2030 targets  |  | Under development |
| <b>1.2 X% increase in the market preference for buying Australian dairy products, compared with our top 3 international competitors (NZ, EU and US)</b>   | <b>1.2 Increase the Australian dairy industry's share of global dairy trade to 10% by volume</b><br><br>Still discussing the merit of volume versus value. In 2017/18 the volume share was 6%. The metrics/indicators will be sourced from Dairy Australia's "Australian Dairy Industry In Focus" published annually with data obtained from a variety of referenced sources   |  | NEW               |
| <b>1.3 Ensuring sustainability criteria (eg carbon, animal welfare, environmental impact) do not impede market access</b>   | <b>Deleted for 2030</b><br><br>The Target was set in 2013 – with metrics difficult to determine. This Target is reflective of the dairy industry's overall Promise to provide nutritious food for a healthier world and our 4 commitments that underpin this promise   |  | RETIRED           |
| <b>1.4 Increase adoption of new technologies and innovative practices within the dairy industry – measured by % of farmers planning capital investment</b><br><br>It was difficult to determine a meaningful metric for this Target – so an indicator was chosen to reflect innovation adoption, namely:<br><br>% of farmers planning and actually making capital investment (NDFS) | <b>1.3 Increase RD&amp;E expenditure in the dairy sector by 2% per annum</b><br><br>To be measured by RD&E expenditure by Dairy Australia; the % of dairy farmers and dairy companies making capital investments<br><br>In 2018, a new statement was added to the NDFS – "I am constantly on the lookout for new information that can help me improve my dairy farm business". 79% of respondents agreed. There were a series of other questions asked in 2018 that may help track the intent of dairy farmers to seek new information/innovations |  | NEW               |
| <b>1.5 Provide consumers with greater choice and access to a variety of dairy products and/or ingredients to meet their specific needs</b><br><br>No meaningful metric was able to be established and it has not been reported until 2017 through the Dairy Trust Tracker   | <b>1.4 Provide consumers with greater choice and access to a variety of dairy products and/or ingredients to meet their specific nutritional needs</b><br><br>The Dairy Trust Tracker provides information for: The dairy industry provides a range of products to meet different needs – 75% of respondents agreed in 2017 and 85% in 2018  |  | CONTINUED         |

## Goal 2

| 2020 goal   |   | 2030 goal   |  |
|---|---|---|--|
| Increase the resilience and prosperity of dairy communities   |   | Increase the resilience and prosperity of dairy communities – No change |  |
| 2020 targets  | 2030 targets, indicators and data sources   | Change  |  |
| <p><b>2.1 Understand the contribution the dairy industry makes to supporting the economy of dairy regions</b></p>   | <p><b>2.1 Increase the contribution the dairy industry makes to supporting the economy of dairy regions.</b></p> <p>Indicators for 2030 are:</p> <p>The total value of payments made to dairy farmers on a region-by-region basis; (<i>Note:</i> This first indicator is a guide to how much money is going into communities. It's simple, uses existing data, is aligned with the criteria (for rural economies) in the global Dairy Sustainability Framework and changes can be expressed in % terms. No new investment is required to obtain data for this indicator.)</p> <p>The number of jobs supported by dairy economic activity in each dairy region; (<i>Note:</i> The data for this indicator can be obtained from an economic multiplier analysis of Australian Bureau of Statistics (ABS) input:output tables. The results can be used to compare the contribution of the dairy sector with other sectors if similar multipliers are available for other sectors.)</p>   | NEW INDICATOR – Same Target   |  |
| <p><b>2.2 The contribution of dairy is recognised in relevant local and state government strategies (especially growth and investment strategies)</b></p> <p>No meaningful metric/indicator was available</p>   |   | RETIRED   |  |
| <p><b>2.3 Increase consumers' and dairy communities' recognition of the value of the dairy sector</b></p> <p>The dairy industry is an essential part of the community</p> <p>People in my region appreciate the role that dairy farmers like myself play in our community</p> | <p><b>2.2 Increase the recognition of the benefit of the dairy industry to regional communities by 10% by 2030</b></p> <p>The indicators for 2030 are the same as 2020:</p> <p>% people in regional areas who think dairy is an essential part of their community (from Dairy Trust Tracker)</p> <p>% of farmers who agree "people in my region appreciate the role that dairy farmers like myself play in our community" (from NDFS)</p>   | CONTINUED   |  |
|   | <p><b>2.3 Increase the contribution people in dairy make to social capital in their community</b></p> <p>In 2017/18 the dairy industry commissioned some work to see if there were any existing indicators that could be used. Following extensive discussion, it was agreed to use the following indicators for 2030:</p> <p>% farmers who say they/their employees actively participate in their local community initiatives (NDFS)</p> <p>% farmers who believe it's important for them/their employees to support their local community initiatives (NDFS)</p> <p>% dairy companies investing funds and participating in local community initiatives</p> <p>% increase in the level of participation of DA/RDPs in community-related events/initiatives (no. of events/initiatives)</p> <p>% dairy people who feel their community has effective dairy leaders and strong social networks (Regional Wellbeing Survey)</p> <p>The presence of effective leadership and strong social (interacting) networks are signs of resilient and prosperous regional (dairy) communities; and active participation in local decision-making is an indicator of the capacity of dairy people to contribute to build social capital.</p> | NEW   |  |

## Goal 3

| 2020 goal   |   | 2030 goal   |  |
|---|---|---|--|
| Provide a safe work environment for all dairy workers                                       |   | Provide a safe work environment for all dairy workers – No change |  |
| 2020 targets  | 2030 targets, indicators and data sources   | Change  |  |
| 3.1 100% of on-farm and dairy company workers completed OH&S training (on going compliance) | 3.1 100% of dairy workers to be implementing good safety practices<br>Indicators – From dairy companies and as reported in the Power of People in Dairy (POP) Survey (latest October 2017) for farmers  | NEW Target but same Indicators                                    |  |
| 3.2 30% reduction in Lost Time Injury Frequency Rate (LTIFR)                                | 3.2a More than 90% of dairy workers working less than 50 hours per week<br>3.2b 30% reduction in Lost Time Injury Frequency Rate (LTIFR) for farm and manufacturing workplaces on figures reported in 2017 (plus media monitoring for farm statistics as incidents underreported at farm level) | NEW   |  |
| 3.3 Zero workplace fatalities   | 3.3 Zero workplace fatalities on farm and in manufacturing<br>Metric/indicators from Safe Work Australia – plus media monitoring for Farm statistics (Safe Work Australia is a lag indicator)   | CONTINUED   |  |

## Goal 4

| 2020 goal  |  | 2030 goal   |  |
|--|--|---|--|
| Attract, develop and retain a skilled and motivated dairy workforce  |  | Provide a productive and rewarding work environment for all dairy workers |  |
| 2020 targets   | 2030 targets, indicators and data sources  | Change  |  |
| 4.1 30% increase in the number of suitable applicants for dairy industry jobs<br>% dairy farmers who expect to recruit staff | 4.1 Less than 25% of dairy workers report low levels of life satisfaction<br>Metrics/indicators from the National Regional Wellbeing Survey for farmers – still to be determined for dairy companies | NEW   |  |
| 4.2 Increase participation in development activities – 50% increase in education and 100% increase in extension activities   | 4.2 Rates of dairy remuneration are similar to or higher than for other regional industries<br>ABS information to provide metrics  | NEW   |  |
| 4.3 Retain an experienced and motivated workforce – 20% increase in the number of experienced employees retained             | 4.3 80% of dairy employees are retained within the industry year-on-year<br>Metrics/indicators – POP Survey for dairy farmers, dairy companies source still to be determined                         | NEW   |  |
|  | 4.4 Less than 20% of dairy employers report difficulty in sourcing suitable applicants<br>Metrics/indicators still to be determined  | NEW   |  |
| 4.4 50% of dairy farmers have a well-developed business transition plan  | 4.5 More than 70% of dairy farm owners have an agreed farm transition/succession plan by 2030<br>4.6 Human rights – target and indicators to be developed. following industry discussion             | NEW   |  |



## Commitment 2 Improving wellbeing of people

### Goal 5

| 2020 Goal  |  | 2030 Goal  |   |           |
|--|--|--|---|-----------|
| All dairy products and ingredients sold are safe |  | All dairy products and ingredients sold are safe – no change |   |           |
| 2020 targets                                     |  | 2030 targets, indicators and data sources                    |   | Change    |
| 5.1  | <b>Zero non-compliant chemical residues found during the Australian Milk Residue Analysis (AMRA) Survey</b>                              | 5.1  | <b>Zero non-compliant chemical residues found during the Australian Milk Residue Analysis (AMRA) Survey</b>   | CONTINUED |
| 5.2  | <b>Zero product recalls due to food contamination (as reported by Product Safety Recalls Australia)</b>                                  | 5.2  | <b>Zero product recalls due to food contamination (as reported by Product Safety Recalls Australia)</b>   | CONTINUED |
| 5.3  | <b>15% increase in the number of consumers who agree Australia produces safe and high quality dairy products (based on 2013 figures)</b> | 5.3  | <b>15% increase in the number of consumers who agree Australia produces safe and high quality dairy products (based on 2018 figures)</b><br><br>Metrics/Indicators from the Dairy Trust Tracker: <ul style="list-style-type: none"> <li>• The dairy industry produces safe products – 81% in 2018</li> <li>• The dairy industry produces high quality products – 83% in 2018</li> </ul> | CONTINUED |
|  |  | 5.4  | <b>Food Safety Culture embedded into the dairy food business</b><br><br>A food safety culture maturity model with appropriate metrics/ indicators is being developed. While food safety is expected, it is important that it is not taken for granted and continues to be a key focus.  | NEW       |



## Goal 6

| 2020 Goal  |  | 2030 Goal   |  |           |
|--|--|---|--|-----------|
| Dairy contributes to improved health outcomes for Australian communities |  | Dairy contributes to improved health outcomes for all Australians |  |           |
| 2020 targets   |  | 2030 targets, indicators and data sources                         |  | Change    |
| <b>6.1a</b>  | <b>Improve recognition that dairy (milk, cheese and yoghurt) is a key element of a healthy diet</b>  | <b>6.1</b>  | <b>Improve consumers' perception of the health and nutrition benefits of dairy foods</b>   | CONTINUED |
|  | Metrics/Indicators from the Dairy Trust Tracker:   |   | Metrics/Indicators from the Dairy Trust Tracker:   |           |
|  | <ul style="list-style-type: none"> <li>Increase the % of individuals who agree 'Dairy foods are essential for good health and wellbeing' to 85% by 2020</li> </ul>                                     |   | <ul style="list-style-type: none"> <li>Increase the % of individuals who agree "Dairy foods are essential for good health and wellbeing"</li> </ul>                            |           |
|  | <ul style="list-style-type: none"> <li>Decrease the % of individuals who agree 'I'm concerned consuming dairy foods will increase my weight' to 20% by 2020</li> </ul>                                 |   | <ul style="list-style-type: none"> <li>Decrease the % of individuals who agree "I'm concerned consuming dairy foods will increase my weight"</li> </ul>                        |           |
| <b>6.1b</b>  | <b>The National Health and Medical Research Council (NHMRC) Australian Dietary Guidelines continue to recommend milk, cheese and yoghurt as part of a healthy diet</b>                                 | <b>6.2</b>  | <b>The National Health and Medical Research Council (NHMRC) Australian Dietary Guidelines continue to recommend milk, cheese and yoghurt as part of a healthy diet</b>         | CONTINUED |
| <b>6.2</b>   | <b>Increase the proportion of Australians meeting their recommended daily intake of the milk, cheese, yoghurt and/or alternatives food group as outlined in the 2013 Australian Dietary Guidelines</b> | <b>6.3</b>  | <b>Australians meet recommended daily serves for dairy.</b>  | NEW       |
|  |  | <b>6.4</b>  | <b>All dairy companies adopt a stated position on responsible consumption by 2020 and publicly report on progress by 2030.</b><br><br>Metrics/Indicators still to be developed | NEW       |



## Commitment 3

### Providing best care for all our animals

#### Goal 7

| 2020 goal                         |  | 2030 goal   |   |                           |
|-----------------------------------|--|---|---|---------------------------|
| Provide best care for all animals |  | Provide best care for all animals for whole of life |   |                           |
| 2020 targets                      |  | 2030 targets, indicators and data sources           |   | Change                    |
| 7.1                               | <b>All of industry complying with legislated Animal Welfare Standards</b>  | 7.1   | <b>100% ongoing compliance with legislated animal welfare standards</b><br><br>Metrics/Indicators – to be included in AHW Monitoring Program being developed, with verification through the Animal Husbandry Survey   | CONTINUED                 |
| 7.2                               | <b>All of industry adopting relevant recommended industry practices for animal care</b><br><br><ul style="list-style-type: none"> <li>• Reduced use of routine calving induction</li> <li>• Don't dock tails</li> <li>• Disbudded prior to 2 months of age</li> <li>• Have a lameness strategy</li> <li>• All farmers where relevant have cool infrastructure</li> <li>• Bobby calves fed within 6 hours prior to transport</li> </ul> | 7.2   | <b>All of industry adopting relevant recommended industry practices for animal care</b><br><br><ul style="list-style-type: none"> <li>• No routine use of calving induction</li> <li>• No tail docking</li> <li>• All calves disbudded with pain relief prior to two months of age</li> <li>• All farmers implementing a lameness strategy</li> <li>• All farmers where relevant have cooling facilities</li> <li>• Bobby calves managed appropriately</li> <li>• All farms are implementing a documented biosecurity plan</li> </ul>   | CONTINUED WITH AMENDMENTS |
| 7.3                               | <b>25% increase in the number of consumers who believe dairy farmers do a good job caring for animals</b>  | 7.3   | <b>25% increase in the number of consumers who believe dairy farmers do a good job caring for animals</b><br><br>Metric/Indicator: Dairy farmers do a good job caring for their animals (Dairy Trust Tracker)   | CONTINUED                 |
|                                   |  | 7.4   | <b>Antimicrobial Stewardship (AMS) – the dairy industry uses antibiotics responsibly – as little as possible, as much as necessary – to protect the health and welfare of our animals</b><br><br>Metrics/Indicators:<br><ul style="list-style-type: none"> <li>• All dairy farmers access antibiotics from a registered vet and are using them responsibly under veterinary direction</li> <li>• Antibiotics that are of high importance to human AMR in Australia are only used to treat dairy livestock in exceptional circumstances where no other alternatives exist</li> </ul> | NEW                       |



## Commitment 4

### Reducing environmental impact

#### Goal 8

| 2020 goal                                   |   | 2030 goal                                 |  |                                       |
|---|---|---|--|---------------------------------------|
| Improve nutrient, land and water management |   | Improve land management                   |  |                                       |
| 2020 targets                                |   | 2030 targets, indicators and data sources |  | Change                                |
| 8.1   | 90% of stock excluded from waterways  | 8.1a                                      | 100% of stock excluded from waterways; and   | NEW                                   |
|   |   | 8.1b                                      | 100% of riparian zones actively managed and maintained<br>Waterways to be defined by the Victorian Government Department of Water, Environment and Land Planning (DWELP)<br>Rivers are defined as major rivers, streams or creeks and their feeders (tributaries), and include the water, the channel and surrounding land (known as riparian land).<br>Wetlands are still-water environments, usually occurring where water collects in depressions in the landscape from either surface water or groundwater. Wetlands can include swamps, lakes and peatlands (organic matter collections).<br>Metrics/Indicators: From NDFS and from NRM Surveys |                                       |
| 8.2   | 80% of farmers implement nutrient management plans                                      | 8.2                                       | 100% of farmers complete and implement a soil and nutrient management plan<br>Metrics/Indicators: Data to be provided through farmer self-assessment by the Natural Resource Management Survey and completion of DairySAT  | NEW                                   |
| 8.3   | 80% of dairy farms with irrigation have implemented some level of irrigation automation |   |  | MOVED TO GOAL 9: Water Efficiency     |
| 8.4   | 80% of dairy farms managing some land for conservation and biodiversity                 | 8.3                                       | 100% of dairy farms have and implement a documented biodiversity action plan   | NEW                                   |
|   |   | 8.4                                       | Zero net deforestation by 2020<br>Ideally no land should be converted from forest to agricultural land. If some forest has to be destroyed, the loss shall be compensated – this includes ensuring responsibly sourced feedstuffs<br>Metrics/Indicators: Data to be provided through farmer self-assessment by the NRM Survey and completion of DairySAT – net deforestation by 2020 then ongoing  | NEW                                   |
| 8.5   | Where relevant, all dairy farmers actively managing noxious weeds                       |   | Principles now incorporated into Target 8.3 – Biodiversity Plan  | RETIRED                               |
| 8.6   | 100% of farmers have practices to recycle water on farm                                 | -   |  | MOVED TO GOAL 9: Water Use Efficiency |

## Goal 9

| 2020 goal  |   | 2030 goal   |  |           |
|--|---|---|--|-----------|
| Reduce the consumptive water intensity of dairy companies by 20% |   | Increase water use efficiency (now includes farm and manufacturing) |  |           |
| 2020 targets   |   | 2030 targets, indicators and data sources                           |  | Change    |
| 9.1  | <b>Reduce the consumptive water intensity of dairy companies by 20% (on 2010/11 levels)</b> | 9.1   | <b>Reduce the consumptive water intensity of dairy companies by 30% by 2030 (on 2010/11 levels)</b><br><br>Metrics/Indicators: From Dairy Manufacturers Sustainability Council (DMSC) annual reporting | CONTINUED |
|  |   | 9.2   | <b>Improve water use and water productivity to utilise 2.0 tonnes of dry matter per ML used</b>  | NEW       |
|  |   | 9.3   | <b>100% of farmers recycling water from dairy sheds</b>  | NEW       |
|  |   | 9.4   | <b>100% of farmers monitoring water consumption</b>  | NEW       |
|  |   | 9.5   | <b>100% of farmers have a water security risk management plan by 2020 and are implementing it (ongoing)</b>  | NEW       |

## Goal 10

| 2020 goal  |  | 2030 goal                                 |  |        |
|--|--|---|--|--------|
| Reduce greenhouse gas emissions intensity by 30% |  | Reduce greenhouse gas emissions intensity |  |        |
| 2020 targets                                     |  | 2030 targets, indicators and data sources |  | Change |
| 10.1   | <b>30% reduction in GHE intensity on 2010/11 levels</b><br><br>Direct measurement of dairy companies' emissions through the DMSC annual reporting<br><br>Output measures from farm abatement actions- no metrics set – efficient use of electricity used as a proxy target | 10.1                                      | <b>Reduce greenhouse gas emissions intensity by 30% across the whole industry (from a baseline of 2015).</b><br><br>Metrics/Indicators:<br><ul style="list-style-type: none"> <li>• For Manufacturing – from the DMSC members annual reporting</li> <li>• For Farm – to be determined</li> </ul> | NEW    |

## Goal 11

| 2020 goal                       |  | 2030 goal                                 |  |         |
|---------------------------------|--|---|--|---------|
| Reduce waste to landfill by 40% |  | Reduce waste                              |  |         |
| 2020 targets                    |  | 2030 targets, indicators and data sources |  | Change  |
| 11.1                            | <b>40% reduction in dairy company waste to landfill intensity on 2010/11 levels</b><br><br>No target for dairy farmers was set<br><br>Proxy: 80% of silage wrap recycled by 2020 | 11.1a                                     | <b>100% diversion rate from landfill (for dairy companies)</b><br><br>Metrics/Indicators: DMSC annual reporting                                    | REVISED |
|                                 |  | 11.1b                                     | <b>100% of silage wrap recycled (for farm)</b>   |         |
| 11.2                            | <b>All dairy companies being signatories of the Australian Packaging Covenant (APC)</b>  | 11.2                                      | <b>All dairy companies participate in the Australian Packaging Covenant (APC) or equivalent scheme</b>   | REVISED |
|                                 |  | 11.3                                      | <b>100% of Australian dairy packaging to be recyclable, compostable or reusable by 2025 or earlier</b><br><br>Metrics/Indicators under development | NEW     |
|                                 |  | 11.4                                      | <b>Halve food waste by 2030</b><br><br>Metrics/Indicators under development  | NEW     |

## Appendix 6

# Global Reporting Initiative (GRI) content index

The Dairy Industry Sustainability Framework Progress Report 2018 references Disclosures from GRI 101: Foundation 2016, GRI 102 General Disclosures 2016, GRI 305-4 Emissions 2016 and GRI 416-2 Customer Health and Safety 2016.

| GRI Standard Disclosure <sup>1</sup>   | Location   | Omissions   |
|--|--|---|
| <b>GRI 101: Foundation 2016</b>  |  |   |
| <b>GRI 102: General Disclosures 2016</b>   |  |   |
| 102-1 Name of the organization.  | Appendix 1: Governance   |   |
| 102-2 A description of the organization's activities.  | About the Australian dairy industry  |   |
| 102-3 Location of the organization's headquarters.   | Back cover   |   |
| 102-4 Number of countries where the organization operates, and the names of countries where it has significant operations and/or that are relevant to the topics covered in the report.                                | About the Australian dairy industry  |   |
| 102-5 Nature of ownership and legal form.  | Appendix 1: Governance   |   |
| 102-6 Markets served, including: geographic locations where products and services are offered; sectors served; types of customers and beneficiaries.   | About the Australian dairy industry  |   |
| 102-7 Scale of the organization, including: total number of employees; total number of operations; net sales; total capitalization broken down in terms of debt and equity; quantity of products or services provided. | About the Australian dairy industry  | Total capitalization not available sector-wide  |
| 102-8 Total number of employees by employment contract (permanent and temporary), by gender.   | About the Australian dairy industry  | Information by gender, region and tenure is not available sector-wide.                                |
| 102-9 A description of the organization's supply chain, including its main elements as they relate to the organization's activities, primary brands, products, and services.   | Addressing the key issues  | Information broken down by brands is not available sector-wide but remains with individual companies. |
| 102-10 Significant changes to the organization's size, structure, ownership, or supply chain.  | Message from the Chairs  |   |
| 102-11 Whether and how the organization applies the Precautionary Principle or approach.   | Refer to Dairy Australia's Audit and Risk Committee Charter<br><br><a href="https://www.dairyaustralia.com.au/about-dairy-australia/about-the-organisation/who-we-are/corporate-governance">https://www.dairyaustralia.com.au/about-dairy-australia/about-the-organisation/who-we-are/corporate-governance</a> |   |
| 102-12 A list of externally-developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes, or which it endorses.  | Appendix 2: Framework principles and guidance  |   |
| 102-13 A list of the main memberships of industry or other associations, and national or international advocacy organizations.   | Appendix 2: Framework principles and guidance and Appendix 1: Governance   |   |
| 102-14 A statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization and its strategy for addressing sustainability.                                   | Message from the Chairs  |   |
| 102-15 A description of key impacts, risks, and opportunities.   | Addressing the key issues<br><br>Progress snapshot   |   |
| 102-16 A description of the organization's values, principles, standards, and norms of behaviour.  | Appendix 2: Framework principles and guidance  |   |
| 102-18 Governance structure of the organization.   | Appendix 1: Governance   |   |

<sup>1</sup> Disclosure descriptions have been summarised. For detailed descriptions refer to the GRI Standards <https://www.globalreporting.org/standards>

| GRI Standard Disclosure <sup>1</sup>  | Location  | Omissions                               |
|---|---|---|
| <b>GRI 101: Foundation 2016</b>   |   |   |
| <b>GRI 102: General Disclosures 2016</b>  |   |   |
| 102-40 A list of stakeholder groups engaged by the organization.  | Appendix 4: Stakeholder engagement  |   |
| 102-41 Percentage of total employees covered by collective bargaining agreements.   |   | Information unavailable sector-wide.    |
| 102-42 The basis for identifying and selecting stakeholders with whom to engage.  | Appendix 4: Stakeholder engagement  |   |
| 102-43 The organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process. | Consultation on new targets<br>Appendix 4: Stakeholder engagement                 |   |
| 102-44 Key topics and concerns that have been raised through stakeholder engagement.  | Appendix 4: Stakeholder engagement  |   |
| 102-45 A list of all entities included in the organization's consolidated financial statements or equivalent documents.   |   | Not applicable to a sector-wide report. |
| 102-46 An explanation of the process for defining the report content and the topic Boundaries. An explanation of how the organization has implemented the Reporting Principles for defining report content.   | Appendix 3: Materiality process   |   |
| 102-47 A list of the material topics identified in the process for defining report content.   | Appendix 3: Materiality process   |   |
| 102-48 The effect of any restatements of information given in previous reports, and the reasons for such restatements.  | Re-statements are noted in the text.  |   |
| 102-49 Significant changes from previous reporting periods in the list of material topics and topic Boundaries.   | Addressing the key issues<br>About this report<br>Appendix 3: Materiality process |   |
| 102-50 Reporting period for the information provided.   | About this report   |   |
| 102-51 If applicable, the date of the most recent previous report.  | About this report   |   |
| 102-52 Reporting cycle.   | About this report   |   |
| 102-53 The contact point for questions regarding the report or its contents.  | Back cover  |   |
| 102-54 The claim made by the organization, if it has prepared a report in accordance with the GRI Standards.  | About this report   |   |
| 102-55 The GRI content index, which specifies each of the GRI Standards used and lists all disclosures included in the report.  | Appendix 6: GRI Content Index   |   |
| 102-56 A description of the organization's policy and current practice with regard to seeking external assurance for the report.  | About this report.  |   |
| <b>GRI 305: Emissions 2016</b>  |   |   |
| 305-4 GHG emission intensity <sup>2</sup>   | Commitment 4  |   |
| <b>GRI 416: Customer Health and Safety 2016</b>   |   |   |
| 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services   | Commitment 2  |   |

<sup>2</sup> Scope 1 and 2 emissions based on the National Greenhouse and Energy Reporting (Measurement) Determination 2008 and the National Greenhouse and Energy Reporting Act 2007.

# Appendix 7

## 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, over 400 dairy farmers are surveyed nationally. The most recent survey was conducted in 2016.

Visit [dairyaustralia.com.au/farm/animalmanagement](http://dairyaustralia.com.au/farm/animalmanagement)

#### **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 2015.

Visit [www.dairyingfortomorrow.com.au/wp-content/uploads/Australian-Dairy-Sustainability-Framework-NRM-Survey-2015.pdf](http://www.dairyingfortomorrow.com.au/wp-content/uploads/Australian-Dairy-Sustainability-Framework-NRM-Survey-2015.pdf)

#### **DairyBase**

This is a web-based tool developed by Dairy Australia that allows dairy farmers and their advisors to assess farm business performance using a consistent industry agreed methodology. DairyBase also contains additional verified and validated datasets from farm business consultants and service providers. It also contains information from the Dairy Farm Monitor Project (DFMP) that gathers financial and production data from a selection of dairy farms across Victoria and the Queensland Dairy Accounting Scheme (QDAS).

Visit [dairybase.com.au](http://dairybase.com.au)

#### **Dairy Trust Tracker**

This national survey of 1300 members of the public is undertaken by Dairy Australia and conducted annually by online survey. The data generated enables Dairy Australia to monitor levels of trust, identify emerging issues, and track the public's perceptions of dairy foods and the industry in general.

#### **Dairy Situation and Outlook**

This regular report from Dairy Australia is undertaken three times per year to update and appraise farmers and industry stakeholders about the current situation affecting the outlook for the Australian dairy industry.

Visit [dairyaustralia.com.au/industry/dairy-situation-and-outlook/situation-and-outlook](http://dairyaustralia.com.au/industry/dairy-situation-and-outlook/situation-and-outlook)

#### **The Power of People in Dairy (POP) Survey**

This independent survey of around 400 dairy farmers was conducted for the first time in 2014 and more recently in 2017. Commissioned by Dairy Australia, it is used to identify the need for support, training and development and seeks to understand farmer attitudes, behaviours and needs on topics such as farm safety, employee capabilities and employee attraction, retention and transition.

Visit [thepeopleindairy.org.au/projects/pop](http://thepeopleindairy.org.au/projects/pop)

#### **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.

## 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 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.

Visit [animalwelfarestandards.net.au/cattle](http://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 publicly available. The Progress Report draws on ABARES data to determine and track performance measures for farm profitability.

The figures are based on a rolling 3 year average of ABARES data.

The data documented here keeps track of the preliminary and provisional estimates available in previous years to allow previously report three year averages to be replicated.

2010/11: 66% of farms were reported as being profitable

2011/12: 64%

2012/13: 35.3% (note: preliminary estimate was 32%)

2013/14 52.4% final (note: provisional estimate was 62%)

2014/15 54% final (note: provisional estimate was 39%)

2015/16 42.7% final (note: provisional estimate was 43%)

2016/17 52.0% preliminary (note: provisional was 34%)

2017/18 60.7% Provisional estimate (note: no provisional as data was not sought in that period)

Note that as of 2015, the baseline to 2013 now contains all 'final' figures and should not change further.

Link to data (note that historical data is not online but can be requested from ABARES): <http://agriculture.gov.au/abares/research-topics/surveys/farm-survey-data#summary-data-tables>

ABARES have stated (via email) that "this data is updated each year after our OUTLOOK conference in March"

Visit [agriculture.gov.au/abares](http://agriculture.gov.au/abares)

### **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; and reduce the risk of chronic disease. The Guidelines are for use by health professionals, policy makers, educators, food manufacturers, food retailers and researchers.

Visit [eatforhealth.gov.au/guidelines](http://eatforhealth.gov.au/guidelines)



### **Australian Milk Residue Analysis (AMRA) survey**

The Australian Milk Residue Analysis (AMRA) Survey provides a national, independent chemical residue monitoring program in Australian bovine milk. The AMRA Survey has a key role in promoting the dairy industry's reputation and facilitating ongoing market access by monitoring on-farm chemical use. Throughout each year around 1000 samples of raw milk are collected from farms across all dairying regions of Australia. These samples are used to conduct around 13,000 analyses for nearly 70 different compounds covering antimicrobials, animal parasite control chemicals, feed contaminants and environmental contaminants.

Visit [agriculture.gov.au/export/controlled-goods/dairy/links/australian-milk-residue-survey](http://agriculture.gov.au/export/controlled-goods/dairy/links/australian-milk-residue-survey)

### **Dairy Sustainability Framework**

The global Dairy Sustainability Framework (DSF) provides a holistic approach to global dairy sustainability activity, generating a common sustainability commitment.

Visit <https://dairysustainabilityframework.org/>

### **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.

Visit [productsafety.gov.au/recalls](http://productsafety.gov.au/recalls)

### **QDAS**

Qld Dairy Accounting Scheme The Queensland Dairy Accounting Scheme (QDAS) is a service of the Queensland Department of Agriculture, Fisheries and Forestry, and was established to improve the understanding of business principles among advisors and dairy farmers by providing farm management accounting and analysis. QDAS has evolved to now examine the business traits of profitability, solvency and efficiency and continues to help dairy farmers make informed decisions based on business information.

The QDAS reports provide a summary of physical and financial data from various dairy

production systems in Queensland. Farmer participation in QDAS is voluntary and free. Information from the QDAS is incorporated into DairyBase.

Visit <http://dairyinfo.biz/technical-information/farm-business-management/qdas/>

### **Dairy Farm Monitor Project**

The project provides a comprehensive physical and financial analysis for farms across Australia. Reports are used by industry and government to inform policy and service delivery to generate economic growth. Farmers can compare their performance and identify areas for improvement. The data collected through the Dairy Farm Monitor Project is now stored in DairyBase.

Visit [dairyaustralia.com.au/farm/farm-business-management/dairy-farm-monitor-project](http://dairyaustralia.com.au/farm/farm-business-management/dairy-farm-monitor-project)

### **Regional Wellbeing Survey**

The Canberra University Regional Wellbeing Survey (CU RWS) 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.

Visit [www.canberra.edu.au/research/faculty-research-centres/ceraph/regional-wellbeing/survey-results/2014-survey-results](http://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.

Visit [safeworkaustralia.gov.au/](http://safeworkaustralia.gov.au/)

# Appendix 8

## Scorecard 2018

### Overview of 2018 performance against the 2020 Goals and Targets

This is a compilation of all the individual tables already presented under each goal. References for data sources are shown in the individual tables.

#### A summary of our 2018 progress

|                       |  |  |   | Baseline  | 2014                                   | 2015                  | 2016                        | 2018               | 2020 Target           | Progress                    |   |
|-----------------------|--|--|---|---|--|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---|
| Enhancing livelihoods | 1 Increase the future competitiveness and profitability of the Australian dairy industry | 1.1  | X% increase in the number of profitable dairy farms   | 55%   | 51%                                    | 47%                   | 50%                         | 52%                | Under review          | ●                           |   |
|                       |  | 1.2  | X% increase in the market preference for buying Australian dairy products, compared with our top 3 international competitors (NZ, EU and US)    | Under review  |  |                       |                             | No data            | Under review          |                             |   |
|                       |  | 1.3  | Ensuring sustainability criteria (eg carbon, animal welfare, environmental impact) do not impede market access                                  | Under review  |  |                       |                             | No data            | Under review          |                             |   |
|                       |  | 1.4  | Increase adoption of new technologies and innovative practices within the dairy industry – measured by % of farmers planning capital investment | 40%   | 51%                                    | 52%                   | 49%                         | 79%                | Under review          | ●                           |   |
|                       |  | 1.5  | Provide consumers with greater choice and access to a variety of dairy products and/or ingredients to meet their specific needs                 | Under review  | This wasn't reported on in 2016 report |                       |                             | 85%                | Under review          | ●                           |   |
|                       | 2 Increase the resilience and prosperity of dairy communities                            | 2.1  | Understand the contribution the dairy industry makes to supporting the economy of dairy regions   | Under review  |  |                       |                             |                    | No update             | Under review                |   |
|                       |  | 2.2  | The contribution of dairy is recognised in relevant local and state government strategies (especially growth and investment strategies)         | Under review  |  |                       |                             |                    | No update             | Under review                |   |
|                       |  | 2.3  | Increase consumers' and dairy communities' recognition of the value of the dairy sector   |   |  |                       |                             |                    |                       |                             |   |
|                       |  |  | Dairy industry is an essential part of the community  | 71%   | 70%                                    | 68%                   | 67%                         | 88%                | 78%                   | ●                           |   |
|                       |  |  | People in my region appreciate the role that dairy farmers like myself play in our community  | 76%   | 76%                                    | 79%                   | 78%                         | 67%                | 87%                   | ●                           |   |
|                       | 3 Provide a safe work environment for all dairy workers                                  | 3.1 100% of on-farm and dairy company workers completed OH&S training  |   | On-farm workers   | 46%                                    | 46%                   | no data                     | no data            | 38%                   | 100%                        | ● |
|                       |  |  |   | Dairy company workers   | 100%                                   | 100%                  | 100%                        | 100%               | 100%                  | 100%                        | ● |
|                       |  |  |   |   |  |                       |                             |                    |                       |                             |   |
|                       |  | 3.2 30% reduction in Lost Time Injury Frequency Rate (LTIFR)   |   | Dairy farming   | 5.8                                    | 8.9                   | 6.7                         | 14.3               | 13.7                  | 3.6                         | ● |
|                       |  |  |   | Dairy companies   | 8.2                                    | 8.6                   | 13                          | 12.1               | 5.6                   | 6.1                         | ● |
|                       |  | 3.3 Zero workplace fatalities  |   | Dairy farming   | 2                                      | 1                     | 3                           | 6                  | 2                     | 0                           | ● |
|                       |  |  |   | Dairy companies   | 0                                      | 0                     | 0                           | 0                  | 0                     | 0                           | ● |
|                       | 4 Attract, develop and retain a skilled and motivated dairy workforce                    | 4.1 30% increase in the number of suitable applicants for dairy industry jobs                                      |   | Measured by % dairy farmers who expect to recruit new staff in the next 12 months | 20%                                    | 22% expect to recruit | Not Reported in 2016        |                    | 16% expect to recruit | 30% increase (under review) | ● |
|                       |  |  |   | Dairy companies   | Under review                           |                       |                             |                    |                       | Under review                |   |
|                       |  | 4.2 Increase participation in development activities   |   | Extension   | 20%                                    | 39%                   | Not reported in 2016 report |                    | 57%                   | 100% increase               | ● |
|                       |  |  |   |   |  |                       |                             |                    |                       |                             |   |
| 4.3                   |  | Retain an experienced and motivated dairy workforce – 20% increase in the number of experienced employees retained | 75%   | 75%   | Not reported in 2016 report            |                       | 71%                         | 90%                | ●                     |                             |   |
| 4.4                   |  | 50% of dairy farmers have a well-developed business transition plan  | 8%  | 8%  | Not reported in 2016 report            |                       | 21%                         | 50% – under review | ●                     |                             |   |

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●

## A summary of our 2018 progress

|                     |  |      |   | Baseline   | 2014                 | 2015       | 2016       | 2018       | 2020 Target         | Progress |  |
|---------------------|--|------|---|--|----------------------|------------|------------|------------|---------------------|----------|--|
| Improving wellbeing | 5 All dairy products and ingredients sold are safe                         | 5.1  | Zero non-compliant chemical residues found during the AMRA Survey   | 0  | 0                    | 0          | 0          | 0          | 0                   | ●        |  |
|                     |  | 5.2  | Zero product recalls due to food contamination  | 7  | 8                    | 9          | 7          | 8          | 0                   | ●        |  |
|                     |  | 5.3  | 15% increase in the number of consumers who agree Australia produces safe, high quality dairy products  |  |                      |            |            |            |                     |          |  |
|                     |  |      | The dairy industry produces safe products   | 67%  | 69%                  | 67%        | 68%        | 81%        | 77%                 | ●        |  |
|                     |  |      | The dairy industry produces high quality products   | 77%  | 74%                  | 75%        | 74%        | 83%        | 88%                 | ●        |  |
|                     | 6 Dairy contributes to improved health outcomes for Australian communities | 6.1a |   | Improve recognition that dairy (milk, cheese and yoghurt) is a key element of a healthy diet |                      |            |            |            |                     |          |  |
|                     |  |      | Increase the % of individuals who agree dairy foods are essential for good health and wellbeing   | 72%  | 68%                  | 69%        | 71%        | 78%        | 85%                 | ●        |  |
|                     |  |      | Decrease in the % of individuals who agree "I'm concerned consuming dairy foods will increase my weight"  | 32%  | 30%                  | 31%        | 32%        | 31%        | 20%                 | ●        |  |
| 6.1b                |  |      | NHMRC Australian Dietary Guidelines continue to recommend milk, cheese and yoghurt as part of a healthy diet  | Recognised   | Recognised           | Recognised | Recognised | Recognised | Ongoing recognition | ●        |  |
| 6.2                 |  |      | Increase the proportion of Australians meeting their recommended daily intake of the milk, cheese, yoghurt and/or alternatives food group as outlined in the 2013 Australian Dietary Guidelines | Under review   | Not reported in 2016 |            |            |            | Under review        |          |  |

|   |                                     |     |  |     |     |     |     |         |      |      |  |
|---|-------------------------------------|-----|--|-----|-----|-----|-----|---------|------|------|--|
| Providing best care for all our animals | 7 Provide best care for all animals | 7.1 | All of industry complying with legislated animal welfare standards                                 |     |     |     |     |         | 100% |      |  |
|   |                                     |     | Awareness of new Animal Welfare Standards  | 56% | 56% |     | 47% | No data | 100% |      |  |
|   | 7.2                                 |     | All of industry adopting relevant recommended industry practices for animal care                   |     |     |     |     |         |      | 100% |  |
|   |                                     |     | Reduce use of routine calving induction  | 80% | 80% | 88% | 90% | 95%     |      | ●    |  |
|   |                                     |     | Don't dock tails   | 80% | 85% |     | 91% | No data |      |      |  |
|   |                                     |     | Disbud prior to 2 months of age  | 57% | 63% |     | 63% | No data |      |      |  |
|   |                                     |     | Have a lameness strategy   | 87% | 95% |     | 95% | No data |      |      |  |
|   |                                     |     | Where relevant, have cooling facilities  | 94% | 98% |     | 92% | No data |      |      |  |
|   |                                     |     | Bobby calves fed within 6 hours prior to transport   | 97% | 97% |     | 96% | No data |      |      |  |
|   | 7.3                                 |     | 25% increase in the number of consumers who believe dairy farmers do a good job caring for animals | 60% | 62% | 59% | 58% | 72%     | 75%  | ●    |  |

|                                    |  |      |   |   |       |       |       |              |                     |              |   |
|------------------------------------|--|------|---|---|-------|-------|-------|--------------|---------------------|--------------|---|
| Reducing environmental impact      | 8 Improve nutrient, land and water management                  | 8.1  | 90% of stock excluded from waterways                                | 73%   |       | 76%   |       | No data      | 90%                 |              |   |
|                                    |  |      | 80% of farmers implement nutrient management plans                  | 30%   |       | 58%   |       | No data      | 80%                 |              |   |
|                                    |  | 8.3  |   | 80% of dairy farms with irrigation have implemented some level of irrigation automation                                   | 47%   |       | 54%   |              | No data             | 80%          |   |
|                                    |  |      |   | 80% of dairy farms managing some land for conservation and biodiversity   | 47%   |       | 45%   |              | 81%                 | 80%          | ● |
|                                    |  | 8.5  |   | Where relevant, all dairy farmers actively managing noxious weeds   |       |       |       |              |                     |              |   |
|                                    |  |      |   | Noxious weeds identified as major land issue  | 37%   |       | 29%   |              | No data             | Under review |   |
|                                    |  |      |   | Actively managing noxious weeds where a problem   | 28%   |       | 28%   |              | No data             | 100%         |   |
|                                    |  | 8.6  |   | 100% of farmers have practices to recycle water on farm   | 50%   |       | 75%   |              | No data             | 100%         |   |
|                                    |  |      |   |   |       |       |       |              |                     |              |   |
|                                    | 9 Reduce consumptive water intensity of dairy companies by 20% | 9.1  |   | Reduce the consumptive water use intensity of dairy companies by 20% (on 2010/11 levels) (litres/litre of milk processed) | 1.75  | 1.56  | 1.58  | 1.62         | 1.85                | 1.4          | ● |
|                                    |  |      |   |   |       |       |       |              |                     |              |   |
|                                    | 10 Reduce greenhouse gas emissions intensity by 30%            | 10.1 |   | 30% reduction in GHG emissions intensity on 2010/11 levels measured by a direct measurement of dairy companies emissions  | 178.7 | 153.6 | 152.5 | 140          | 159.6               | 125.8        | ● |
|                                    |  |      |   | 10.2  |       |       |       |              |                     |              |   |
| 11 Reduce waste to landfill by 40% | 11.1a  |      | 40% reduction in dairy company waste to landfill on 2010/11 levels  | 2.69  | 1.63  | 1.45  | 1.39  | 1.32         | 1.61                | ●            |   |
|                                    |  |      | Dairy companies: Signatories to Australian Packaging Covenant (APC) | 9   | 9     | 8     | 8     | >15          | All Dairy companies | ●            |   |
|                                    |  |      | 11.2  |   |       |       |       |              |                     |              |   |
|                                    |  |      | Farm level waste reduction  | Under review  |       |       |       | Under review |                     |              |   |

Progress towards 2020 Target against baseline ●  
 Result maintained or marginal change ●  
 Regression ●

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