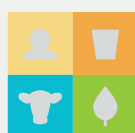




DAIRY MANUFACTURERS SUSTAINABILITY COUNCIL

ENVIRONMENTAL SCORECARD 20/21

Working together for a sustainable future



Australian Dairy Sustainability Framework



dairy manufacturers sustainability council



Members of the DMSC 2020/21

Saputo
Dairy Australia



CHOBANI

BESTON
GLOBAL FOOD COMPANY



EXECUTIVE SUMMARY

Australian dairy companies are committed to reducing their environmental impact.

Australian dairy companies work together pre-competitively on projects to reduce their environmental impact through the Dairy Manufacturers Sustainability Council (DMSC).

The DMSC is a nationally recognised community of practice, comprised primarily of environmental and sustainability group managers from Australian dairy manufacturing companies. The DMSC has an industry-wide focus that assists company members to work together pre-competitively to improve environmental performance and the sustainability of their operations.

The Australian Dairy Sustainability Framework is a guide for the entire dairy industry to move towards sustainable production. The framework sets out goals and targets for 2030. Particularly relevant to this report are goals 9, 10 and 11 – increasing water use efficiency, reducing greenhouse gas emissions intensity and reducing waste. Each year, members of the DMSC report on their performance against these targets. Data supplied by manufacturers is aggregated, and progress towards the goals reported against.

For 2020/21, data was contributed by Bega Cheese, Bulla Dairy Foods, Burra Foods, Chobani Australia, Fonterra, Lactalis Australia, the Union Dairy Company, and Saputo Dairy Australia. These DMSC member companies process 84 per cent of Australia's dairy milk supply. They measure and submit environmental data for reporting and benchmarking.

KEY ACHIEVEMENTS IN 2021

Emissions

Dairy companies have cut GHG emissions intensity by 25.5 per cent between 2010/11 and 2020/21.

Waste

Dairy companies reduced solid waste sent to landfill by 6.5 per cent per ML of raw milk processed (compared to 2019/2000) and this is a 41 per cent reduction since 2010/11.

Accountability

An increase in individual manufacturer sustainability reporting.

SCORECARD GOAL 9

INCREASING WATER USE EFFICIENCY

Target 9.1 Reducing consumptive water intensity of dairy companies by 30% on 2010/11 levels

Most water usage in the dairy industry comes from farms. For the processing and manufacturing sector, the largest use of water is cleaning processes, to ensure the high standards required for food safety are met. Factors that can influence water use at processing sites include:

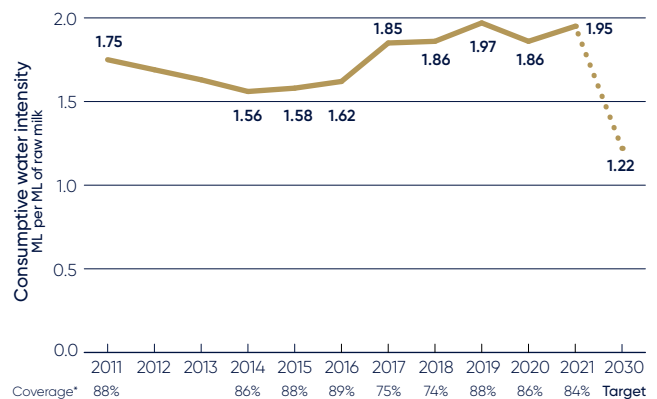
- Product mix – factories produce a wide range of dairy products, which require varying amounts of water as an input and for cleaning processes. For example, in the production of milk powder, water that is extracted from the product itself can be captured and re-used for other purposes.
- Milk supply – Some dairy regions in Australia have a declining milk supply. This means processors can't always run at full capacity, which reduces how efficiently resources, such as water, can be used.
- Customer expectations – As dairy offerings expand in response to consumer desire for additional diversity, more frequent changeovers and associated cleaning processes are required for the plant environment and equipment.

Results

In 2021, water intensity for DMSC members increased marginally, from 1.86 ML per megalitre (ML) of raw milk processed to 1.95 ML per ML of raw milk processed.

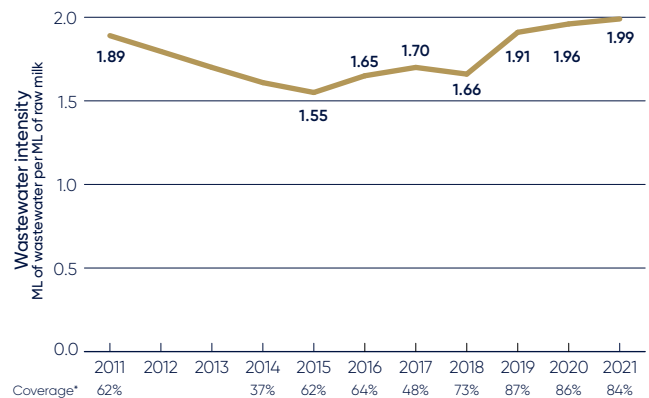
The increase in water intensity may be due to the shrinking milk supply the Australian dairy industry has been experiencing for some years. This results in manufacturing plants operating at sub-optimal efficiencies. Cleaning regimes, for example, are both water and energy intensive and are linked to food safety standards rather than the volume of milk processed. These processes must remain consistent in application, regardless of the quantity of product moving through a plant.

Figure 1 Consumptive water



Coverage is the proportion of milk produced by reporting manufacturers vs industry.

Figure 2 Wastewater



Coverage is the proportion of milk produced by reporting manufacturers vs industry.

SCORECARD GOAL 10

REDUCING GHG EMISSIONS INTENSITY BY 30% ON 2015/16 LEVELS

Target 10.1 Reduce greenhouse gas emissions intensity

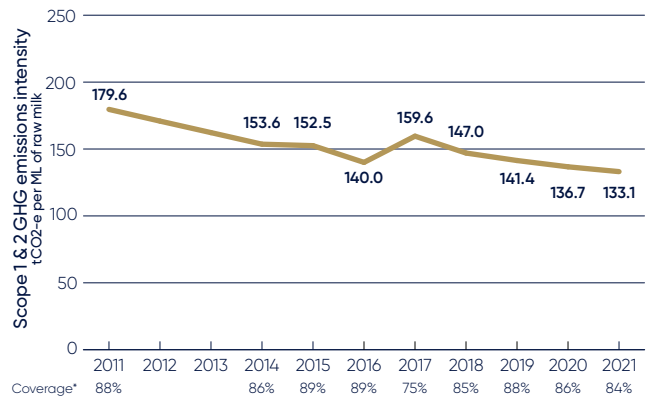
Dairy companies measure their emissions by the tonnes of carbon dioxide equivalent (tCO₂-e) per ML of milk processed. Scope 1 GHG emissions are generated by activities such as gas consumption at manufacturing sites and Scope 2 GHG emissions are mainly generated by purchased energy such as electricity at manufacturing sites.

Several manufacturers and global customers have committed to not only reducing their emissions but are active participants in global programs such as the Science Based Targets Initiative (SBTi). Many members of the DMSC are also subject to Australia's national legislation that requires public reporting of scope 1 and scope 2 emissions which form the basis of performance reporting for this target.

Results

In 2020/21, DMSC members generated on average, an estimated 133.1 tCO₂ -e per ML of raw milk processed. This represents 84 per cent of the milk volume processed in Australia and includes scope 1 (direct) and scope 2 (indirect) GHG emissions. While this represents a slight decrease in emissions intensity of 2.7 per cent from the previous year, it also represents a 25.5 per cent decrease since the original baseline of 2010/11 and a 12.7 per cent decrease on the revised baseline of 2015 toward our target of a 30 per cent reduction by 2030.

Figure 3 Emissions intensity



In 2020/2021, DMSC members consumed on average, an estimated 1.27 terajoules of energy per ML of raw milk processed. This is a small increase of 2.5 per cent on the energy consumed in the previous year after three years of declining energy consumption. This small rise has not translated to an increase in greenhouse gas emissions from the sector, likely due to the uptake of renewable energy projects by processing companies.

SCORECARD GOAL 11

REDUCE WASTE

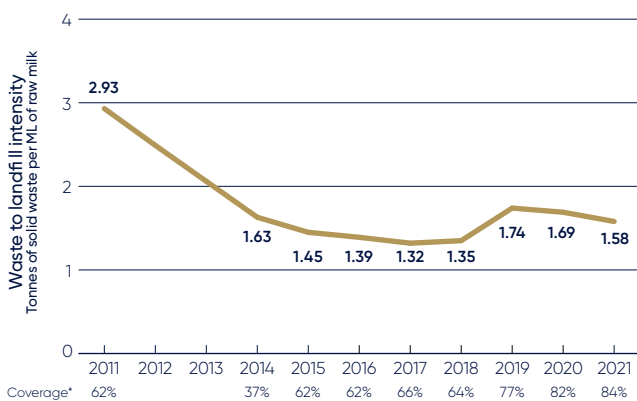
Target 11.1 100% diversion rate from landfill (for dairy companies) by 2030

Most waste from dairy companies is generated by four streams:

- Packaging – such as cardboards, paper, cartons and plastic.
- Organics – such as sludge and rejected product.
- Single-use personal protective equipment – such as hair nets and face coverings.
- Office and operational equipment.

These streams can vary significantly between manufacturing and processing sites. Some are facing location-specific challenges – such as regional areas without access to recycling services – while others are already diverting 100 per cent of their waste from landfill.

Figure 4 Waste to landfill



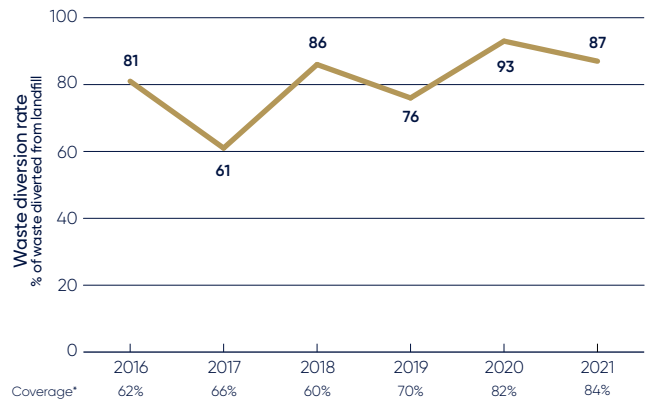
In 2020/21 DMSC members generated on average, an estimated 1.58 tonnes of solid waste per ML of raw milk.

Results

In 2020/21, DMSC members generated on average an estimated 1.58 tonnes of solid waste to landfill per ML of raw milk processed, a decrease of 6.5 per cent on the previous year.

Consistent data collection and monitoring remains a challenge for dairy companies. While reporting a decrease in waste generation, DMSC members also reported a decrease in the group diversion rate from 93 per cent in 2019/20 to 87 per cent in 2020/21. At least some of this drop is due to inconsistent data collection over successive years which can disproportionately impact the data and overall trend.

Figure 5 Waste diversion



Dairy companies have a target of 100 per cent of waste (tonnes per ML of milk processed) diverted from landfill by 2030.

Target 11.4 100% of Australian dairy packaging to be recyclable, compostable or reusable by 2025 or earlier

As a whole, the dairy industry has embraced the ambitious **National Packaging Targets** which commit 100% of Australian dairy packaging to be recyclable, compostable or reusable by 2025 (if not before). An industry working group is driving progress towards these targets, launching the **Australian Dairy Sustainable Packaging Roadmap** in 2021. The roadmap was developed in partnership with the Australian Packaging Covenant Organisation (APCO), Dairy Australia and the Australian Dairy Products Federation. It aims for:

- Implementation of collection and recycling systems for all dairy packaging by 2025.
- 80 per cent of supermarket products to be labelled with the Australasian Recycling Label by December 2023.
- 50 per cent average post-consumer recycled content across all dairy packaging by 2025.

Target 11.5 Halve food waste by 2030

With the support of the **Circular Economy Business Innovation Centre**, Dairy Australia is partnering with **Stop Food Waste Australia** and the **Australian Dairy Products Federation**, along with input from the DMSC to develop a Dairy Sector Food Waste Action Plan. The Action Plan will support the Australian dairy industry's commitment to halve food waste nationally by 2030. The plan will include practical and commercially realistic solutions, increase transparency along the dairy supply chain and promote collaboration across the industry.

PROGRESSING OUR GOALS

Industry initiatives are supporting progress towards achieving our sustainability goals for Commitment 4 of the Sustainability Framework: Reducing environmental impact. Examples of these activities include:

Collective industry vision for sustainable dairy packaging

The launch of the Australian Dairy Sustainable Packaging Roadmap in 2021 provided a collective vision for the dairy industry in moving towards sustainable packaging. It also provides a practical framework for how to implement the improvements required to ensure 100 per cent of Australian dairy packaging is recyclable, compostable or reusable by 2025.

Developed by the Australian Packaging Covenant Organisation in partnership with Dairy Australia and the Australian Dairy Products Federation, key targets include:

- Implementation of collection and recycling systems for all dairy packaging by 2025.
- 80 per cent of supermarket products to be labelled with the Australasian Recycling Label by December 2023.
- 50 per cent average post-consumer recycled content across all dairy packaging by 2025.

Training our industry for better environmental protection

The Environment Protection Authority (EPA) industry partnership program aims to improve understanding of changes to the Environment Protection Act (20017) that came into effect in 2021. Dairy Australia has partnered with the EPA to deliver training to dairy companies, ensuring the industry plays its role in protecting Australia's unique natural environment.

Manufacturer initiatives

Many dairy companies in Australia are developing their own responses to sustainable development. Conducting business responsibly is a business imperative. Australia's dairy manufacturing companies are using many of the global frameworks and standards in developing their approaches. Many are producing voluntary annual sustainability reports which demonstrate progress on topics, including food safety, greenhouse gas emissions and animal welfare. Others share their approach through their websites and contribute monitoring information on energy, water, greenhouse gas emissions and waste to this report. Examples include:

- **Fonterra Sustainability Report 2021**
- **2021 Saputo Promise Report**
- **Bega Cheese Greater Good Sustainability Report 2021**
- **Lactalis Australia Sustainability Report 2020**
- **Chobani sustainability webpage**
- **Bulla impact webpage**
- **Burra Foods sustainability webpage**

Dairy companies are also subject to multiple regulatory disclosures and voluntary programs in Australia on topics ranging from packaging and greenhouse gas emissions to gender diversity and human rights. Information on their progress can be found on searchable websites, including:

- **The Workplace Gender and Equality Agency**
- **The Australian Packaging Covenant Organisation**
- **National Pollutant Inventory**
- **Clean Energy Regulator**
- **Modern Slavery Statements Register**



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