Australian Dairy Industry Sustainability Framework

Progress Report — December 2014

Reporting Progress against the Dairy Industry’s 2020 Sustainability Targets and Performance Measures
Statement from the Chair

The Australian dairy industry is proud of its commitment to sustainability — taking an industry-wide, whole-of-value-chain approach. Sustainability and profitability are an essential part of the Australian dairy industry and should be at the core of everything we do.

Our customers and the community are increasingly demanding proof we are doing the right thing by people, animals and our planet. They want to see our credentials and evidence of our progress — and we welcome the opportunity to share this to showcase the work we are doing.

The Australian Dairy Industry Sustainability Framework, led by the Australian Dairy Industry Council (ADIC) and supported by Dairy Australia, provides an opportunity to demonstrate our credentials.

On our farms and in our factories, we undertake many programs which contribute to enhancing livelihoods, improving the wellbeing of people and animals, and reducing our environmental impact. However, there is still work to do and challenges to overcome. We continue to look for improvements and are strongly committed to working towards even better performance.

This 2014 Progress Report builds on the first report in 2013 by focusing on the industry’s sustainability activities during 2014. It demonstrates our commitment to the Framework, our principles of transparency and accountability, our progress against the goals and targets of the Framework and where we need to continue to do more.

The Progress Report provides evidence the dairy industry is committed to delivering better outcomes for the community and the environment, and demonstrates the benefits of working together to help create value for our industry, our customers and the community. It builds on our significant existing industry activity, providing guidance to farmers, dairy companies and industry bodies on achieving our shared priorities and commitments.

The Framework has been developed in consultation with industry stakeholders, customers and interest groups as we want to be recognised worldwide as a responsible, responsive and prosperous producer of healthy food.

We commend to you the industry’s second Sustainability Progress Report and we welcome your feedback.

Chris Griffin
Chair, Steering Committee, Dairy Industry Sustainability Framework

Noel Campbell
Chair, Australian Dairy Industry Council

December 2014
Section 1: 2014 Report — Executive Summary
A summary of our 2014 progress

The Dairy Industry Sustainability Framework comprises 11 targets and 41 measures under three themes: enhancing livelihoods, improving wellbeing and reducing environmental impact.

This 2014 Progress Report documents how we are tracking against targets set during 2013 and where we need to focus activity, in order to achieve our commitments by 2020.

The 2014 Progress Report is the second published by the Australian Dairy Industry Council on behalf of the Australian dairy industry. It demonstrates our principles of transparency and accountability, and our progress against the goals and targets in the Framework.

Baseline data has not been established for all measures under each target and in some cases only proxy indicators are available at this time. In these cases, specific targets for 2020 are still to be set and relevant baseline data is under investigation. Improved data representing on the ground outcomes will be included in future reporting cycles as they develop and become more robust.

Enhancing Livelihoods

For the 43,000 Australians employed on farms and in manufacturing by the dairy sector, dairying is their future. It creates jobs for generations and careers for life. By generating $13 billion in economic value, dairying makes a vital contribution to the nation and, in particular, regional communities.

Improving Wellbeing

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

Reducing Environmental Impact

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

By generating $13 billion in economic value, a competitive and profitable Australian dairy industry makes a vital contribution to the nation and, in particular, to the resilience and prosperity of regional communities where one in eight Australians lives. The industry is committed to developing a skilled and motivated workforce and creating a safe workplace for the 43,000 people employed by farmers and manufacturers. For enhancing livelihoods the Australian Dairy Industry Sustainability Framework has set 2020 targets for industry competitiveness and profitability; community resilience and prosperity; a safe work environment; and a skilled and motivated workforce.

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

Dairy seeks to develop a culture of profitability

During 2013 five performance measures were agreed for Target 1 — farm profitability, market preference, market access, capital investment and product diversity — and baseline data were established for two of these measures — farm profitability and capital investment.

In 2013/14, 63% of farmers had a positive farm business profit (ABARES data). Farm business profit is a measure of longer-term profitability that accounts for capital depreciation, payments to family workers and changes in inventories of livestock, fodder and grain held on farm. Changes in farm business profit closely reflect changes in farm cash income.

Farm business profit is defined as farm cash income plus build up in trading stocks, less depreciation and the imputed value of the owner-manager, partners and family labour.

The agreed baseline measure for farm profitability is a rolling three year average of the percentage of farms with positive farm business profit using ABARES data. For the three year average (2011 to 2014), 52% of farms had a positive farm business profit. This represents a very small downward shift from the previous three year average (2010 to 2013) which was 54%. A key influence on the average figure is the impact of the 2012/13 season where only 32% of farms reported a positive farm business profit as a result of lower milk receipts and increased fodder costs.

The DairyBase project currently underway should also refine the measures for profitability. Using ABARES data is the best indicator at present – but this will be reviewed in 2015, in light of DairyBase results.

The proportion of dairy farmers who are planning to invest capital in new technology and innovative practice rose during 2014. 48% of farmers (NDFS 2014) reported they made capital investments in the last 12 months. This compares with 40% of farmers (NDFS 2013) who in 2013 reported they were planning capital investments. A target for 2020 has not been set.

A performance measure for dairy manufacturers is yet to be established.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance*</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 % Profitable farms (rolling 3 year average)</td>
<td>54%</td>
<td>52%</td>
<td>TBA</td>
</tr>
<tr>
<td>1.2 Market preference</td>
<td>n/a</td>
<td>n/a</td>
<td>-</td>
</tr>
<tr>
<td>1.3 Market access</td>
<td>n/a</td>
<td>n/a</td>
<td>-</td>
</tr>
<tr>
<td>1.4 Capital investment</td>
<td>40%</td>
<td>48%</td>
<td>n/a</td>
</tr>
<tr>
<td>1.5 Product diversity</td>
<td>n/a</td>
<td>n/a</td>
<td>-</td>
</tr>
</tbody>
</table>

Understanding 2014 performance

- Improvement from last measurement
- No change from last measurement
- Regression from last measurement
- No measurement in 2014
- Ongoing target achieved in 2014
- Ongoing target not achieved in 2014

*n/a* indicates where an appropriate baseline measure or target has yet to be established

*figure shown relates to the 2014 Progress report and not necessarily the 2013/14 year results*
**Target 2: Increase the resilience and prosperity of dairy communities**

**Supporting communities to live, work and play**

In 2013 three measures were agreed for tracking progress against **Target 2**. These were economic contribution, government recognition and community recognition.

In the 2013 Progress Report, we noted further work would be undertaken to develop baseline information to assess performance against the measures established under this target. This work has not proceeded as fast as we would like and will be a priority for 2015.

Future activities include considering an economic study into the Gross Domestic Product (GDP) contribution that dairy makes to each of its eight regions and nationally.

In 2015 we will develop measures to track the extent to which relevant local and state government strategies positively recognise the importance of the dairy industry to the economy.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Economic contribution</td>
<td>n/a</td>
<td>n/a</td>
<td>-</td>
</tr>
<tr>
<td>2.2 Government recognition</td>
<td>n/a</td>
<td>n/a</td>
<td>-</td>
</tr>
<tr>
<td>2.3 Community recognition</td>
<td>- dairy industry is an essential part of community</td>
<td>71%</td>
<td>70%</td>
</tr>
<tr>
<td>2.3 Community recognition</td>
<td>- people appreciate dairy farmers in our community</td>
<td>76%</td>
<td>76%</td>
</tr>
</tbody>
</table>

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

**Training underpins strategy to keep workers safe**

In 2013 three measures were agreed for tracking the dairy industry’s progress under **Target 3**: OH&S Training, Lost Time Injury Frequency Rate (LTIFR); and fatalities (as reported by Safe Work Australia).

The industry set a target of 100% of on-farm and manufacturing workers to have completed Occupational Health & Safety training (incl. ongoing compliance) by 2020.

A survey (The power of people on Australian dairy farms, POP September 2014) has enabled us to determine a baseline measure for dairy farms — 46% of dairy farmers have a documented OH&S plan in place. A baseline for manufacturers is being investigated.

During 2014 the need for better information about on-farm safety practices was recognized and research with farmers provided baseline data on OH&S practices.

There appears to have been a substantial increase in on-farm safety issues that need to be investigated further. This may be due to revisions in Safe Work Australia data and/or under reporting farm work injuries in the base year. In either case, it warrants further investigation.
**Target 3: SAFE WORK ENVIRONMENT**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 OHS Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- dairy farming</td>
<td>n/a</td>
<td>46%</td>
<td>➔</td>
</tr>
<tr>
<td>- dairy manufacturing</td>
<td>100%</td>
<td>100%</td>
<td>✔</td>
</tr>
<tr>
<td>3.2 Lost Time Injury Frequency Rate [LTIFR]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- dairy farming</td>
<td>5.9</td>
<td>10.0</td>
<td>➔</td>
</tr>
<tr>
<td>- dairy manufacturing</td>
<td>8.1</td>
<td>8.3</td>
<td>➔</td>
</tr>
<tr>
<td>3.3 Fatalities</td>
<td>Not applicable</td>
<td>1</td>
<td>X</td>
</tr>
</tbody>
</table>

**Understanding 2014 performance**

- ➔ improvement from last measurement
- ➔ no change from last measurement
- ➔ ongoing target achieved in 2014
- ➔ regression from last measurement
- ? no measurement in 2014
- ✔ ongoing target not achieved in 2014

*“n/a” indicates where an appropriate baseline measure or target has yet to be established*

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

**The challenge: to be a workplace of choice**

In 2013, four measures were agreed upon to track progress with *Target 4*: applicant suitability, professional development; workforce retention; and business transition.

To date, a baseline for one indicator, participation in development (dairy farmers), has been established: being 20% in 2013. During 2014 this measure rose to 39% (POP 2014).

A comparison between the dairy industry and other agricultural industries regarding attracting, developing and retaining a skilled and motivated workforce is due to be considered.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Suitable Applicants</td>
<td>n/a</td>
<td>n/a</td>
<td>-</td>
</tr>
<tr>
<td>4.2 Participation in development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- extension</td>
<td>20%</td>
<td>39%</td>
<td>➔</td>
</tr>
<tr>
<td>- education</td>
<td>n/a</td>
<td>n/a</td>
<td>-</td>
</tr>
<tr>
<td>4.3 Retain workforce</td>
<td>n/a</td>
<td>n/a</td>
<td>-</td>
</tr>
<tr>
<td>4.4 Business planning</td>
<td>n/a</td>
<td>n/a</td>
<td>-</td>
</tr>
</tbody>
</table>

**Understanding 2014 performance**

- ➔ improvement from last measurement
- ➔ no change from last measurement
- ➔ ongoing target achieved in 2014
- ➔ regression from last measurement
- ? no measurement in 2014
- ✔ ongoing target not achieved in 2014

*“n/a” indicates where an appropriate baseline measure or target has yet to be established*

In 2014, there was an increased focus on and investment in farm change and extension. In order to attain a better understanding of the challenges faced by dairy farms, Dairy Australia commissioned research (*The power of people on Australian dairy farms survey September 2014*) and the feedback from this and other research clearly indicates the significant challenges that ‘attract and retain’ poses for farmers.
Improving wellbeing

With a unique natural package of 10 essential nutrients, dairy foods — milk, cheese and yogurt — have helped underpin the health and wellbeing of generations of Australians. As an industry, we care deeply for the wellbeing of the community and our animals. Under the Framework there are three targets for improving wellbeing by 2020: safe products and ingredients, improved health outcomes and care for all animals.

Target 5: All dairy products and ingredients sold are safe

Systems, licences, audits underpin food safety

During 2013, the dairy industry agreed upon measures, established baseline data and set a target for tracking progress with the safety of dairy products and ingredients.

Monitoring evidence of non-compliant chemical residues, product recalls and consumer sentiment is how the dairy industry measured progress with Target 5 during 2014.

The 2013/14 Australian Milk Residue Analysis Survey shows the industry achieved 100% compliance with Australian standards on chemical residuals (zero non-compliances) — in line with the target set for 2020.

In 2014, the industry recorded seven product recalls, due to food contamination (Source: Product Safety Recalls Australia). This remains unchanged from 2013. The proportion of consumers who agree Australia produces safe dairy products rose two points to 69% (20% neutral, 3% disagree and 9% don’t know DM 2014).

Understanding 2014 performance

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Chemical residues - compliance</td>
<td>Zero non-compliance</td>
<td>Zero non-compliance</td>
<td>✔ Zero non-compliance</td>
</tr>
<tr>
<td>5.2 Product recalls</td>
<td>7</td>
<td>7</td>
<td>✗ Zero</td>
</tr>
<tr>
<td>5.3 Consumer support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Safe products</td>
<td>67%</td>
<td>69%</td>
<td>✗ 77%</td>
</tr>
<tr>
<td>- Quality products</td>
<td>77%</td>
<td>74%</td>
<td>✗ 86%</td>
</tr>
</tbody>
</table>

“n/a” indicates where an appropriate baseline measure or target has yet to be established.
Target 6: Dairy contributes to improved health outcomes for Australian communities

Dairy sets sights on healthy diets, daily intake

During 2013, two measures for tracking dairy’s contribution to improved health outcomes for Australian communities (Target 6) were agreed upon. These were:

- the recognition of milk, cheese and yogurt as part of a healthy diet; and
- the consumption of milk, cheese and yogurt, compared to the recommended intake.

Baselines were established and targets were also set for the first measure.

The proportion of Australians who agree “Dairy foods are essential for good health and wellbeing” slipped four points to 68% in 2014 (27% neutral, 6% disagree DM 2014). A baseline of 72% was set in 2013 using the Dairy Monitor Survey (DM) 2013 results. A target of 85% is set for 2020.

Dairy foods continue to be recognised by the National Health and Medical Research Council’s (NHMRC’s) Australian Dietary Guidelines as being part of a healthy diet.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1a Healthy Diet:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- good health</td>
<td>72%</td>
<td>68%</td>
<td>➪ 85%</td>
</tr>
<tr>
<td>- weight</td>
<td>32%</td>
<td>30%</td>
<td>➪ 20%</td>
</tr>
<tr>
<td>6.1b Healthy Diet - NHMRC</td>
<td>Recognised</td>
<td>Recognised</td>
<td>✔ Ongoing recognition</td>
</tr>
<tr>
<td>6.2 Daily intake</td>
<td>n/a</td>
<td>n/a</td>
<td>- n/a</td>
</tr>
</tbody>
</table>

Understanding 2014 performance

- ➪ improvement from last measurement
- ➫ no change from last measurement
- ➬ regression from last measurement
- ➨ no measurement in 2014
- ✔ ongoing target achieved in 2014
- ✗ ongoing target not achieved in 2014

“n/a” indicates where an appropriate baseline measure or target has yet to be established.

Note: Baseline data for “daily intake” has not been established and, as result, a target in 2020 for this measure has not been set.
Target 7: Provide best care for all animals

Our vision: best care for all animals

Two measures — compliance with animal welfare standards and adoption of recommended husbandry practices — were agreed upon in 2013 for monitoring progress under Target 7.

During 2013, baseline data was established for all indicators, except the level of compliance with standards, and targets for 2020 were set for each indicator under both measures.

A new set of Australian Animal Welfare Standards for Cattle are under development. It will be an essential legal requirement that they are met by all dairy farmers. Although these standards are yet to be endorsed and implemented by government, 56% of dairy farmers are aware of them, according to the Animal Husbandry Survey, 2014. This figure will be used as a guide for compliance while a baseline is being investigated.

In 2014, dairy farmers made progress against four of the five indicators for recommended animal husbandry practice. This included the proportion of farmers who don’t dock tails, which rose from 80% in 2013 to 85%, and the proportion of farmers who have an effective lameness strategy in place, which rose from 87% to 95% in the past year.

Although the proportion of farmers who use induction did not change, the number of cows induced has almost halved (now representing approximately 1.3% of cows nationally).

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 Compliance with standards</td>
<td>n/a</td>
<td>56%</td>
<td>100%</td>
</tr>
<tr>
<td>- Aware of new standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2 Recommended practices:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- don’t dock tails</td>
<td>80%</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>- reduce use of induction</td>
<td>80%</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>- disbud prior to 2 months</td>
<td>57%</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>- lameness strategy</td>
<td>87%</td>
<td>95%</td>
<td></td>
</tr>
<tr>
<td>- cool infrastructure</td>
<td>94%</td>
<td>98%</td>
<td></td>
</tr>
</tbody>
</table>

Understanding 2014 performance

- Improvement from last measurement
- No change from last measurement
- Regression from last measurement
- No measurement in 2014
- Ongoing target achieved in 2014
- Ongoing target not achieved in 2014

"n/a" indicates where an appropriate baseline measure or target has yet to be established.
Reducing environmental impact

Dairy farmers are responsible stewards of the land. Dairy works hard to reduce waste to landfill, reduce the intensity of greenhouse gas emissions and to use water wisely. Technology and tenacity underpin commitment by dairy manufacturers and farmers to reduce their impact on the environment. The Australian Dairy Industry Sustainability Framework has identified four targets for reducing environmental impact by 2020: nutrient, land and water management; reduced water consumptive intensity; reduced GHG emissions intensity; and reduced waste to landfill.

Target 8: Improve nutrient, land and water management

Performance figures are a work in progress

Six measures for monitoring the extent to which dairy farmers are improving nutrient, land and water management to minimise their environmental footprint were agreed during 2013. These performance measures, together with baselines for each, were taken from the 2012 Dairying for Tomorrow survey of farmers’ natural resource management practices.

Traditionally, this survey has been run every six years, so performance data for 2014 is not available. The industry intends to run it more frequently — with one planned for 2015.

Consumer sentiment is tracked in the annual Dairy Monitor Survey. In the 2014 Survey, it was found that 31% of consumers agreed “dairy foods are produced in an environmentally-responsible way”. The target is to increase this to 37% by 2016. Consumer sentiment is being used as a proxy measure for monitoring progress against this target until such time that up-to-date measures of performance are recorded.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1 Exclusion of stock from waterways</td>
<td>73%</td>
<td></td>
<td>90%</td>
</tr>
<tr>
<td>8.2 Nutrient management plans</td>
<td>30%</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>8.3 Irrigation automation</td>
<td>47%</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>8.4 Managing land for conservation and biodiversity</td>
<td>47%</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>8.5 Managing noxious weeds</td>
<td>37%</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>8.6 Recycle water on farm</td>
<td>50%</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Understanding 2014 performance

- improvement from last measurement
- no measurement in 2014
- no change from last measurement
- ongoing target achieved in 2014
- regression from last measurement
- ongoing target not achieved in 2014

“n/a” indicates where an appropriate baseline measure or target has yet to be established

Not measured until 2015
**Target 9: Reduce the consumptive water intensity of dairy manufacturers by 20%**

*Dairy manufacturers cut water intensity by 10.5%*

In 2013, the consumptive water intensity of dairy manufacturers, in terms of litres of water per litre of milk processed, was the single measure of performance agreed for **Target 9**.

A baseline figure of 1.75 litres of water per litre of milk processed in 2010/11 (Source: Australian Dairy Manufacturing Environmental Sustainability Report 2010/11) has been adopted and a target of 1.40 litres of water per litre of milk processed has been set for 2020.

The consumptive water intensity of dairy manufacturers during 2013/14 was an estimated 1.56 litres of water per litre of milk processed¹. This represents a 10.5% reduction in water intensity since 2010/11. A 20% reduction by 2020 is the target set for manufacturers.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1 Consumptive water intensity of dairy manufacturers (litres per litre of milk processed)</td>
<td>1.75</td>
<td>1.56</td>
<td>1.40</td>
</tr>
</tbody>
</table>

**Understanding 2014 performance**

- ↑ improvement from last measurement
- ➔ no change from last measurement
- ✗ regression from last measurement
- ✔ ongoing target achieved in 2014
- × ongoing target not achieved in 2014

¹ “n/a” indicates where an appropriate baseline measure or target has yet to be established

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**Target 10: Reduce greenhouse gas emissions intensity by 30%**

*Manufacturers reduce emissions intensity by 14.5%*

In 2013, the dairy industry agreed to use the intensity of greenhouse gas (GHG) emissions generated by manufacturers as a measure for monitoring its environmental impact.

It was agreed a reduction in the intensity of GHG emissions would be measured through:

- a. direct measurement of manufacturer emissions; and
- b. output measures from on-farm abatement actions.

The intensity of GHG emissions generated by manufacturers’ use of fuel and electricity in 2013/14 fell by 14.5% to an estimated 153.6 tonnes of CO₂ (equivalent) per ML milk processed². A 30% reduction in GHG emissions intensity from the baseline figure of 178.7 tonnes of CO₂ (equivalent) per ML milk processed in 2010/11 has been set for 2020.

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¹ 2013/14 water intensity data (as reported by DMSC members) is estimated to cover 86% of industry by milk production volume.

² 2013/14 greenhouse gas data coverage (as reported by DMSC members) is estimated to cover 86% of industry by milk production volume.
The specific performance measure for on-farm abatement is yet to be agreed, and, as a result, baseline data for this measure has not been established and the target is still to be set.

**Target 11: Reduced waste to landfill**

**Recovery, reuse and recycling cut manufacturers’ waste**

Australian dairy manufacturers (representing 51% of milk processed) have achieved a 39% reduction in waste to landfill since 2010/11 by maximising their recovery, reuse and recycling of waste materials.

The amount of waste sent to landfill by manufacturers during 2013/14 is estimated at 1.63 tonnes of waste per ML of milk processed\(^3\), compared with 2.69 tonnes in 2010/11. This 39% reduction in waste to landfill since 2010/11 is in line with the target of a 40% reduction by 2020. However, it is likely that some of this result is due to improvements in the quality of data collected, and that data is based on 51% of total milk processed.

In 2013, the dairy industry agreed to measure its progress with minimising waste by monitoring the amount of waste sent to landfill by manufacturers and dairy farmers.

Although a direct quantitative target for manufacturers has been set, based on a 2010/11 baseline of 2.69 tonnes of waste per ML of milk processed, a baseline and target for farm-level is yet to be established.

Baseline data for farm waste will be established using the recently-released 2014 *Dairy Self-Assessment Tool* (DairySAT) indicator — Farm Waste chapter. Sufficient data has not yet been collected to establish a baseline.

Between 2013 and 2014 there was no change in the number of manufacturers who are signatories to the Australian Packaging Covenant (APC). It has been calculated that those nine signatories are processing 85% of Australia’s milk production.

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\(^3\) 2013/14 waste to landfill data (as reported by DMSC members) is estimated to cover 51% of industry by milk production volume.
Section 2: Detailed discussion on 2014 Progress
Enhancing livelihoods

By generating $13 billion in economic value, a competitive and profitable Australian dairy industry makes a vital contribution to the nation and, in particular, to the resilience and prosperity of regional communities where one in eight Australians lives. The industry is committed to developing a skilled and motivated workforce and creating a safe workplace for the 43,000 people employed by farmers and manufacturers. For enhancing livelihoods the Australian Dairy Industry Sustainability Framework has set 2020 targets for industry competitiveness and profitability; community resilience and prosperity; a safe work environment; and a skilled and motivated workforce.

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

OUR STORY IN BRIEF

Dairy seeks to develop a culture of profitability

Notwithstanding the vagaries of volatile prices and seasonal fluctuations from year-to-year, the Australian dairy industry has continued to improve its competitiveness and profitability over the long term.

In response to this volatility the dairy industry is focused on supporting farm profitability in good years and bad, and developing a culture within the industry of being profitable.

Around 63% of Australian dairy farms had a positive farm business profit in 2013/14 — considerably more than 2012/13 where only 32% of farmers were profitable. Using a rolling three year average, 52% had a positive farm business profit based on 2011 to 2014 figures, compared to 54% based on 2010 to 2013 figures — according to the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES). The low profitability in 2012/13 will continue to impact the rolling three year average until 2015/16.

ABARES defines farm business profit as farm cash income plus build up in trading stocks, less depreciation and the imputed value of the owner-manager, partners and family labour.

The 2014 National Dairy Farmer Survey also noted that 48% of dairy farmers made capital investments this year, 8% more than said they would when asked in the year previous (NDFS 2013).
Productivity has varied across dairy regions largely due to climatic differences, different regional industry structures, adoption of new technologies and local farming systems. The general trend is increased profits in all states except those dominated by drinking milk contracts (QLD and WA).

Global demand for dairy products continues to grow, particularly in South-East Asia and China, providing opportunities for the dairy industry to increase production and market share. As other dairy nations look to make stronger pushes into international markets, Australia must find ways to remain competitive and keep up with export demand.

**HOW WE'RE TRACKING**

**Baselines, targets: a work in progress**

The Framework outlines five performance measures for Target 1: Increase the future competitiveness and profitability of the Australian dairy industry:

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

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance*</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 % Profitable farms (rolling 3 year average)</td>
<td>54%</td>
<td>52%</td>
<td>TBA</td>
</tr>
<tr>
<td>1.2 Market preference</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>1.3 Market access</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>1.4 Capital investment</td>
<td>40%</td>
<td>48%</td>
<td>n/a</td>
</tr>
<tr>
<td>1.5 Product diversity</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Understanding 2014 performance**

- Improvement from last measurement
- No change from last measurement
- Regression from last measurement
- No measurement in 2014
- Ongoing target achieved in 2014
- Ongoing target not achieved in 2014

*“n/a” indicates where an appropriate baseline measure or target has yet to be established

1.1. **[X%] increase in the number of dairy farms that are profitable**

A target for the percentage increase will be established in 2015

**Performance measure:** ABARES data shows 54% (was 56% in 2013 Progress Report)\(^4\) of dairy farms were profitable based on a three-year rolling average to 2012/13 (ABARES).

**2014 performance data:** In 2013/14, 63% of farmers had a positive farm business profit (ABARES). This compares with 32% in 2012/13, 64% in 2011/12 and 65% in 2010/11. The baseline measure agreed was profitability based on a three year rolling average using ABARES data. Based on the 2011 to 2014 data, 52% of farmers had a positive farm business profit, compared with a rolling three year average for 2010 to 2013 of 54%, reported last year (ABARES). The rolling three year average will remain low until the 2012/13 figures are no longer included, despite good results in individual years. The DairyBase project currently underway should also refine the measures for profitability. Using ABARES data is the best indicator at present – but this will be reviewed in 2015, in light of DairyBase results.

\(^4\) Note: Retrospective updates in the estimated number of profitable farms in 2012/13 by ABARES has meant that the 2013 baseline needed to be revised down from 56% to 54%. 

Enhancing livelihoods  Improving wellbeing  Reducing environmental impact
1.2. **Market preference for buying Australian dairy products** (measure still to be set — considering comparing Australian dairy exports with our top 3 international competitors (NZ, EU and US))

*Performance measure:* to be established.

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

*Performance measure:* to be established.

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

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

*2014 performance data:* 48% of dairy farmers reported they made capital investments in the last 12 months (up from the 40% who said they would in 2013) and 51% of dairy farmers reported they were planning capital investment in next 12 months (NDFS 2014).

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

*Performance measure:* to be established.

The proportion of dairy farmers who are planning to invest capital in new technology and innovative practice rose during 2014. This year, 48% of farmers reported they made such investments in the last 12 months (NDFS 2014). This compares with 40% of farmers who in 2013 reported they were planning capital investments (NDFS 2013). A target for 2020 and a performance measure for dairy manufacturers have not been established.

**WHAT WE’RE DOING**

**Dairy raises investment in farm business management**

The dairy industry is focusing on profitable growth and is increasing investment in farm business management activities to help farmers better understand their financial situation and build financial flexibility to deal with volatility.

Planning and implementation of capital investment projects reflect the dairy industry’s commitment to adopting new technologies and introducing innovative management practices. These activities also provide an indication of dairy farmer confidence.

In 2013 we understood 40% of dairy farmers were planning capital investment (NDFS 2013), however we did not have a sense of what investment had actually been made in the previous year.

We have improved our data collection for 2014, by asking for an indication of capital investment activity in the past year, as well as intentions for the upcoming 12 months. The results from the 2014 National Dairy Farmer Survey found that 48% of dairy farmers reported that they had made capital investments in the past year (increased from the 40% reporting in 2013 that they intended to do this), and that 51% intended to do so in the year ahead.

The inaugural ADF National Dairy Farmers Summit (13 March 2014) identified key priorities around developing an industry strategy for innovation, investment and growth; identifying pathways to encourage investment and confidence in the industry; and actively encouraging government to continue trade reform that benefits dairy.
The national RD&E Framework (Dairy Moving Forward initiative) is a project overseen by a Steering Committee comprising Commonwealth and state governments, farmer organisations, milk processors and Dairy Australia. The initiative is responsible for ensuring investment in RD&E is collaborative and addressing dairy industry priorities.

The Dairy Farm Monitor Project has been expanded nationally and will now be able to collect high quality data sets used for industry averages that will feed into a new system known as DairyBase.

DairyBase will enable farmers to compare their business performance against others and improve their business planning. DairyBase will also provide dairy farmers, service providers and industry with access to a national database of accurate physical and financial information for more effective farm comparisons and industry analysis.

A national Herd Improvement Strategy has been developed with a 2020 vision focusing on maximizing dairy farm profitability through a vibrant herd improvement industry that enables farmers to choose elite animals. It covers herd testing, genetic evaluation, research, marketing and extension, genomics and breed societies.

Work programs to support progress with this target also include International Market Support — maintaining and enhancing existing market access and obtaining access to additional markets.

WHAT WE’RE PLANNING

Free trade agreements should expand export markets

Australia signed free trade agreements (FTAs) with Japan, Korea and China during 2014 and these should help the dairy industry expand export market activities.

China is Australia’s fastest growing dairy market, with total dairy exports to the region totalling 1.9 million tonnes in 2013 alone, an increase of 40% over the previous year (Dairy Australia).

With demand for dairy in this region to rapidly increase in coming years, stable and open trade with China is a key in order for Australian dairy to capitalise on this opportunity for growth. The FTA will strengthen Australian dairy’s competitiveness by providing our industry with a significant advantage compared to other countries in the market that do not have a FTA with China. It also puts the industry on a more level playing field against key competitors in the Chinese market, such as New Zealand.

Under the FTA, the Australian dairy industry will be able to further develop its long-term relationship with China to the mutual benefit of both our countries, with full tariff diminutions expected over the coming years. The industry can expect positive flow-on effects throughout the supply chain, in particular through substantially reduced tariffs on key dairy products such as infant nutrition, cheese, milk powder and packaged milk.
A new South-East Asian scholarship program in 2014/15 will bring up to 15 dairy leaders a year from South-East Asia to study dairy production and manufacturing in Australia. This should help support growth of market preference for buying Australian dairy products. Work is still continuing to establish a reasonable baseline to measure performance in this area. A number of measures have been explored throughout 2014 however further collaborative work is needed.

Following the successful investment forum industry held in 2014, further activity in this area to encourage investment will take place over the next 12 months. Industry will also advocate for policy settings to assist with competitiveness e.g. more FTAs with positive dairy outcomes.

OUR PEOPLE, PROJECTS

Bega rewards farmers for tackling sustainability, growth

Bega Cheese’s Sustainability and Milk Growth program represents the start of a new era in milk supply management in Australia, according to Manager of Environment and Sustainability, Elvis Amair.

The program provides suppliers with cash incentives to invest in their businesses with the goal of increasing milk supply in a sustainable way.

“With the global demand for high quality dairy products looking strong, the Bega Group has coupled its customers’ desire for a secure supply of sustainably sourced milk with a financial incentive for suppliers to ignite sustainable milk growth projects across its supply base.”

Sustainability is not a new concept for suppliers of Bega Cheese or Tatura Milk Industries. The company has been implementing its Bega Cheese Environmental Management System (BEMS) for 10 years in the Bega region and in Victoria since 2011. BEMS is a voluntary continuous improvement program that provides Bega Group suppliers with the opportunity to access incentives for environmental works, and participate in professional development programs such as discussion groups, pasture management groups and nutrient management planning.

Originally focussed on natural resource management, BEMS has been expanded to include broader sustainability issues. For example, BEMS incorporates a Future Leaders program where young farmers taking on management roles can be sponsored to attend well-respected leadership courses.

The BEMS Sustainability Assessment underpins the program and provides the Bega Group with a means of identifying gaps in management practice adoption at the farm and regional levels, and of monitoring change over time. BEMS has been strongly supported by the Federal and NSW Governments and the South East Local Land Service.
BEMS has been incorporated into the Sustainability and Milk Growth program as it met customer requirements; and allows measurement of improvement in sustainable management practices over the three year supply agreement period. It was also familiar to many suppliers.

The Sustainability and Milk Growth program is divided into two components. The sustainability incentive is a payment of three cents per litre (milk solids equivalent). Suppliers participating in the program need to complete a BEMS Sustainability Assessment and sign a three year supply agreement. Sustainability-approved suppliers are then eligible to apply for the growth payment of an additional two cents per litre (milk solids equivalent) to fund growth projects. These need to be on-farm projects able to increase supply by up to 20% over a three-year period.

Ronnie and Julia Hibma from Gippsland commenced supply to Bega Cheese a few years ago. They have signed up to the program and have already received both the sustainability and milk growth incentive payments. Ronnie and Julia in partnership with sharefarmers Maxi and Tameeka milk 400 cows on their 280 acre farm. They will use the funds to fast track capital works projects on their property.

“The feedpad is nearly finished and we plan to upgrade our irrigation and drainage infrastructure next year, in addition to milking more cows to reach our target milk production potential by the end of year 3 of the program,” says Ronnie.

There is a real sense of excitement with the owners, sharefarmers and employees all sensing a secure and profitable future with Bega Cheese, according to Elvis Amair who is also a member of the Australian Dairy Industry Sustainability Framework’s Steering Committee.

“Bega’s Sustainability and Growth program strongly reflects the aims of the industry Framework,” says Elvis. “There is an emphasis on both enhancing livelihoods and reducing environmental impact, which are key themes.”

Want to know more? www.begacheese.com.au
Target 2: Increase the resilience and prosperity of dairy communities

OUR STORY IN BRIEF

Supporting communities to live, work and play

An estimated 100,000 Australians are employed in industries servicing the dairy sector. Many of these jobs are in regional areas where dairy production was valued at $4.7 billion in 2013/14 (Dairy Industry In Focus 2014, produced by Dairy Australia).

In some regions, dairy (directly or indirectly) accounts for 40% of jobs (Dairy Australia). Regional communities are home to one in eight Australians, according to the Australian Bureau of Statistics.

Yet, the contribution of the dairy industry to communities in regional Australia reaches far beyond the economics of farm production, where it creates jobs for generations and careers for life.

Dairy people are active members in their local communities and most manufacturers have community contribution strategies in place and sponsor local activities and clubs.

Building resilience within farming communities is the focus of several projects being undertaken. These include the Sustainable Farm Family (SFF) program, which promotes the importance of health and wellbeing, and the Flood Ready Dairying project (see Case study).

Delivered by the National Centre for Farmer Health (NCFH), the SFF program is a tailored, health education program designed to assist farmers re-engage with their health and make positive future changes for the health and wellbeing of their entire family. Dairy Australia has funded the delivery of this program into a dairy region and will monitor the impact and outcomes on the community. The ADF was instrumental in getting government to re-fund the NCFH after funds were initially cut.
HOW WE’RE TRACKING
Baselines, targets: a work in progress

The Australian Dairy Industry Sustainability Framework seeks to measure dairy’s contribution to the resilience and prosperity of dairy communities in regional Australia.

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

- Economic contribution
- Government recognition
- Community recognition

Currently, baseline data for one of the measures, community recognition, has been established. It comprises data from the National Dairy Farmers Survey (NDFS) and the Dairy Monitor Survey (DM).

<table>
<thead>
<tr>
<th>Target 2: COMMUNITY RESILIENCE AND PROSPERITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator</td>
</tr>
<tr>
<td>2.1 Economic contribution</td>
</tr>
<tr>
<td>2.2 Government recognition</td>
</tr>
<tr>
<td>2.3 Community recognition</td>
</tr>
<tr>
<td>- dairy industry is an essential part of community</td>
</tr>
<tr>
<td>- people appreciate dairy farmers in our community</td>
</tr>
</tbody>
</table>

Understanding 2014 performance

- Improvement from last measurement
- No improvement in 2014
- Regression from last measurement
- No measurement in 2014
- Ongoing target achieved in 2014
- Ongoing target not achieved in 2014

“n/a” indicates where an appropriate baseline measure or target has yet to be established

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

Performance measure: to be established

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

Performance measure: to be established

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

Performance measure: 10% increase in the number of consumers who agree the dairy industry is an essential part of their community from the baseline of 71% (DM 2013).

Performance measure: 15% increase in the number of dairy farmers who agree that “people in my region appreciate the role that dairy farmers like myself play in our community” from a baseline of 76% (NDFS 2013).

2014 performance data: 70% of consumers (19% neutral, 4% disagree, 7% don’t know) agree “the dairy industry is an essential part of our community” (DM 2014). 76% of farmers agree “people in my region appreciate the role that dairy farmers like myself play in our community” (NDFS 2014). There is no real change in the performance measures in 2014.
An estimated 100,000 Australians are employed in industries servicing the dairy sector. Many of these jobs are in regional areas where dairy production at the farm gate is valued at $4.7 billion (Australian Dairy Industry In Focus 2014, Dairy Australia). In some regions, dairy (directly or indirectly) accounts for 40% of jobs.

WHAT WE’RE DOING
Research, education underpin contribution

The major communications and education program, LEGENDAIRY, is a key strategy by industry to increase Australian consumers’ and dairy communities’ recognition of the value of the dairy industry (Indicator 2.3).

LEGENDAIRY was launched in August 2013 through a mass media campaign of eight television commercials, together with radio, print and online features. Additional media bursts followed in November 2013 and March 2014. Further activity will be undertaken in 2015.

The LEGENDAIRY program celebrates Australia’s dairy farmers, the quality dairy foods they produce and their contribution to the Australian economy. It aims to enhance the reputation of the industry in the minds of consumers and influential individuals and organisations, thereby contributing to increased consumption of dairy products and a positive operating environment for the industry.

As part of the industry strategy to increase the resilience and prosperity of dairy communities, the dairy industry has been working with local and state authorities to help ensure communities are ready for and can recover from natural disasters like floods and fire.

Investment seminars and discussions with service providers and others such as banks and local councils are aimed at providing information on the operating conditions being faced by the dairy industry and future market conditions. These activities support Indicator 2.2.

WHAT WE’RE PLANNING
Valuing our contribution is a key priority

In the 2013 Progress Report, we noted further work would be undertaken to develop baseline information to assess performance against the measures established under this target. This work has not proceeded as fast as we would like and will be a priority for 2015.

Next year’s activity will include undertaking a proposed economic study into the Gross Domestic Product (GDP) contribution that dairy makes to each of its eight regions and nationally across all dairy regions (Indicator 2.1). When the study is finalised, the target can be refined and measures set to track performance, considering direct contribution, local multiplier effects and comparison to other industries.

Similarly, we are yet to develop metrics and baseline data to measure the recognition of the importance of the dairy sector in relevant local and state government strategies. This work will be actioned in 2015 and reported in the next report.
“Being flood-ready is a responsibility shared by farmers, industry, community and government.”

Rik Whitehead of the Wollongbar Primary Industries Institute.

Building communities’ capability to bounce back

Increasing the capacity and capability of the dairy industry to prepare for, respond to and recover from floods — the most common and costly natural disaster on the NSW North Coast — is the aim of the Flood Ready Dairying project.

The Flood Ready Dairying project recognises that assistance from outside the region is not sufficient to cover the costs and impacts of flood events on the dairy sector and no single government agency, organisation or individual can manage floods alone.

It’s driven by dairy industry leaders, dairy service providers and emergency service professionals who have substantial experience in dealing with flood events. Over the long term, this project will help to increase the resilience of dairy communities subject to flooding.

A key action is to develop a strategic plan in response to the recurring issues raised by dairy farmers and their industry after major floods — taking collective action on the concerns farmers have been raising for years.

“Being flood ready is a responsibility shared by farmers, industry, community and government. We all need to be prepared to respond effectively and to assist in recovery,” said Rik Whitehead of the Wollongbar Primary Industries Institute, who is heading the Project.

In late 2014, Flood Ready Dairying project officers will be talking to dairy farmers and others seeking their views on the Draft Strategic Plan and damage reporting system and to test the usefulness of new farm level and practical tools.

The Flood Ready Dairying project commenced in 2013 and is funded by the joint Federal and State Natural Disaster Program.

Want to know more? Flood Ready Dairying on the North Coast of NSW
**Target 3: Provide a safe work environment for all dairy workers**

**OUR STORY IN BRIEF**

People are fundamental to a flourishing dairy industry and good people can be the conduit to a successful and well-run dairy business.

Training underpins strategy to keep workers safe

People are fundamental to a flourishing industry. Keeping the 43,000 Australians directly employed by manufacturers and farmers safe is a key priority for the dairy industry.

The dairy industry’s goal is that all our people — whether they work in manufacturing facilities or on farms — have a safe and healthy work environment, as well as the skills required to perform their jobs competently.

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

A recent survey (The power of people on Australian dairy farms, September 2014) has enabled us to determine a baseline measure for dairy farms — 46% of dairy farmers have a documented OH&S plan in place.

**HOW WE’RE TRACKING**

**Dairy sets 100% target for safety training by 2020**

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

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

The LTIFR is defined as claims with one week or more time lost, per million hours worked. There appears to have been a substantial increase in on-farm safety issues that needs to be investigated further. This may be due to revisions in Safe Work Australia data and/or under reporting farm work injuries in the base year. In either case, it warrants further investigation.

Baseline data for these indicators is included where it has been established.
### Target 3: SAFE WORK ENVIRONMENT

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 OHS Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- dairy farming</td>
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</tr>
<tr>
<td>- dairy manufacturing</td>
<td>100%</td>
<td>100%</td>
<td>✔</td>
</tr>
<tr>
<td>3.2 Lost Time Injury Frequency Rate (LTIFR)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- dairy farming</td>
<td>5.9</td>
<td>10.0</td>
<td>4.1</td>
</tr>
<tr>
<td>- dairy manufacturing</td>
<td>8.1</td>
<td>8.3</td>
<td>5.7</td>
</tr>
<tr>
<td>3.3 Fatalities</td>
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<td>1</td>
<td>×</td>
</tr>
</tbody>
</table>

#### Understanding 2014 performance

- **[+]** improvement from last measurement
- **[✓]** no change from last measurement
- **[✗]** regression from last measurement
- **[×]** no measurement in 2014
- **[✓]** ongoing target achieved in 2014
- **[✗]** ongoing target not achieved in 2014

*n/a* indicates where an appropriate baseline measure or target has yet to be established

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

**Performance measure:** All dairy companies have OH&S programs in place.

**2014 performance data:** All dairy companies continue to maintain OH&S programs. The power of people on Australian dairy farms survey (September 2014) has enabled us to determine a baseline measure for dairy farms. The baseline data for 2014 is 46% of dairy farmers have a documented OH&S plan in place and 74% have induction programs for new employees.

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

**Performance measure:** 30% reduction by 2020 in LTIFR from a 2010/11 baseline of 5.9 (compared to 6.1 in the 2013 Report) workers’ compensation claims involving one week or more time lost per million hours worked in dairy cattle farming, and 8.1 (9.4 in the 2013 Report) workers’ compensation claims involving one week or more time lost per million hours worked in dairy product manufacturing.

**Latest (2012) performance data:** LTIFR of 10.0 workers’ compensation claims involving one week or more time lost per million hours worked in dairy cattle farming (69% increase). The LTIFR of 10.0 in dairy cattle farming is higher than the 7.6 LTIFR recorded for sheep, beef cattle & grain farming and the 9.7 LTIFR for the agriculture sector as a whole over the same period. LTIFR of 8.3 workers’ compensation claims involving one week or more time lost per million hours worked in dairy product manufacturing (2% increase). The LTIFR number for dairy manufacturing during the reporting period was 8.3 which compares with: beverage manufacturing (6.2), sugar and confectionery manufacturing (8.6), bakery product manufacturing (6.4) and grain mill & cereal manufacturing (16.8).Note: 2011/12 is the latest available ‘final’ figure. A projected 2012/13 figure is also available, but this is an estimate expected to rise — hence use of 2011/12 data.

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5 The 2010/11 LTIFR figures for dairy farming and dairy product manufacturing (i.e. the ‘baseline’) in the Australian Dairy Industry Sustainability Framework Progress Report 2013 have been revised to those reported above due to one off changes in Safe Work Australia’s data collection and calculation methods. These include: i) a change from ANZSIC 93 to ANZSIC 2006 classifications, and ii) revisions to ABS injury data. For further information on LTIFR measurement please visit www.safeworkaustralia.gov.au/sites/swa/statistics/LTIFR/pages/lost-time-injury-frequency-rates
3.3 Zero workplace fatalities

Performance measure: Zero workplace fatalities

2014 performance data: Safe Work Australia recorded 1 fatality in dairy cattle farming during 2012/13, the latest figures available. The single fatality recorded was the result of a vehicle collision on a public road. Incidents involving vehicles accounted for 71% of fatalities on Australian farms generally between 1 July 2003 and 30 June 2011. The most common vehicles involved were tractors, aircraft, light vehicles and quad bikes respectively. (Source: Safe Work Australia March 2013 Work-related injuries and fatalities on Australian farms.)

By 2020, 100% of on-farm and factory workers will have completed OH&S training (incl. ongoing compliance). That’s the target set by industry. Following The power of people on Australian dairy farms survey in September 2014, a baseline for dairy farms of 46% of dairy farmers with a documented OH&S plan in place has been established.

WHAT WE’RE DOING

Manufacturers set clear targets for worker safety

Dairy companies continue to place a high priority on OH&S initiatives and all Australian dairy manufacturers have OH&S training for their employees.

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

The need for better information about on-farm safety practices has been recognised. An independent study was undertaken with farmers (POP 2014) and this research has provided baseline data on OH&S practices and helps industry to set better practices for farms.

The survey showed that while there was an overwhelming level of understanding about the OH&S requirements and the importance of safety and employer obligations, only 46% of dairy farmers have a documented OH&S plan in place, with 35% having informal plans. 74% have induction programs for new employees.

OH&S information has been incorporated into the Employment Starter Kit Initiative (ESKi) launched by Dairy Australia in 2013.

WHAT WE’RE PLANNING

Farmer study informs plans for better practice

The findings from the 2014 POP Survey relating to OH&S will inform new programs to embed safe practices into all aspects of dairy production.

On-going communication on safe practices, as well as workshops and recognition of good practice, should help achieve a reduced LTIFR for farm and manufacturing in the future.
OUR PEOPLE, PROJECTS

Devondale Murray Goulburn employees attend ‘stop 4 safety’ day as part of Goal ZERO.

The vastly improved safety record was driven by the executive team’s new safety vision of ‘Goal ZERO’.

Goal ZERO achieves a significant fall in lost-time injuries

Through its renewed focus on safety, Devondale Murray Goulburn achieved a significant reduction in lost-time injuries.

This vastly improved safety record was driven by the executive team’s new safety vision of ‘Goal ZERO’, which centres on Safe People, Safe Systems, Safe Workplaces and Safely Home.

Devondale Murray Goulburn’s actions support the Australian Dairy Industry’s Sustainability Framework which contains a target of providing a safe work environment for all dairy workers.

The company has undertaken various initiatives to deliver Goal ZERO and strives to fully integrate health and safety into all aspects of its work through a process of continual improvement.

It has invested significantly to:
- Improve health and safety across all areas of the business;
- Build a shared understanding of the role everyone plays in creating a safe workplace; and
- Ensure that every staff member has had safety training.

Secondary to this, is a stronger focus on effective injury management and facilitating an early return to work where possible.

“The importance of our long-term safety vision and strategy remains essential, and a key part of what we do every day,” says David Hopkins, GM Health, Safety, Environment and Sustainability.

“One way we reinforce safety in the workplace is the annual ‘stop 4 safety’ day.”

“This year, on one day in May, every person at every Devondale Murray Goulburn workplace stopped work for an hour to consider workplace health and safety and undertake an activity in small groups aimed at reminding everyone to Stop, Think, Plan and Act, before starting a job.”

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

**OUR STORY IN BRIEF**

Attracting, developing and retaining a skilled and motivated workforce is essential for dairy businesses... however this remains a major challenge for our industry.

**The challenge: to be a workplace of choice**

The Australian dairy industry is committed to growing an internationally-competitive, innovative and sustainable sector within the Australian economy.

To do this, we need people that want to work and invest in the industry for the long-term. However, while attracting, developing and retaining a skilled and motivated workforce is essential for dairy businesses to operate effectively, this remains a major challenge for our industry.

We’re committed to growing our capability and skills to ensure sustainability. This requires understanding and addressing both immediate and long-term people requirements for the industry, providing development support and educational resources to maintain and build industry capability, and ensuring the dairy industry is seen as an employer and workplace of choice.

**HOW WE’RE TRACKING**

**Development, retention, transition: keys to keeping people**

The Dairy Industry Sustainability Framework uses applicant suitability, professional development, employee retention and business transition planning to measure investment in dairy people.
4.1 Suitable Applicants

**Performance measure:** For dairy farms: 56% of dairy farms reported to have found suitable applicants for jobs (NDFS 2013).

**2014 performance data for dairy farms:** A new survey was undertaken — The power of people on Australian dairy farms (POP September 2014) to provide a better understanding of farmer attitudes, experiences and needs relating to attract, develop, retain and transition employees, as well as on farm safety and wellbeing. Farmers were asked if they find it easy to recruit suitable applicants. 20% of respondents reported they did. This is likely to form the performance measure and baseline in the future as it will also help inform programs to attract people.

**Performance measure for dairy manufacturers:** To be established.

4.2 Participation in development

- Extension
  - **2014 performance data:** 39% farmer participation rate in training activities was achieved, with 74% of those respondents reporting a positive impact on efficiency/effectiveness as a result of training. This will form the baseline for our performance measure in future reports. We are still developing the education measure as well as a measure for dairy manufacturers.

- Education
  - **2014 performance data:** Participation in extension activities was 20% in 2012 (NCDEA) and participation in education activities was to be determined.

4.3 Retain workforce

**Performance measure:** 20% increase in the number of experienced employees retained (baseline to be developed).

**2014 performance data:** The 2014 POP Survey asked farmers to indicate the percentage of employees that have left over the last 12 months (25%) and the employees working on-farm that have a career plan (17%). We still need to determine what percentage of workers retained were experienced employees — further work will be undertaken to investigate this to enable a baseline to be determined. Measures for other dairy workers will also be investigated.

4.4 Business planning

**Note:** Baseline data for indicators is included where it has been established. Further baseline data is being investigated. Targets for 2020 will be set when baselines have been established.
4.4 50% of dairy farmers have a well-developed business transition plan

**Performance measure:** 50% of dairy farmers have a well-developed business transition plan (baseline to be established).

**2014 performance data:** The 2014 POP Survey reported that of the 38% of farmers who said they planned to grow their business, 8% had a formal written plan in place for the future of their farm. 73% did not have a written plan, but said they knew what they were going to do. This indicator needs further work.

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Achieving a 50% increase in the proportion of dairy farmers participating in training activities by 2020 is an indicator of progress for industry. A baseline measure of 39% (POP 2014) was established during 2014. So, the industry will seek to achieve a participation rate of 60% by 2020.

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**WHAT WE’RE DOING**

**Bigger investments made in farm change, extension**

In 2014, there was an increased focus on and investment in farm change and extension. In order to attain a better understanding of the challenges faced by dairy farms, Dairy Australia commissioned research (*The power of people on Australian dairy farms* survey September 2014) and the feedback from this and other research clearly indicates the significant challenges that ‘attract and retain’ poses for farmers.

To implement the industry’s national people capability strategy locally, there have been increased resources provided at regional levels. A range of leadership education activities and programs identified as a priority by the industry have also been undertaken, including support for the Young Dairy Network to optimize dairy farmer connection with development and leadership initiatives.

The ‘Developing Legendairy Champions’ course (launched in August 2014), is a free, nationally-accredited on-line communications training program that provides farmers with practical skills and tools in public speaking. It aims to support and encourage farmers to talk to a range of audiences and help positively position the dairy industry as a career of choice. It is delivered through the National Centre for Dairy Education Australia (NCDEA).

There is a growing trend towards more formal training as opposed to attending one off workshops — and some blurring between training/education and extension. People seem to be more interested in receiving some form of accreditation for the ‘training’ they undertake. Formal training also offers some assurance that the training itself has some professional standing.

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**WHAT WE’RE PLANNING**

**New tools help people make steps in right direction**

Information from dairy manufacturers’ human resources departments is yet to be obtained.

Further work that compares the dairy industry with other agricultural industries regarding attracting, developing and retaining a skilled and motivated workforce is still to be considered.

A joint meeting of Research and Development Corporations (RDC) extension program managers has identified that all RDCs want to rely less on activity reporting and be able to better evaluate and measure impacts of extension. This work will be pursued in 2015.

Further work on developing tools (Stepping Stones) to help attract people into dairy (Stepping In), developing them (Stepping up) and helping people move on from dairying (Stepping Back) is also underway.
Stepping Stones

Career pathways for new and current employees in the Tasmanian Dairy Industry

The Stepping Stones career pathway guide supports the industry’s goal to attract and retain people in the dairy industry.

"Whether you want to work on a dairy farm or own your own property, Stepping Stones can help you find the pathway to achieve your career goal."

New guide shows career paths into and out of dairy

Stepping Stones, a guide to career pathways in the dairy industry — which aims to attract and retain people in the industry — has been launched by DairyTas and Dairy Australia. The guide features story profiles on farm operators, sharefarmers and owners and outlines job profiles and career progression for people interested to enter and develop in the industry.

“The latest Dairy Australia farmer survey data shows Tasmanian dairy farmers are the most confident in the country with 91% positive and 84% expecting to make a profit and 45% expecting to invest further in the coming 12 months,” said DairyTas Executive Officer Mark Smith.

Dairy employs over 1500 people on the island state and in 2013/14 the dairy sector contributed $440M in farm gate income and over $1 billion in total dairy processing value to the Tasmanian economy.

“As confidence improves for the dairy industry and milk prices hold up we are seeing increasing interest from potential investors looking at farm ownership and expansions and this should help with our objective to grow milk production over the next three to four years,” said Mr Smith.

Dairy Australia Managing Director Ian Halliday described the guide as the most comprehensive dairy careers information source available in the dairy industry.

“Whether you want to work on a dairy farm or own your own property, Stepping Stones can help you find the pathway to achieve your career goal,” said Ian Halliday.

“This resource is important for people who may be looking at entering the dairy industry. It will be valuable as an education and career resource in schools and will complement existing school programs like ‘Cows Create Careers’.

Improving wellbeing

With a unique natural package of 10 essential nutrients, dairy foods — milk, cheese and yogurt — have helped underpin the health and wellbeing of generations of Australians. As an industry, we care deeply for the wellbeing of the community and our animals. Under the Framework there are three targets for improving wellbeing by 2020: safe products and ingredients, improved health outcomes and care for all animals.

Target 5: All dairy products and ingredients sold are safe

OUR STORY IN BRIEF

The Australian Milk Residue Analysis (AMRA) Survey results demonstrate the food safety programs adopted by the dairy industry are successful in managing potential residue contaminations.

Systems, licences, audits underpin food safety

The Australian dairy industry has comprehensive quality assurance systems and processes to ensure all dairy products and ingredients sold are safe.

Independent state-based regulatory bodies ensure mandatory national food safety standards are met. This includes licensing all dairy premises (farms and manufacturing establishments) and verifying that their food safety programs are documented and address potential food safety risks. Compliance with documented food safety programs is verified at audit and is a condition of holding a valid dairy licence for both farms and manufacturing premises.

Dairy companies’ quality assurance systems encompass food safety and other quality requirements. They also include recall procedures to be used if any issues are identified that require product to be recalled from the marketplace. In 2013 there were seven product recalls as reported by Product Safety Recalls Australia, primarily due to microbial contamination.

An independent national monitoring program, the Australian Milk Residue Analysis (AMRA) Survey, demonstrates the dairy industry risk management systems are effective in managing potential agricultural and veterinary chemical residues and environmental contaminants in Australian bovine milk.
Consumer sentiment about the safety of dairy products is tracked in the annual Dairy Monitor (DM) Survey. Consumer concerns around issues relating to dairy nutrition, such as saturated fat, alternatives to dairy etc., all impact on consumer sentiment. Differences from year-to-year will emerge based on activities and information being portrayed through various channels.

**HOW WE’RE TRACKING**

**Consumers consider dairy products safe**

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

In terms of chemical residues, all samples analysed under the Australian Milk Residue Analysis (AMRA) Survey complied with the Maximum Residue Limits in the FSANZ Food Standards Code during 2013/14.

Consumer sentiment about the safety of dairy products is tracked in the annual Dairy Monitor (DM) Survey. In the DM 2014 Survey, 69% (20% neutral, 3% disagree, 9% don’t know) of Australian consumers agreed that Australia produces safe dairy products, and 74% (18% neutral, 2% disagree, 6% don’t know) of consumers agreed that Australia produces high quality dairy products.

Consumer sentiment on safe dairy products has marginally increased and sentiment on quality has marginally decreased but we are still tracking positively towards our target of a 15% increase in both sentiments by 2020, based on 2013 data.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Chemical residues - compliance</td>
<td>Zero non-compliance</td>
<td>Zero non-compliance</td>
<td>✔</td>
</tr>
<tr>
<td>5.2 Product recalls</td>
<td>7</td>
<td>7</td>
<td>Zero</td>
</tr>
<tr>
<td>5.3 Consumer support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Safe products</td>
<td>67%</td>
<td>69%</td>
<td>77%</td>
</tr>
<tr>
<td>- Quality products</td>
<td>77%</td>
<td>74%</td>
<td>86%</td>
</tr>
</tbody>
</table>

**Understanding 2014 performance**

- ✗ improvement from last measurement
- ✔ no change from last measurement
- ✗ regression from last measurement
- ✗ no measurement in 2014
- ✗ ongoing target achieved in 2014
- ✗ ongoing target not achieved in 2014

“n/a” indicates where an appropriate baseline measure or target has yet to be established.

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

**Performance measure:** Zero non-compliant chemical residuals found during the 2011/12 Australian Milk Residue Analysis (AMRA) Survey.

**2014 performance data:** 100% compliance with Australian standards on chemical residuals achieved in the 2013/14 AMRA Survey (zero non-compliances).

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

**Performance measure:** There were 7 product recalls in 2012 (as reported by Product Safety Recalls Australia).

**2014 performance data:** There were 7 product recalls due to food contamination in 2013, which remains unchanged from the 2012 baseline data. For more information, www.recalls.gov.au/content/index.phtml/itemid/952826/fromItemid/952823
5.3 15% increase in the number of consumers who agree Australia produces high quality and safe dairy products by 2020

Performance measure: 67% of consumers agree Australia produces safe dairy products and 77% of consumers agree Australia produces high-quality dairy products (DM 2013).

2014 performance data: 69% (20% neutral, 3% disagree, 9 don’t know) of consumers agree Australia produces safe dairy products and 74% (18% neutral, 2% disagree, 6% don’t know) of consumers agree Australia produces high-quality dairy products (DM 2014).

There were seven product recalls, due to food contamination, during 2013 (Source: Product Safety Recalls Australia). This remains unchanged from 2012. The dairy industry has rigorous food safety systems and will continue to review and refine them to reduce food recalls.

WHAT WE’RE DOING

Industry agenda covers product recalls, antibiotics

Dairy companies, in conjunction with regulators, continually review supply chain quality assurance programs to address any quality assurance or food safety concerns.

A stock-take of all research activities linked to milk safety and quality has been undertaken and priority issues have been identified for further action. A web-based tool to demonstrate how potential risks across the dairy supply chain are managed has also been developed.

As global concerns about the risk of antimicrobial resistance grow, the industry needs good systems to prepare for increased scrutiny of the use of antibiotics to treat production animals. The dairy industry has contributed to a national strategy for monitoring antibiotic use and antibiotic resistance in livestock and presented findings of a review of antibiotic use in the Australian dairy industry.

The dairy industry’s rapid response plan, coordinated by Dairy Australia, helped to manage international consumer requests for assurances on the safety of Australian product, following the precautionary product recall of potentially contaminated whey protein concentrate (WPC80) in New Zealand. Although the New Zealand product was confirmed safe, the incident was a good test of the Australian dairy industry’s coordination and communication processes.

WHAT WE’RE PLANNING

Emerging priorities: skills, capability, traceability

Increasing skills and capability around the delivery of quality and safety programs is a priority for the Australian dairy industry.

The dairy industry is investigating what actions can be undertaken to enhance the current skills-set. It is also investigating ways to enhance traceability throughout the dairy food supply chain.
OUR PEOPLE, PROJECTS

Dairy farmers view a win in the Australian Milk Quality Awards as a badge of honour.

The awards celebrate the dedication of Australian dairy farmers to producing the highest quality milk possible and gaining a premium for their products internationally.

Milk awards celebrate farmers’ bid for best-quality

Australian dairy farmers’ dedication to producing the highest milk quality possible and gaining a premium for their products internationally is celebrated by the Australian Milk Quality Awards.

The awards are judged based on the lowest 5% of average annual Bulk Milk Cell Count (BMCC) across the country — a higher milk cell count generally occurs when mastitis is present in a dairy herd.

The awards celebrate the success of more than 300 Australia dairy farmers and are the result of collaboration between dairy manufacturers, Dairy Australia’s Countdown 2020 project, the Australian Dairy Herd Improvement Scheme (ADHIS) and The Weekly Times.

As well as recognising the hard work done by farmers to keep milk quality at a consistently high standard, the awards are an opportunity for farmers to share information and learn from each other.

Winning farms receive a metal plaque for their gates and those in the top 100 receive a newly-designed gold plaque replacing the certificates of previous years.

Reducing the mastitis burden on-farm is critical for cow comfort and welfare, and saves dairy farmers time at milking and considerable money in terms of lost-milk production and animal treatments.

A video highlighting the dedication and work of gold winners at the 2014 Australian Milk Quality Awards, Ancret and Michael Shipton, has been released by Dairy Australia.

The annual Awards are based on BMCC data supplied to the ADHIS by dairy manufacturers nationwide. To be eligible, dairy farms must have data for a minimum of nine months in 2013.

Want to know more?

- 2014 Australian Milk Quality Awards
- Watch the Gold Winners on YouTube
Target 6: Dairy contributes to improved health outcomes for Australian communities

OUR STORY IN BRIEF

With strengthening evidence on the health and wellbeing benefits of including dairy foods in the diet, there is a strong platform to advocate and encourage Australians to consume more milk, yogurt and cheese in their diets.

Australians consume less dairy than recommended

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

Yet, according to the comprehensive 2011/12 Australian Health Survey (AHS 2011/12), the average Australian consumes less dairy than the 2013 Australian Dietary Guidelines recommend — this is:

• 1.5 to 2 serves per day for children under 8 years old
• 2.5 to 3.5 serves per day for older children and adolescents
• 2.5 serves per day for younger adults
• 3.5 to 4 serves per day for older adults.

An estimated $2 billion could be saved from the annual healthcare budget if Australians increased their dairy intake to the recommended levels6. These healthcare savings are based on the body of evidence showing adequate intakes of milk, yogurt and cheese (both regular and reduced-fat varieties) are associated with reduced risk of chronic diseases including obesity, heart disease, stroke and type 2 diabetes.

With strengthening evidence on the health and wellbeing benefits of including dairy foods in the diet, there is a strong platform to advocate and encourage Australians to consume more milk, yogurt and cheese in their diets.

Initiatives which inadvertently classify whole milk and regular-fat yogurt and cheese as less healthy have the potential to encourage inadequate dairy intake and potentially increase the burden on Australia’s health care system.

The AHS 2011/12 survey was the largest and most comprehensive health survey ever conducted in Australia. It collected dietary data from 9,500 private dwellings from a sample of 12,123 people between May 2011 and June 2012, with a response rate of 77%.

This information was gathered using a 24-hour dietary recall on all foods and beverages consumed on the day prior to the interview.

Top line results (1 day data):

- 85% of the Australian population (aged 2 years and over) consumed milk products and dishes containing dairy on the day of the survey.
- Mean intake of the milk, yogurt, cheese and/or alternatives food group (dairy food group) was 1.1 serves/day consisting of:
  - 152g milk (0.6 of a serve)
  - 24g yogurt (0.12 of a serve)
  - 12g cheese (0.3 of a serve)
  - 3g custard (0.015 of a serve)
  - 28g flavoured milk (0.11 of a serve)
  - 0.1g soy drink (0 serves).

HOW WE’RE TRACKING

Less concern about weight but less awareness of benefits

The Dairy Industry Sustainability Framework measures the recognition of milk, cheese and yogurt as part of a healthy diet and consumption against recommended intake.

<table>
<thead>
<tr>
<th>Target 6: IMPROVED HEALTH OUTCOMES</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1a Healthy Diet:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- good health</td>
<td>72%</td>
<td>68%</td>
<td>≥ 85%</td>
</tr>
<tr>
<td>- weight</td>
<td>32%</td>
<td>30%</td>
<td>≥ 20%</td>
</tr>
<tr>
<td>6.1b Healthy Diet - NHMRC</td>
<td>Recognised</td>
<td>Recognised</td>
<td>Ongoing recognition</td>
</tr>
<tr>
<td>6.2 Daily intake</td>
<td>n/a</td>
<td>n/a</td>
<td>–</td>
</tr>
</tbody>
</table>

Understanding 2014 performance

- ≥: improvement from last measurement
- ?: no change from last measurement
- ?: no measurement in 2014
- ≥: ongoing target achieved in 2014
- ×: regression from last measurement
- ×: ongoing target not achieved in 2014

*n/a* indicates where an appropriate baseline measure or target has yet to be established.

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

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

Performance measure: Increase the % of individuals who agree “Dairy foods are essential for good health and wellbeing” from 72% (DM 2013) to 85% by 2020.

2014 performance data: 68% (27% neutral, 4% disagree) of individuals agree “Dairy foods are essential for good health and wellbeing” (DM 2014).

Performance measure: Decrease the % of individuals who agree “I’m concerned consuming dairy foods will increase my weight” from 32% (DM 2013) to 20% by 2020.
2014 performance data: 30% (37% neutral, 33% disagree) of individuals agree “I’m concerned consuming dairy foods will increase my weight” (DM 2014).

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

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

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

6.2 [X%] increase in the proportion of Australians meeting their recommended daily intake of the milk, yogurt, cheese and/or alternatives food group as outlined in the 2013 Australian Dietary Guidelines. (Target to be set once new nutrition data available).

Performance measure: Still to be set — awaiting further data release from the 2011/12 Australian Health Survey.

**WHAT WE’RE DOING**

Research, marketing to promote health benefits of dairy

In August 2013, Dairy Australia launched LEGENDAIRY, a long-term marketing and communications platform to increase community and dairy farmer confidence in the Australian dairy industry and its products.

LEGENDAIRY targets three key audiences:

- consumers
- farmers and their communities
- key opinion leaders such as health professionals.

Year one activities focused on raising awareness and perceptions of the industry, encouraging greater and more varied dairy consumption.

An extensive range of dairy promotion activities generated positive results, including a 4% increase in consumer recognition of the prestigious Australian Grand Dairy Awards logo, an increase in consumers who consumed all three dairy products (milk, cheese and yogurt) in any given week and an increase in consumers who purchased a wider variety of yogurt and cheese types in a month.

Dairy Australia brought three international nutrition experts to speak at Australian health conferences about recent health research relating to dairy consumption, including topics such as obesity, type 2 diabetes, cardiovascular disease, muscle maintenance and sports performance.

Dairy Australia also partnered with key influencers such as the Dietitians Association of Australia, Nutrition Australia, Nutrition Society of Australia, National Asthma Council and Life Education to promote the industry’s contribution to the Australian economy and community and build a broader awareness of nutrition science.
In 2014, the dairy industry ran two workshops for dairy manufacturers and nutrition scientists on the transition to the new FSANZ Health Claims Standard. The industry is also providing evidence to support its claim that dairy products should have a minimum of 3 stars in relation to the Health Star Rating due to their inherent nutritional value.

Several Dairy Australia studies have disproven health recommendations around limiting cheese consumption to four times a week. This research highlighted that it is important to consider the impact of the whole food, not just single nutrients such as saturated fat. Other Dairy Australia-funded research has shown that consumption of dairy products by teenagers could have beneficial effects on blood pressure, particularly among girls.

CSIRO analysis funded by Dairy Australia highlighted that in 2007 a substantial proportion of Australian children consumed less than the minimum recommended amount of foods from the dairy food group, as outlined in the 2013 Australian Dietary Guidelines.

**WHAT WE’RE PLANNING**

**Updated data will provide a better understanding of Australian health**

Dairy Australia initiated a strong push from key public health opinion leaders in relation to analysis of the nutrition results from the Australian Health Survey (AHS). The current AHS data are initial results only and based on one-day intake records. The currently available national dairy consumption data for adults is from 1995 and for children from 2007 and therefore unlikely to reflect current eating habits.

In response, the Australian Bureau of Statistics is now planning to analyse the results in relation to the 2013 Australian Dietary Guidelines. Updated national data on nutrition, including dairy consumption, will soon become available to provide a better understanding of the health of people living in Australia.

Future releases will use a second day of dietary intake data to calculate usual intakes of nutrients. The numbers presented are for a nationally representative sample of Australians of all ages (2 years and over). In addition the Australian Bureau of Statistics (ABS) will work to determine who is meeting the Australian Dietary Guideline recommendations, which should be available towards the end 2015 and offer a better picture of dairy consumption.

Of particular relevance is:

- Usual intake of key nutrients for the various population groups compared with recommendations.
- The proportion of the various population groups consuming the recommended intake of the dairy food group.

This information will be used to set baselines for measurement of performance against daily dairy consumption targets recommended in the Australian Dietary Guidelines.

In addition, partnerships with six other dairy organisations from the United States, Europe and Australia are helping fund a major $3.7 million, five-year clinical trial examining the impact of increased dairy consumption on health (particularly bone health) among the elderly. The trial, led by the University of Melbourne, is being conducted in 60 Victorian aged care facilities and three-quarters of these facilities have already been recruited.

The twin epidemics of obesity and type 2 diabetes are a major threat to healthcare systems in Australia and around the world. Plans are being developed to co-fund a major study investigating the mechanisms by which dairy-rich diets may affect glucose tolerance and its determinants.
Lion Dairy & Drinks’ Goodness Project is a commitment not only to make its products even better, but to make healthy choices easier for consumers and their families.

Lion has audited its entire product range, which includes many of Australia’s best loved, household brands in dairy and juice, and will deliver significant formulation improvements over five years.

“The mission of our Dairy and Juice businesses is to deliver more natural goodness to every Australian, every day. To deliver on this, we’ve taken a leadership position to improve not only what’s inside our products, but what’s outside them too,” said Meredith Banks, Group Manager Environment.

“We expect our commitments through The Goodness Project will remove around 9 tonnes of salt, 1400 tonnes of sugar and 600 tonnes of fat from the national diet each year when fully implemented, without any taste and quality compromise.”

Under the Goodness Project, Lion will:
• reduce added sugar across its whole portfolio by 10%
• reduce added salt in its cheeses by 5%
• reduce total fat by 10% across all products in its ‘treat’ category
• never add ‘artificial’ trans-fats to any Lion product
• eliminate all artificial colours, flavours and added fructose, and maintain its ban on artificial sweeteners, across all children’s products.

Additional energy information, including Federal Government approved health star ratings, will be rolled out across its portfolio within four years. Lion’s new nutrient criteria, based on local and international scientific and government standards, will see its products labelled as either ‘best for you’, ‘good for you’ or ‘treat for you’.

“By 2019, 80% of everything we make will either be in our ‘best’ or ‘good for you’ product categories, according to rigorous nutrient criteria peer reviewed by the CSIRO and Deakin University,” said Meredith Banks. “Almost everything we make comes from Australian farms, and is highly aligned to consumers’ desire to eat better quality, less processed and more wholesome food.”

The Goodness Project is inline with the Dairy Industry’s Sustainability Framework priority area of “maximising nutrition” and contributes to the target of improving health outcomes for Australian communities.

Want to know more? http://lionco.prod.mytwa.net/sociability-living-well/supporting-better-choices/the-goodness-project
Target 7: Provide best care for all animals

OUR STORY IN BRIEF

Australian dairy farmers practice sound animal husbandry and keep their animals in peak condition.

First, foremost: we care for our cows

Australian dairy farmers are committed to the health and wellbeing of their animals. The practices of most farmers exceed standards which are consistent with the National Dairy Industry Animal Welfare Strategy. Cows are a farmers’ livelihood. Caring for them is a farmers’ first responsibility.

In order to deliver safe, high-quality dairy products, Australian dairy farmers know only too well they must practice sound animal husbandry and keep their animals in peak condition.

The animal welfare system in Australia aims to ensure all animals receive an acceptable level of care and treatment, including adequate housing or habitat, handling, sanitation, nutrition, water, veterinary care, and protection from extreme weather conditions and other forms of natural disasters.

New Australian Animal Welfare Standards and Guidelines for Cattle, although yet to be endorsed by government, have been developed to safeguard the welfare of cattle on farms across Australia.

The standards and guidelines create clear and consistent regulation based on current scientific knowledge, recommended industry practices and community expectations. They have been developed by the Commonwealth and State governments, in consultation with livestock organisations (including Australian Dairy Farmers (ADF) and Dairy Australia) and animal welfare groups.
HOW WE'RE TRACKING

Our vision: every animal is well-cared for

Animal welfare practices underpin the reputation and integrity of the dairy industry.

The ways in which the Dairy Industry Sustainability Framework measures the extent to which Australian dairy farmers are adhering to good animal husbandry practices are outlined below.

Baseline data is included where it has been established. This includes a metric for consumer sentiment. An estimated 62% (18% neutral, 4% disagree, 15% don’t know) of consumers believe dairy farmers do a good job in caring for their animals (DM 2014).

Understanding 2014 performance

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 Compliance with standards</td>
<td>n/a</td>
<td>56%</td>
<td>-</td>
</tr>
<tr>
<td>7.2 Recommended practices:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- don't dock tails</td>
<td>80%</td>
<td>85%</td>
<td>✓</td>
</tr>
<tr>
<td>- reduce use of induction</td>
<td>80%</td>
<td>80%</td>
<td>✓</td>
</tr>
<tr>
<td>- disbud prior to 2 months</td>
<td>57%</td>
<td>63%</td>
<td>✓</td>
</tr>
<tr>
<td>- lameness strategy</td>
<td>87%</td>
<td>95%</td>
<td>✓</td>
</tr>
<tr>
<td>- cool infrastructure</td>
<td>94%</td>
<td>98%</td>
<td>✓</td>
</tr>
</tbody>
</table>

Understanding 2014 performance

“n/a” indicates where an appropriate baseline measure or target has yet to be established

7.1 100% of industry complying with legislated animal welfare standards

**Performance measure:** 92% of dairy farmers were aware of the Codes of Practice for the Welfare of Cattle (Animal Husbandry Survey, 2012)

**2014 performance data:** New Australian Animal Welfare Standards and Guidelines for Cattle have been developed and are yet to be endorsed and implemented by governments. In the most recent survey (Animal Husbandry Survey, 2014) 56% of dairy farmers were aware of the new recommended standards. The baseline measure reported in the 2013 Sustainability Report was the percentage of farmers who were aware of the existing Codes of Practice — and shown as 92% in 2012. The survey now asks a different question, considering that the new standards will replace the existing Codes of Practice. The 56% awareness of the new standards will be a better baseline for future reports and also shows that there is further work needed to raise awareness. The aim is to increase this figure to 100% and ensure all dairy farmers comply with the standards by 2020.

Want to know more? www.animalwelfarestandards.net.au

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

**Performance measure:** More than 80% of Australian dairy farmers do not dock the tails of their cows; 80% of dairy farmers do not use calving induction as a farm management tool (2.2% of cows were induced); 57% of farmers disbud calves prior to two months; 87% of dairy farms have an effective lameness strategy in place; 94% of dairy farms have infrastructure in place to keep cows cool during hot weather (Animal Husbandry Survey 2012).
2014 performance data: More than 85% of Australian dairy farmers do not dock the tails of their cows; more than 80% of dairy farmers do not use calving induction as a farm management tool and although induction is used on a similar number of farms as 2012, the number of cows induced has almost halved (about 1.3% of cows nationally); 63% of farmers disbudd calves prior to two months; 95% of dairy farms have an effective lameness strategy in place and 40% of dairy farmers surveyed had attended an industry lameness workshop; 98% of dairy farms have infrastructure in place to keep cows cool during hot weather (Animal Husbandry Survey, 2014).

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

Performance measure: 60% of consumers believe dairy farmers do a good job caring for animals (DM 2013)

2014 performance data: 62% (18% neutral, 4% disagree, 15% don’t know) of consumers believe dairy farmers do a good job caring for animals (DM 2014)

WHAT WE’RE DOING

New standards raise stakes for farmers

The new Australian Animal Welfare Standards for Cattle are essential legal requirements that must be met by all dairy farmers.

Widespread public consultation has been completed and it is expected the standards will be endorsed by all State, Territory and Commonwealth Agriculture Ministers in late 2014 or early 2015.

The standards will take time to implement in State legislation, but they are based on the former Codes of Practice for Cattle and are consistent with the National Dairy Industry Animal Welfare Strategy. All dairy farmers should ensure they meet the standards now and may need to review current practices to ensure they comply with the law.

To prepare for implementation of the Standards, a guide to the recommended standards and guidelines has been distributed to all dairy farmers by dairy manufacturers. This guide is to be retained as part of a dairy farmer’s QA program to help demonstrate compliance and commitment to the Standards.

In conjunction with the new standards, the industry continues to develop and run programs and activities which build knowledge and improve the care of our cows.

These include:

• Cool Cows — assists dairy farmers to manage the risk of heat stress in their herds;
• FutureDairy — assesses animal behaviours in automatic milking system; and
• Animal health and biosecurity programs — address disease and illness problems such as the prevention, timely identification and treatment of diseases and the management of downer cows.

To keep track and evaluate the animal health and welfare practices undertaken on dairy farms, Dairy Australia has been coordinating the Animal Husbandry Survey biennially since 2005.
The data gathered is used to identify where farmers need more support and information, to inform development of the National Dairy Industry Animal Welfare Strategy, as well as to track the uptake of recommended practices.

The results of the 2014 Animal Husbandry Survey are included as a measure of performance for this target and have revealed positive results for the industry.

The 2014 results reflect increases across all performance measures, with more than 85% of Australian dairy farmers not docking the tails of their cows; more than 80% of dairy farmers not using calving induction as a farm management tool; 62% of farmers disbudding calves prior to two months; 95% of dairy farms having an effective lameness strategy in place and 98% of dairy farms having infrastructure in place to keep cows cool during hot weather.

**WHAT WE’RE PLANNING**

**Investments target better welfare outcomes**

The Australian dairy industry maintains a commitment to improving animal welfare practice.

The industry’s consultations with stakeholders have confirmed that the priorities set for animal welfare strategies implemented by industry are consistent with community expectations.

Regardless, it is critical farmers continue to advance our husbandry practices. So, the industry will continue to invest in activities to improve animal welfare outcomes.

These include:

- Research into better dairy animal welfare: calf management, transport, lameness, fertility management, dehorning and management of downer cows.
- Educating and training farmers on good husbandry practices.
- Educating and training all people who work with bobby calves.
- Industry quality assurance for the production of high quality milk from healthy, well cared for animals.
- Development and implementation of national standards and guidelines and state legislation and regulations in animal welfare and land transport.

The Animal Husbandry Survey 2014 indicates that not all farmers are implementing industry recommended practice. The industry will continue training and extension in animal husbandry, including initiatives in nutrition, mastitis control, reproductive management, farm risk management, calf management and rearing, and lameness. In future, the survey will monitor dairy farmers’ understanding and adoption of the new Australian Animal Welfare Standards and Guidelines for Cattle.
“What I like about (the app) is that takes a lot of stuff out of your head... We’re saving on average $50,000 to $70,000 a year.”  Stephen Luckin, dairy farmer, south-west Victoria.

App puts improved cow health in farmers’ hands

Better cow health and higher milk quality, as well as saving time and money, is now, literally, in the hands of south-west Victorian dairy farmers Stephen and Tania Luckin.

A free digital app, the Countdown Mastitis Toolkit, designed for use on a mobile device, gives the Luckins instant access to up-to-date information on mastitis control and milk quality.

More than 1800 dairy farmers and advisors have downloaded the app since it was released in 2013. Some farmers are using the app to save as much as tens of thousands of dollars a year.

Mastitis is an inflammation of a cow’s udder due to bacterial infection which can affect the cell count in milk and, in turn, the price for the milk received by dairy farmers.

The Luckins say that it was taking an extra 20 minutes at milking time to treat cows previously. A cell count problem at their 500-cow farm also resulted in 90 cows being culled. They now use the app as a control mechanism to monitor animal health and the hyper-keratosis that causes the mastitis problem on the farm.

“What I like about (the app) is that takes a lot of stuff out of your head,” says Mr Luckin.

“You can just access it instantly and come up with an answer (and) don’t have to rush home and look it up or think about it, and that’s worth a lot when you are milking. This provides better cow health and welfare outcomes.

“We are saving on average $50,000–$70,000 a year.”

The app, which can be downloaded for free to iPhone and Android devices, was designed in consultation with dairy farmers, advisors and vets and is based on the Countdown 2020 mastitis control program and associated resources. It will be updated and refreshed with the latest information over time.

Want to know more? Countdown 2020 mastitis toolkit on YouTube
“Our herd is our livelihood, and the welfare of our animals is linked to productivity. But it goes much deeper than that... We take animal welfare quite personally.”

Jacqui Biddulph, Western Australian dairy farmer.

Animal wellbeing: “it’s integral to the business”

Ensuring their animals have the best possible welfare is integral to the way Western Australian dairy farmers Jacqui and Bob Biddulph go about their daily businesses.

“Our herd is our livelihood, and the welfare of our animals is linked to productivity. But it goes much deeper than that. We take animal welfare quite personally,” says Jacqui Biddulph.

“We can see our cows every time we milk, and they stay in the herd for five, ten or more years. So we feel very connected with our cows and young stock.”

The Biddulph’s recognise that mastitis, lameness and calf-rearing are risk areas for animal welfare. Their approach to caring for animals is based on prevention and close monitoring.

Mastitis levels on their 400-cow home farm and 200-cow share-farm have fallen, as a result of following guidelines from Countdown Downunder. Their actions include vigilant teat disinfection, dry-cow therapy and calving cows onto clean paddocks to prevent contamination.

Young calves are the Biddulph’s future so they provide the best possible conditions for growth, health and welfare.

“As soon as we see a newborn calf it gets an antiseptic spray on the navel to prevent infection, a multi-vitamin injection, colostrum and an ear tag. We also photograph every calf so we can identify it even if the ear tag falls out,” she says.

Until weaning, all calves are fed appropriate quantities of milk daily and housed on clean, fresh straw with constant access to water and solid feed. Diarrhoea is rare in the Biddulph’s calves, which they put down to their emphasis on the individual animal.

“We keep a very close eye on individual calves in their early days so we can pick up if they are poorly or need extra feed,” Jacqui says.

All dairy farmers must remove the horns from their cows — horns are a hazard for humans and animals alike. The Biddulph’s disbud calves at eight weeks of age.

“Disbudding is simple and less stressful for animals and workers if it’s done when the calves are small,” she says.

To prevent lameness, the Biddulphs have a regular maintenance program for the farm’s laneways, and have a complete review of laneway conditions every year.

At the dairy, foot baths are used to keep hoofs in top health and hoof mats provide added protection and comfort.

Lame cows are separated from the herd, treated and kept with a ‘hospital group’ until they recover. This minimises stress and gives their feet a chance to heal.
Reducing environmental impact

Dairy farmers are responsible stewards of the land. Dairy works hard to reduce waste to landfill, reduce the intensity of greenhouse gas emissions and to use water wisely. Technology and tenacity underpin commitment by dairy manufacturers and farmers to reduce their impact on the environment. The Australian Dairy Industry Sustainability Framework has identified four targets for reducing environmental impact by 2020: nutrient, land and water management; reduced consumptive water intensity; reduced GHG emissions intensity; and reduced waste to landfill.

Target 8: Improve nutrient, land and water management

OUR STORY IN BRIEF

The Australian dairy industry has a long history of improving natural resource management on farms. Dairy farmers are committed to managing land and water responsibly.

Amongst the most efficient farmers in the world

The Australian dairy industry has a long history of improving natural resource management on farms. Dairy farmers are committed to managing land and water responsibly, reducing greenhouse gas emissions intensity and protecting our natural resources for future generations.

In the 2014 annual Dairy Monitor Survey, which measures consumer sentiment, 31% (54% neutral, 14% disagree) of consumers agreed that dairy foods are produced in an environmentally responsible way.

The dairy industry’s natural resource management specialists support the delivery of industry level projects by providing coordination and integration services, and facilitating partnerships between private consultants, milk companies and industry stakeholders. They also provide technical support to industry stakeholders including farmers as requested.

Australian dairy farmers are amongst the most efficient in the world. To survive in this competitive industry, the production and utilisation of pasture as our main feed source will be the key to future success. Many farmers are finding that, with proper soil and fertiliser management, they can produce more feed at no extra cost.
Performance figures are a work in progress

The Framework measures the extent to which farmers are improving nutrient, land and water management to minimise their environmental footprint. The performance measures and baselines were taken from the 2012 Dairying for Tomorrow survey of natural resource management practices.

While this survey has traditionally been run every six years, and up-to-date performance data is not yet available, the intention is to run it more frequently — planned for 2015.

### Target 8: IMPROVE NUTRIENT, LAND AND WATER MANAGEMENT

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1 Exclusion of stock from waterways</td>
<td>73%</td>
<td>?</td>
<td>90%</td>
</tr>
<tr>
<td>8.2 Nutrient management plans</td>
<td>30%</td>
<td>?</td>
<td>80%</td>
</tr>
<tr>
<td>8.3 Irrigation automation</td>
<td>47%</td>
<td>?</td>
<td>80%</td>
</tr>
<tr>
<td>8.4 Managing land for conservation and biodiversity</td>
<td>47%</td>
<td>?</td>
<td>80%</td>
</tr>
<tr>
<td>8.5 Managing noxious weeds</td>
<td>37%</td>
<td>?</td>
<td>80%</td>
</tr>
<tr>
<td>8.6 Recycle water on farm</td>
<td>50%</td>
<td>?</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### Understanding 2014 performance

- ? improvement from last measurement
- = no change from last measurement
- ✔ ongoing target achieved in 2014
- ✗ regression from last measurement
- ✗ ongoing target not achieved in 2014

*n/a* indicates where an appropriate baseline measure or target has yet to be established

### 8.1 90% of stock are excluded from waterways by 2020

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

### 8.2 80% of farmers implement nutrient management plans by 2020

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

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

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

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

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

### 8.5 All dairy farmers actively managing noxious weeds by 2020

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

### 8.6 80% of farmers have practices to recycle water on farm by 2020

**Performance measure:** Around 50% of dairy farmers recycle some water (DairySAT).

While there is no update on the performance measures, there are a number of programs in place to help achieve the target.
Consumer sentiment is tracked in the annual Dairy Monitor (DM) survey. In the 2014 Survey, it was found that 31% of consumers agreed “dairy foods are produced in an environmentally-responsible way”. The target is to increase this to 37% by 2016. Consumer sentiment is being used as a proxy measure for monitoring progress against this target until such time that accurate baselines have been established.

WHAT WE’RE DOING

Australia first to comply with Unilever’s Sustainable Agriculture Code

The Australian dairy industry has worked hard to become the first to be recognised at an industry level as compliant with Unilever’s Sustainable Agriculture Code (SAC) for Australian milk production. The independent evidence provided through the 2012 Dairying for Tomorrow survey and DairySAT supported this recognition.

The Fert$mart program aims to improve the efficiency and profitability of fertiliser use and improve soil health on Australian dairy farms.

An upgraded Dairy Self-Assessment Tool (DairySAT) is making it easier for farmers to identify and deal with critical environmental issues facing their operation. New features allow farmers to work through 10 focus areas such as soils, fertilisers and effluent management, and then create an action plan.

Seven natural resource management technical specialists are now located across Australia with skills in pasture agronomy, nutrient management, water quality, irrigation design, climate change, effluent system design and management and environmental compliance.

Several dairy companies are now supporting the development and implementation of environmental sustainability plans on dairy farms, e.g. Bega’s Environment Management System which offers a financial incentive to participating suppliers.

WHAT WE’RE PLANNING

Creating more opportunities for farmers

The focus for extension activities over the next twelve months will be creating opportunities for farmers and service providers to participate in Fert$mart, which delivers against the Australian Government supported Smarter Energy Use on Australian Dairy Farms and Profitable Dairying in a Carbon Constrained Future initiatives.

Cross sector partnerships around precision irrigation, soil biology research and a business case to improve resource use efficiency through precision technologies are among research areas to be developed.

The revised DairySAT program is providing information about natural resource management practices across all dairy regions as well as what support programs are needed.

The Australian dairy industry is also contributing to the development of a Biodiversity Action template in partnership with the Sustainable Agriculture Initiative Global Platform and the UN Food and Agriculture Organization’s Livestock Environmental Assurance Program (LEAP). This will help ensure Australian dairy biodiversity action plans are aligned with international developments.

It’s anticipated that the Dairying for Tomorrow survey of natural resource management practices, currently undertaken every six years, will be run more frequently — planned for 2015.
Protecting waterways, lifting farm profits with Support Crew™

David Conheady, a Fonterra supplier near Noorat in western Victoria is saving over A$10,000 per year in fertiliser costs by implementing a farm nutrient management plan on a dairy farm that he recently purchased with his wife Rebecca and parents Anne Marie and John. Importantly, this reduction in fertiliser use also brings environmental benefits.

The development of David’s nutrient management plan was initially part funded by Fonterra’s SupportCrew™ — Sustainability program; a program that provides an incentive for specialist services to undertake projects which have positive outcomes for both farm and the environment.

To ensure each project meets the objectives, all project briefs are peer reviewed by a group of Fonterra’s leading farmers before any incentive funding is approved.

In developing the plan, David soil tested every paddock using an industry accredited process that included getting samples tested in a certified lab and then he reviewed the results with his agronomist. The soil test results showed that David’s soils had high levels of some major nutrients.

This led to David tailoring his fertiliser application regime, which resulted in significant savings in fertiliser costs without compromising pasture growth, animal health or milk production. The risk of impacts from fertiliser run off has also been greatly reduced.

David’s work directly contributes to Target 8 of the Dairy Sustainability Framework — to improve nutrient, land and water management on farms.

As well as benefitting the environment, Fonterra’s SupportCrew™ — Sustainability projects have put A$1.2 million back into the bottom lines of its Australian suppliers over the last year.
Target 9: Reduce the consumptive water intensity of dairy manufacturers by 20%

OUR STORY IN BRIEF

The dairy industry has used drought conditions as an opportunity to better manage its water resources.

Fighting drought with water-saving innovation

Many water-saving initiatives, adopted in response to drought conditions and scarcity of water, have become permanent water saving measures in the Australian dairy industry. Overall, dairy manufacturers managed to reduce their consumptive water intensity by 10.5%.

Water-use in dairy manufacturing can affect what products are made. Different manufacturing processes consume varying quantities of water, which has a significant impact on environmental performance. For example — milk powder production consumes significantly less water than cheese production, but becomes less efficient when the required drying equipment is under-utilised.

Individual dairy processing plants still use substantial volumes of water irrespective of production, for equipment cleaning, cooling towers, boilers and other processes.

Cleaning is the single largest water-consuming process for manufacturers, largely driven by product safety requirements. The volumes consumed relate to equipment capacity, not necessarily volume of milk processed — the size of equipment stays the same but operational runs become shorter between each cleaning cycle.

The dairy manufacturing industry will continue its commitment to manage water resources and reduce consumptive water intensity.
HOW WE’RE TRACKING

Dairy manufacturers cut water intensity by 10.5%

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

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1 Consumptive water intensity of dairy manufacturers (litres per litre of milk processed)</td>
<td>1.75</td>
<td>1.56</td>
<td>1.40</td>
</tr>
</tbody>
</table>

Understanding 2014 performance

- ➤ improvement from last measurement
- ➤ no change from last measurement
- ➤ regression from last measurement

“n/a” indicates where an appropriate baseline measure or target has yet to be established

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

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

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

The consumptive water intensity of dairy manufacturers during 2013/14 equates to an estimated 1.56 litres of water per litre of milk. This represents a 10.5% reduction in water intensity since 2010/11. A 20% reduction by 2020 was the target set for the manufacturing sector.
WHAT WE’RE DOING

RD&E will improve consumptive water intensity

Historically some of the large manufacturers were the greatest consumers of potable water supplies in a community, which put both the local water supply and their own operations at risk.

With the droughts experienced over recent years, farmers and manufacturers are working to reduce the consumptive water intensity.

A strong driver of water saving programs is cost. Whilst potable water does not have a large impact on production costs, for every litre of water used, wastewater effluent is created and disposal and treatment of this effluent is a significant cost on dairy manufacturers.

The product mix generated by the Australian dairy manufacturing industry has continued to change with a steady increase in the proportion of fresh dairy produced since 2005, and a corresponding reduction in cheese production. This has influenced the industry’s reduced water use but it is not known by how much.

Each manufacturer’s product mix is driven by international prices and demand and product mix breakdowns can vary considerably from year to year.

Whilst analysis of the water consumption at the product level is not readily available, total data quality has improved considerably since 2005. However, the poor quality of the old data sets means that it is difficult to rely on accurate trends of performance.

WHAT WE’RE PLANNING

Industry keeps commitment to managing water wisely

The dairy manufacturing industry will continue its commitment to manage water resources and use water efficiently and effectively. Dairy Innovation Australia has been partnering with the CSIRO, the Australian Water Recycling Centre of Excellence and others in the food processing sector to reduce reliance on fresh water. The research program, which started in 2012, aimed to identify opportunities for water recycling and the full potential of water reuse, from energy recovery and nutrient re-use through to the use of spent process water. It also examined consumer and regulatory barriers hindering water recycling and possible strategies to overcome these barriers.

Food processing accounts for one third of the total water used for all manufacturing across Australia. We understand the need to investigate water management options ahead of a future with increasing water scarcity and cost. The research project has mapped sources and sinks of water in the dairy industry and developed tools, including a framework to help select technology options for recycling water. Bega Cheese and Warrnambool Cheese and Butter participated in the development of a tool to calculate the net present value of water recycling investment which takes into consideration site specific factors including the cost of water and wastewater disposal.

A final report will be released early in 2015 which will include the results of the various projects undertaken as part of the research program including dairy case studies, decision-making tools and knowledge sharing for our industry. The research findings will help to further inform policy and program development in water reduction over coming years.
New $160 million milk processing plants represent the largest single investment in dairy processing technology since 2000.

New milk plants a fresh investment for the future

Devondale Murray Goulburn’s two new milk processing plants, worth a combined $160 million, will assist in positioning the cooperative as the nation’s most efficient producer of daily pasteurised milk, and enable the cooperative to supply Coles with approximately 200 million litres of milk each year.

This increased capacity will contribute to the future competitiveness and profitability of the Australian dairy industry. At the same time it delivers significant environmental efficiencies, which will support the industry’s efforts to reduce environmental footprint.

The project also delivers significant water and energy use savings. By operating at high speeds, the plant is energy and resource efficient. Each site is capable of processing up to 50,000 litres of milk per hour.

Designed to use just 0.4 litres of water for every litre of milk produced, compared to an average 1 to 1.5 litres of water for standard facilities, its water usage standards are world class. The plants also use a selection of the latest packaging and processing technology to minimise waste generation.

The investment by Devondale Murray Goulburn will contribute to the future competitiveness of the Australian dairy industry overall — a key target in the industry’s Sustainability Framework. Its energy efficiency, and water and waste saving features, will also support industry targets for the year 2020 around energy efficiency, water use savings and waste reduction.
Target 10: Reduce greenhouse gas emissions intensity by 30%

OUR STORY IN BRIEF

The Australian dairy industry remains engaged in a range of emission intensity reduction initiatives.

Dairy industry remains focused on saving energy

Energy efficiency is not new for the Australian dairy manufacturing industry, which in some cases has reduced energy use by as much as 50% over a 20-year period. It is likely that the continuing focus on energy, including via the subsequent introduction of legislated reporting, has led to better data monitoring.

Agriculture accounts for around 17% of Australia’s greenhouse gas emissions, of which 10% can be attributed to the dairy industry (less than 2% of the national total).

There are a range of pre- and post-farm gate activities that contribute to the dairy industry’s total carbon footprint. In addition to carbon counted as ‘on-farm’ due to animal husbandry and feed production, dairy farms also emit significant amounts of carbon dioxide through use of fossil fuels and electricity. Dairy manufacturing represents a relatively small component of the total carbon emissions from the dairy supply chain.

The majority of emissions from dairy manufacturing are due to energy consumed through electricity and on-site energy used to generate steam and hot water, followed by transport. The amount of energy used and therefore the carbon emissions generated depends on the mix of dairy products produced. Milk powder factories consume significantly more energy than fresh milk processors.

The largest dairy manufacturers in Australia are currently participating in the National Greenhouse and Energy Reporting scheme, a requirement under Australian Government legislation. The industry remains engaged in a range of emission intensity reduction initiatives, including investing in research to improve manufacturing as well as farming practices and implementation of energy efficiency projects.
HOW WE’RE TRACKING

Manufacturers reduce emissions intensity by 14.5%

The intensity of GHG emissions generated by dairy manufacturers in 2013/14, largely as a result of fuel and electricity, fell by 14.5%. The data is based on information obtained directly from dairy companies processing approximately 86% of Australia’s milk production.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1 Emissions from dairy manufacturers (t CO₂-e per ML milk processed)</td>
<td>178.7</td>
<td>153.6</td>
<td>125.8</td>
</tr>
</tbody>
</table>

Understanding 2014 performance

*✔* improvement from last measurement
*×* regression from last measurement
*?* no change from last measurement
* Gazette* no measurement in 2014

‘n/a’ indicates where an appropriate baseline measure or target has yet to be established

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

a. direct measurement of manufacturer emissions

*Performance measure:* Manufacturers’ emissions were 178.7 tonnes of CO₂-e per ML milk processed in 2010/11 [Dairy Manufacturers Environmental Sustainability Report 2010/11]7. Manufacturers’ emissions cover all scope 1 and 2 emissions associated with their manufacturing operations. This includes emissions from combusted stationary fuels (Scope 1), transport fuels (Scope 1) and emissions associated with grid electricity (Scope 2).

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

b. output measures from farm abatement actions

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

*2014 performance data:* No update available.

The intensity of greenhouse gas (GHG) emissions generated by manufacturers’ use of fuel and electricity in 2013/14 fell by 14.5% to 153.6 tonnes of CO₂ (equivalent) per ML milk processed. A 30% reduction in GHG emissions intensity from the baseline figure of 178.7 tonnes of CO₂ (equivalent) per ML milk processed in 2010/11 has been set for 2020.

7 Please note that the baseline emissions intensity figure was incorrectly reported as 1.787 tonnes CO₂-e in the 2010/11 Report. This error (in reporting units) has been corrected for all emissions intensity figures. 2013/14 greenhouse gas data coverage (as reported by DMSC members) is estimated to cover 86% of industry by milk production volume.
WHAT WE’RE DOING

Energy assessments changed attitudes

Nine hundred energy assessments were conducted over the last year through the existing Smarter Energy Use on Australian Dairy Farms initiative. Most (80%) farmers interviewed one year after participating now think or behave differently about energy use.

Farmers are saving $500–$3000 each year by:
- switching off equipment and lights when not required
- increasing maintenance of equipment to ensure it operates more efficiently
- replacing inefficient machinery with more suitable options when it breaks down.

The biggest driver for reducing energy consumption, and therefore greenhouse gas emissions, is the escalating cost of energy. Manufacturers’ solutions have included the replacement of single tanker trucks with more fuel efficient B Double tankers, and large scale conversions of coal-fired boilers to natural gas.

WHAT WE’RE PLANNING

Unprecedented data to inform targets and solutions

Information collected in the Dairying for Tomorrow Survey on energy audits, energy savings strategies and renewable energy use at the farm level indicates a reduction in emissions.

More direct measures of farm level emissions will be investigated, potentially leveraging the dairy industry’s Life Cycle Assessment work and the data sets generated by the Dairy Greenhouse Gas Abatement Strategies Calculator.

The updated online Dairy Self-Assessment Tool includes information about attitudes and practices around emissions from production efficiencies, feed base, nutrient management and energy use. This may provide supporting measures for pre-farm gate sustainability reporting.

Detailed information is being collected as part of the Smarter Energy Use on Australian Dairy Farms project and will also help inform farm level emissions targets. A further 400 assessments are planned for 2014/15 through the same program.

The baseline data for farm emissions will be set based on further investigations relating to potential measures.
The actions of King Island farmers are contributing to achieving the Australian dairy industry’s target of reducing greenhouse gas emissions intensity by 30% by the year 2020.

Solar option cheaper and greener for King Island dairies

King Island dairy farmers are saving money and reducing their environmental impacts through the use of new solar hot water systems in their dairy sheds.

By harnessing the wind and solar energy prevalent on King Island the new systems are expected to reduce hot water costs, the largest part of any dairy shed energy bill for the island’s farmers, by up to 50%.

Nine dairy farms have installed the commercial solar hot water systems as part of an initiative funded by the Tasmanian Government’s Bass Strait Renewable Energy Program and coordinated by Dairy Australia’s Regional Development Program, DairyTas.

The farmers were jointly provided with $202,000 to install the evacuated tubes and energy storage systems.

The King Island initiative is helping the Australian dairy industry achieve its commitment to reduce carbon emission intensity by 30% by 2020. By reducing energy consumption for milk cooling, milk harvesting and hot water production farmers can make useful energy savings without the outlay of significant funds.

King Island Dairy Farmer Supply Group leader and dairy farmer, Troy Smith, said the project was a great opportunity for farmers to make power savings. Farmers currently faced flat rate electricity prices and relied on diesel power generation despite wind and solar energy prevalent on the island.

“If we can be energy efficient and use renewable energy, it saves us money, there is even less diesel coming onto the island and the environment is also better off,” Mr Smith said.

The project is part of a nationwide move by Dairy Australia and the Australian Government to help dairy farmers be smarter with their energy use. This includes the delivery of 900 free energy efficiency assessments for Australian farmers and a second round of free assessments is currently taking place until June 2015.
An industry pamphlet has also been created to complement the on-farm energy assessments and more broadly communicate where energy is used in dairies and where efficiencies can be found.

Amy Fay from Dairy Australia said the idea for the pamphlet came out of a farmer workshop held at Tatura, Victoria in January 2014.

“Farmers told us they wanted something practical that they could use, that’s not a super-technical document, that assists their decision making around what certainly can be a big investment especially as we are now seeing more options becoming available,” Ms Fay said.

Ms Fay said before renewable energy was even a consideration farmers needed to ensure their dairy was as energy efficient as possible with the current equipment used.

Target 11: Reduced waste to landfill

OUR STORY IN BRIEF

The amount of waste sent to landfill by manufacturers during 2013/14 is 39% lower than 2010/11, which is close to the target of a 40% reduction by 2020.

Levies, better data slash manufacturers’ waste

Australian dairy manufacturers have achieved a 39% reduction in landfill waste in the past three years by maximising the recovery, reuse and recycling of waste materials. This 39% reduction in waste to landfill since 2010/11 is in line with the target of a 40% reduction by 2020, but it is likely that some of this result is due to improvements in the quality of data collected (Data source: Dairy Manufacturers Sustainability Council data collection from individual manufacturers).

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

Further, there has been a significant improvement in data collection and data quality in recent years. Historically waste to landfill was calculated and charged by estimated (and often inaccurate) volume measures.

A number of companies are now weighing the waste more accurately and expecting waste contractors to be more accountable. This change from volume to weight measurements has reduced waste (and costs) through more accurate measurement of waste collected.

In 2014, Australian dairy manufacturers produced 1.63 tonnes of waste per ML of milk processed. A significant proportion of the solid waste generated by manufacturers consists of general packaging.
HOW WE’RE TRACKING

Waste from factories to landfill drops 39%

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

### Target 11: REDUCE WASTE TO LANDFILL

<table>
<thead>
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<th>Indicator</th>
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<th>2014 Performance</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1a Waste to landfill intensity of dairy manufacturers (tonnes of waste per ML milk processed)</td>
<td>2.69</td>
<td>1.63</td>
<td>1.61</td>
</tr>
<tr>
<td>11.1b Manufacturers: signatories to Australian Packaging Covenant (APC)</td>
<td>9</td>
<td>9</td>
<td>n/a</td>
</tr>
<tr>
<td>11.2 On farm measurement to be developed from DairySAT tool</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Understanding 2014 performance**

- ↑ improvement from last measurement
- ➡ no change from last measurement
- ➖ regression from last measurement
- × ongoing target achieved in 2014
- ❌ ongoing target not achieved in 2014

“n/a” indicates where an appropriate baseline measure or target has yet to be established.

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

- **a. direct quantitative target**

  *Performance measure:* Manufacturers produced 2.69 tonnes of waste per ML of milk processed in 2010/11 (*Australian Manufacturers Environmental Sustainability Report 2010/11*).

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

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

  *Performance measure:* Out of 20 identified manufacturers, 9 were signatories to the APC in 2013 (processing 85% of Australia’s milk production)

  *2014 performance data:* No change to the number of manufacturers who are signatories (APC website).

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

*Performance measure:* to be established using the Dairy Self-Assessment Tool indicator — Farm Waste chapter.

*2014 performance data:* The updated Dairy Self-Assessment Tool was released in 2014. Sufficient data has not yet been collected to establish a baseline.

---

The amount of waste sent to landfill by manufacturers during 2013/14 is estimated at 1.63 tonnes of waste per ML of milk processed. This represents a 39% reduction in waste to landfill since 2010/11, which is close to the target of a 40% reduction by 2020. It is likely that some of this result is due to improvements in the quality of data collected.
WHAT WE’RE DOING

Dairy passes muster in Unilever test for its sustainability

In November 2013 the Australian dairy industry was recognised by Unilever as meeting its Sustainable Agriculture Code. Unilever is one of the largest companies in the world and the biggest global manufacturer of ice cream.

During the extensive assessment process Unilever identified three areas that could be further enhanced — soils, biodiversity and waste. Dairy Australia together with Devondale Murray Goulburn, Fonterra and several other dairy companies, have agreed to address these areas through a project involving nearly 100 farms across the country’s eight dairy regions. The DairySAT on-line tool is being used to collect data.

WHAT WE’RE PLANNING

Manufacturers set individual waste reduction targets

Manufacturers will continue to monitor their waste production with individual companies setting waste reduction targets.

More work is required to develop measures and establish baseline data before for reducing farm level waste.

Industry partnerships will lead to a greater understanding of where waste is generated and how it can be reduced. Increased participation in recycling programs such as DrumMuster and silage wrap recycling programs may offer a proxy for waste reduction on farm.

The potential to collect other proxy data, for example the percentage of farms with waste management plans, will also be investigated. This could be through inclusion in the next Dairying for Tomorrow Survey, planned for 2015.
Devondale Murray Goulburn’s progress toward sustainable packaging won the 2014 ‘Most Improved’ award from the Australian Packaging Covenant

Packaging improvements gain recognition, get results

Devondale Murray Goulburn has been recognised for significant improvements in sustainable packaging made over the last year, winning the 2014 ‘Most Improved’ award from the Australian Packaging Covenant (APC).

The APC is a voluntary industry-driven sustainable packaging initiative that aims to change the culture of business to design more sustainable packaging, increase recycling rates and reduce packaging litter.

The award was given to Devondale Murray Goulburn for achieving a significantly higher score for their annual report on progress compared with their previous submission, especially in product stewardship outcomes.

“Following considerable effort from multiple teams across the business, we went from a 1.4 out of five to a 3.7 for our report which was better than the average rating for 2014 of 2.8 across all participants to the Australian Packaging Covenant — a significant achievement,” said Felicity Kelly, Sustainability Manager.

Whilst continuous improvement played a role, a transformational strategic change for the business based on the two pillars of Operational Excellence and Innovation, enabled many of these outcomes.

The Operational Excellence program, which places a strong focus on making quality products ‘Right First Time’ and ultimately reducing packaging waste, delivered 24 packaging-related projects last year.

In further efforts to improve waste management, Devondale Murray Goulburn also reviewed all new products developed since March 2013 against the APC’s Sustainable Packaging Guidelines, developed procurement policies in line with the APC goals, updated the company’s Environmental Management System and improved efficiencies across the business in general.

Under its Sustainability Framework, the Australian dairy industry has a specific target of reducing waste to landfill by 40% by the year 2020. Devondale Murray Goulburn’s efforts to improve packaging across its product range will contribute towards this target, as well as to the dairy industry’s overall aim of minimising its environmental footprint.
Section 3:
About our industry, the framework and this report
Dairy Industry Sustainability Framework — An Overview

Enhancing livelihoods

<table>
<thead>
<tr>
<th>Theme</th>
<th>Priority area &gt; Goals</th>
<th>Objectives</th>
<th>Targets</th>
<th>Performance Measures</th>
</tr>
</thead>
</table>
| $     | Creating industry prosperity | Improve the profitability and competitiveness of the industry | Generate returns that are competitive with alternative uses of natural, human and capital resources | 1 | INCREASE THE FUTURE COMPETITIVENESS AND PROFITABILITY OF THE AUSTRALIAN DAIRY INDUSTRY  
  1.1 [X% increase] in the number of dairy farms that are profitable  
  1.2 intent: to set a target around the market preference for buying Australian dairy products  
  1.3 ensuring sustainability criteria (e.g. carbon, animal welfare, environmental impact) so not impede market access  
  1.4 increase adoption of new technologies and innovative management practice within the dairy industry  
  1.5 provide consumers with greater choice and access to a variety of dairy products and/or ingredients to meet their specific nutritional needs |
|       |                       | Market development and market competitiveness |  | |
|       |                       | On-going investment in and increased adoption of innovative solutions and effective use of new technologies |  | |
|       | Supporting communities | Improve the expertise of and prospects for our people | Increase dairy’s contribution to economic outcomes at local, regional, state and national levels | 2 | INCREASE THE RESILIENCE AND PROSPERITY OF DAIRY COMMUNITIES  
  2.1 intent: to set a target around the contribution the dairy industry makes to the economy of dairy regions  
  2.2 the contribution and importance of dairy is recognised in relevant local and state government policies and strategies (especially growth and investment)  
  2.3 increase consumer and dairy community recognition of the value of the dairy industry to local communities |
|       | Enhance the expertise of and prospects for our people | Build capacity to embrace change, improving uptake of new technology and alternative practices; build resilience to climate variability |  | |
| $     | Investing in dairy people | Enhance the resilience and prosperity of communities | Our people have a safe and healthy work environment with the skills required to perform their roles competently | 3 | PROVIDE A SAFE WORK ENVIRONMENT FOR ALL DAIRY WORKERS  
  3.1 100% on-farm and dairy processor workers completed OH&S training (ongoing compliance).  
  3.2 30% reduction in Lost Time Injury Frequency Rate (LTIFR)  
  3.3 Zero workplace fatalities |
|       |                       | Build skills to deliver the sustainability objectives |  | |
|       |                       | Plan for succession and attract, retain and develop talented people | 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  
  4.2 increase participation in development activities by - 50% increase in education and 100% increase for extension activities  
  4.3 retain an experienced and motivated dairy workforce - 20% increase in the number of experienced employees retained  
  4.4 50% of dairy farmers have a well developed business transition plan |
## Improving wellbeing

<table>
<thead>
<tr>
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<th>Objectives</th>
<th>Targets</th>
<th>Performance Measures</th>
</tr>
</thead>
</table>
| ![Improving wellbeing](image) | Ensuring health and safety | All dairy products and ingredients sold are 100% safe | 5 | ALL DAIRY PRODUCTS AND INGREDIENTS SOLD ARE SAFE  
5.1 Zero non-compliant chemical residuals found during the Australian Milk Residue Analysis (AMRA) Survey  
5.2 Zero product recalls due to food contamination (as reported by Product Safety Recalls Australia)  
5.3 15% increase in the number of consumers who agree Australia produces high quality and safe dairy products |
| ![Improving wellbeing](image) | Maximising nutrition | Dairy products are recognised, valued and increasingly consumed as an essential part of a healthy diet | 6 | DAIRY CONTRIBUTES TO IMPROVED HEALTH OUTCOMES FOR AUSTRALIAN COMMUNITIES  
6.1 maintaining meaningful recognition that dairy (milk, cheese and yoghurt) is a key element of a healthy diet:  
a. improve consumers perception of the health and nutrition benefits of dairy foods  
b. NH & MRC Australian Dietary Guidelines continue to recommend milk, cheese and yoghurt as core food group  
6.2 [x%] increase in the proportion of Australians meeting recommended daily serves for dairy |
| ![Improving wellbeing](image) | Caring for our animals | All dairy farmers ensure animal husbandry practices maximise health and welfare outcomes | 7 | PROVIDE BEST CARE FOR ALL ANIMALS  
7.1 100% of industry adopting relevant industry recommended practice for animals care  
7.2 all of industry complying with legislated animal welfare standards  
7.3 25% increase in the number of consumers who believe dairy farmers do a good job caring for animals |
### Reducing environmental impact

<table>
<thead>
<tr>
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<th>Targets</th>
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<tr>
<td></td>
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<td></td>
<td>8</td>
<td><strong>IMPROVE NUTRIENT, LAND AND WATER MANAGEMENT</strong>&lt;br&gt;8.1 90% of stock are excluded from waterways&lt;br&gt;8.2 80% of farmers implement nutrient management plans&lt;br&gt;8.3 80% of dairy farms with irrigation having implemented some level of irrigation automation&lt;br&gt;8.4 80% of dairy farms managing some land for conservation and biodiversity&lt;br&gt;8.5 all dairy farmers actively managing noxious weeds&lt;br&gt;8.6 80% of dairy farmers have practices to recycle water on farm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximise the recovery, reuse and recycling of materials from all waste streams</td>
<td>11</td>
<td><strong>REDUCE WASTE TO LANDFILL BY 40% BY 2020 ON 2010/11 LEVELS</strong>&lt;br&gt;11.1 manufacturer level measured:&lt;br&gt;- with a direct quantitative target&lt;br&gt;- by all manufacturers being signatories of the Australian Packaging Covenant&lt;br&gt;11.2 intent: to set a target around farm level waste reduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduce greenhouse gas emissions</td>
<td>10</td>
<td><strong>REDUCE GREENHOUSE GAS EMISSION INTENSITY BY 30%</strong>&lt;br&gt;10.1 30% reduction in greenhouse gas emissions through&lt;br&gt;- direct measurement of manufacturer emissions&lt;br&gt;- outputs measures from farm abatement actions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improve nutrient, land and water management</td>
<td>9</td>
<td><strong>REDUCE THE CONSUMPTIVE WATER INTENSITY OF DAIRY MANUFACTURERS BY 20%</strong>&lt;br&gt;9.1 20% reduction in the consumptive water intensity of dairy manufacturer (2010/11 levels)</td>
</tr>
</tbody>
</table>

*Source: Australian Dairy Industry Sustainability Framework Progress Report — December 2014*
About the Australian Dairy Industry

A long, proud history of sustainability

The Australian dairy industry has a proud history of sustainability. We undertake many programs that contribute to enhancing livelihoods, improving the wellbeing of people and animals, and reducing our environmental impact, for both today and future generations.

As the third largest rural industry, dairy farms and factories directly employ more than 43,000 people. Our products are an essential part of a healthy diet, valued and trusted by millions, and consumed around the world.

The dairy industry is one of Australia’s major rural industries with a farm gate value of $4.7 billion. The dairy industry is a $13 billion farm, manufacturing and export industry.

The industry employs 43,000 people directly on dairy farms and manufacturing plants and an additional 100,000 people employed indirectly in services such as R&D, dairy transport, veterinary services. Annual milk production reached 9.24 billion litres in 2013/14, with 38% of milk products exported (All facts from Dairy Australia’s Australian Dairy Industry In Focus 2014).

Industry Snapshot

From DA’s Australian Dairy Industry In Focus 2014:

- Average herd size — 268 cows
- Total milk production — 9.24 billion litres
- Average production per cow — 5471 litres
- Dairy: Australia’s third largest rural industry — $13 billion farm, manufacturing and export industry
- Total Australian exports — $3.21 billion
- % of milk production exported — 38%

See: www.australiandairyfarmers.com.au
www.dairyaustralia.com.au
About the Dairy Industry Sustainability Framework

The framework is owned and led by industry

The Australian Dairy Industry Sustainability Framework is owned and led by industry. It builds on significant existing industry activity and sets the direction for continual improvement, providing guidance to farmers, manufacturers and industry bodies on our shared priorities and commitments.

The Framework incorporates the extended dairy value chain from feed production to manufacturing, retail and packaging, with an immediate focus on the areas where dairy farmers and processors have direct control.

The Framework is expected to evolve over time to embrace change as projects are implemented, progress is demonstrated, data techniques are modified, or new issues arise. This is the second Progress report, with the first Progress report released in November 2013.

To guide development of the Framework, a set of principles was adopted to identify and prioritise issues, to determine the best approach to acting on them, to establish content and to engage stakeholders. The principles are shown in Figure 2.

<table>
<thead>
<tr>
<th>Principles</th>
<th>Informed by</th>
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<tbody>
<tr>
<td>Ethical behaviour</td>
<td>CDP</td>
</tr>
<tr>
<td>Transparency and accountability</td>
<td>Global Reporting Initiative™</td>
</tr>
<tr>
<td>Appreciation of stakeholder interests</td>
<td>Australia Way</td>
</tr>
<tr>
<td>Competitive neutrality ‘Not providing competitive advantage’</td>
<td>United Nations Global Compact</td>
</tr>
<tr>
<td>Collective action that delivers mutual benefit</td>
<td></td>
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<tr>
<td>Inclusivity</td>
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Figure 2: Framework principles

Governance: a system of checks and balances

The Australian Dairy Industry Council (ADIC), the dairy industry’s peak policy body, supported by Dairy Australia, has responsibility for setting and reporting progress against the Framework, targets and performance measures.

As the Framework is now being implemented, the governance structure was revisited. Figure 3 outlines the current governance structure for the next phase of the Framework’s development.

The Steering Committee is a more strategic group and Expert Working Groups will be set up to address key areas as required. Dairy Australia will continue to facilitate implementation of the Framework and also provide operational support.

The Consultative Forum comprises representatives from a number of groups with an interest in sustainability issues of importance to the dairy industry or with national and/or global sustainability experience. The Forum provides an opportunity for the dairy industry better understand what is happening globally with sustainability, how other groups are responding to sustainability issues and to critique the dairy industry’s approach. The Forum also provides suggestions on how the dairy industry can enhance its approach.
Australian Dairy Industry Council (ADIC) — the industry’s peak policy body continues to govern the implementation phase of the Framework. The Steering Committee will seek endorsement of its recommendations from the ADIC before proceeding.

- **Steering Committee (SC)** — provides oversight of implementation and consist of a smaller group of representatives from the peak farm and processing sectors. It meets approximately monthly to review progress and set the strategic direction and make recommendations to the ADIC.

- **Working Groups (WG)** — multi-stakeholder Working Groups will be established to provide guidance on the development of actions plans for each target and with “cross-cutting” Working Groups established as needed. The Working Groups will report to the Steering Committee. Some Working Groups will have a limited lifespan, others will operate over a longer period.

- **Dairy Sustainability Consultative Forum (CF)** — will continue to consist of stakeholder representatives to provide feedback to industry on implementation progress and the outcomes of the Working Group processes. Additional members may be invited where appropriate.

- **Secretariat** — Dairy Australia continues to provide secretariat support as well as operational support as required.
About the 2014 Progress Report

The 2014 report demonstrates our commitment

The Australian dairy industry has taken a cohesive whole-of-industry approach to sustainability. In 2012, the industry endorsed the Australian Dairy Industry Sustainability Framework, identifying priority areas, goals and objectives. Our commitment is to report annually on our progress against the Framework.

This Progress Report builds on the first report in 2013 by focusing on the industry’s sustainability activities during 2014. It demonstrates our commitment to the Framework, our principles of transparency and accountability, our progress against the goals and targets of the Framework and where we need to continue to do more.

Further, it provides evidence that the dairy industry is committed to delivering better outcomes for the community and the environment, and demonstrates the benefits of working together to help create shared value for our industry, our customers and the community.

Materiality underlines our strategic approach

Defining materiality is critical to supporting an appropriate strategic approach to sustainability. Material issues are defined as those that could make a major difference to industry’s performance.

Material information provides a basis for us to make sound judgements about the things that matter and take actions to influence our performance. However, there is no clear threshold of legal, financial or reputational liability below which any organisation can safely say ‘that is not our problem’. Emerging issues may be contested and difficult to measure, but they can be early signs of a growing risk or opportunity.

Through a materiality assessment, an organisation is able to identify the issues on which it should place greatest focus and which are more peripheral at a particular point in time. A focus on material issues will enable the development of sustainability strategies and initiatives that are more relevant, more credible and more user-friendly. This will, in turn, enable us to better inform our markets, stakeholders and society on our sustainability matters.

In 2014, a review of the material issues for the Australian dairy industry during the past 12 months was undertaken. This review consisted of a limited materiality assessment (or refresh) to test the currency of the issues used to inform the development of the original Framework. As a “living strategy”, it is important that the issues included reflect national industry sentiments, increasing stakeholder expectations and the maturing sustainability agenda of the industry globally. The review looked at changes in material issues for the Australian dairy industry during the past 12 months, based on a desktop media scan and review of DA’s media monitoring tools (e.g. Dairy Monitor). It is designed to refresh and enhance the material issues piece conducted by Net Balance in 2011, and to ensure that the Framework content areas and 2014 Interim report remain relevant against shifts in the landscape over the past 12 months.

Findings of the materiality and media review include:

• No major shift in the focus of media coverage
• Coverage retains a ‘market’ focus
• Animal welfare issues maintain materiality
• Environmental issues receive little attention, however programs and initiatives were recognised in more local media.

The Consultative Forum was also used to test the current validity of the issues the industry is addressing and if anything has changed that the industry needs to be aware of and that may influence the approach being taken. The Forum met twice during 2014.
About reporting our future progress

Whatever form progress reporting against the Framework adopts, it will be considered alongside other types of sustainability reporting in and of the dairy industry. Current reporting practice in the industry can be classified by scope and boundary.

Specifically:

1. **Individual dairy manufacturers** and their sustainability, environmental or annual reports. The issues that such companies report on include a range of social, environmental and economic issues and indicators which are also reflected in the Framework. In some cases the metrics used in the Framework and by processors, such as greenhouse gas emissions intensity and safety, are identical. However, the boundary of reporting is both narrowed by the coverage of only part of the Australian dairy industry reflected by that company, and broadened by the inclusion of non-dairy activities (e.g. Lion) and off shore manufacturing (e.g. Fonterra).

2. **Reporting by the Dairy Manufacturer’s Sustainability Council (DMSC)** includes approximately 85% of Australia’s milk production by volume. The scope of the report is currently limited to environmental performance, specifically energy, greenhouse gas emissions, water, waste and chemicals. The boundary is also a subset of national milk production. However, reporting by the DMSC provides a good vehicle for smaller manufacturers to participate in transparency and disclosure initiatives in which they may not otherwise invest at this stage of the industry’s development in sustainability.

3. **Progress reporting against the Framework** includes a broad range of environmental, social and economic issues and draws on both on-farm and manufacturer data, but chiefly at the program level. The boundary is the national dairy industry as a whole.

It is also important to note that while some of these reporting vehicles use principles and standards, such as the Global Reporting Initiative, they are not applied consistently or to the same level.

While there is a temptation to reconcile or rationalise the types of reporting, all three currently play a role in communicating the sector’s sustainability issues and performance. They are likely to have different audiences and also serve as drivers for the development of metrics, programs and approaches among manufacturers and farmers as the sector’s sustainability agenda evolves. While duplication and unnecessary reporting burdens should be avoided, such reporting practices in the sector are relatively immature when compared with, for example, the mining industry. At this stage, the most appropriate course is to make clear the differences between the reporting approaches, their respective boundaries, purposes and audiences.

This 2014 Report is an interim report and should be considered in conjunction with the 2012 Framework and the 2013 Progress Report. The next Report will be provided at the end of 2015.
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Pip Band  Meat & Livestock Australia
Meredith Banks  Lion
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Sasha Courville  National Australia Bank
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Peter Stahle  Australian Dairy Products Federation
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Sylvia Vagg  National Centre for Dairy Education Australia
Philip Wright  St James Ethics Centre
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Felicity Kelly  Devondale Murray Goulburn
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Brendan Lim  NetBalance (now Ernst & Young)
Survey Data

Animal Husbandry Survey (AHS)
Conducted every two years with Australian dairy farmers to foster and encourage responsible animal husbandry, and to monitor performance in key priority areas. While self-reported, survey results are validated through independent mechanisms (e.g. focus groups). Funded by Dairy Australia, the most recent survey was conducted in October 2014 and surveyed over 400 dairy farmers nationally.

Australian Milk Residue Analysis (AMRA) survey
An independent national government-coordinated monitoring program for potential agricultural and veterinary chemical residues, and environmental contaminants in the Australian milk supply. The Survey provides evidence that the Australian dairy industry’s food safety system and quality assurance programs effectively manage the food safety and trade related risks associated with the use of agvet chemicals. The Survey also meets the export requirements of the Department of Agriculture under the Export Control (Milk and Milk Products) Orders 2005 and provides assurance to importing countries that Australian dairy commodities comply with importing country requirements with respect to managing the risks from the use of agvet chemicals.

Dairy Monitor Survey – (DM 2014)
Annual tracking survey conducted amongst 1,600 metro and regional respondents to gauge community perceptions of dairy foods and the dairy industry and their dairy consumption behaviour. It covers a range of industry perceptions from animal welfare through to economic, environmental and social impacts of the industry from non-dairy members of the community. It is conducted in March/April each year. The survey is funded by Dairy Australia, but conducted by an independent organisation. Survey participants are asked to rate their responses from 1 (Strongly Disagree) to 5 (Strongly Agree), Ratings of 4 and 5 are deemed to be agree, ratings of 3 are deemed to be neutral and ratings of 1 and 2 are deemed to disagree.

Dairying for Tomorrow (DfT) survey
A survey currently conducted every six years amongst 800 dairy farmers nationally to determine key issues facing farmers in relation to accessing and managing natural resources. It covers aspects such as irrigation water access, fertiliser and effluent management, waterways and native vegetation. As such it provides indicators of on farm practice change over time. The survey is funded by Dairy Australia, but conducted by an independent organisation. Last conducted in 2012.

National Dairy Farmer Survey (NDFS)
A bi-annual survey conducted amongst 1,400 dairy farmers nationally (n=1,000 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.

The Power of People on Australian Dairy Farms Survey (POP) 2014
This independent telephone survey of 400 dairy farmers was conducted for the first time in 2014. It was complemented by an on-line forum.

Enhancing livelihoods  Improving wellbeing  Reducing environmental impact
Enhancing livelihoods  Improving wellbeing  Reducing environmental impact

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