Dairy Australia GOTAFE Webinar

Sustainability: What’s all the fuss about?

9 May 2018
Presenter: Robyn Leeson
Sustainability and its origins

Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs.

There are No Jobs on a Dead Planet
Drivers for the dairy sector - Customers

1. Global and domestic customers are setting increasingly ambitious targets and across a broader range of issues

- Source 100% of energy across operations from renewable sources by 2030.
- Source all electricity purchased from the grid from renewable sources by 2020.
- Eliminate coal from company energy mix by 2020.

- We will inspire our customers to consume all of our products in a healthy, sustainable way.
- Invest the equivalent of 1 per cent of a three year rolling average of total Group Earnings Before Interest and Tax (EBIT) in community partnerships and programs.

- By 2019: Have a functioning governance structure in place in all markets that looks after human rights risks and opportunities.
- By 2020, train all nestle employees on human rights
Drivers for the dairy sector - Customers

2. Global and domestic customers are subject to increasing guidance and regulation

**Principle 3:** Calls for companies to “**act with ethics and integrity**” and commentary re “**good corporate citizen.**” References:
- dealing honestly and fairly with suppliers and customers
- only dealing with business partners who demonstrate similar ethical and responsible business practices

**Commonwealth Inquiry into Modern Slavery 2017**

- Code of Conduct for Suppliers
- Responsible sourcing policy
- Demonstration of due diligence and audit regimes
- Grievance mechanisms & whistleblower protection

**Arla Foods Modern Slavery Statement**

Source: Global Estimates of Modern Slavery 2017 ILO & Walk Free Foundation
Drivers for the dairy sector - Customers

3. Global and domestic customers are subject to sustainability labelling and certification schemes
Drivers for the dairy sector - Customers

4. Dairy manufacturers are subject to multiple assessments from customers

20 page questionnaire and scorecard can be shared with multiple customers

Sedex has 67–203 questions for agriculture companies and has both customer and supplier interfaces.
Drivers for the dairy sector - Customers

Example: Sedex Members Ethical Trade Audit - SMETA

The 4 pillars of a SMETA
- Labour Standards
- Health & Safety
- Business Ethics
- The Environment

78 Pages, 3rd party Audit

<table>
<thead>
<tr>
<th>C: Is there any evidence of discrimination based on race, caste, national origin, religion, age, disability, gender, marital status, sexual orientation, union membership or political affiliation?</th>
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<tbody>
<tr>
<td>Yes</td>
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<thead>
<tr>
<th>A: Does the facility have a Business Ethics Policy and is the policy communicated and applied internally, externally or both, as appropriate?</th>
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<tbody>
<tr>
<td>Internal Policy</td>
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<td>Policy for third parties including suppliers</td>
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<td>Please give details:</td>
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<thead>
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<th>B: The site conducted a risk assessment on the environmental impact of the site, including implementation of controls to reduce identified risks</th>
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<td>Yes</td>
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<th>A: Legal age of employment</th>
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<th>B: Age of youngest worker found:</th>
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<tr>
<th>C: Children present on working but not working at time of audit</th>
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<tr>
<td>Yes</td>
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<tr>
<th>D: % of under 18's at this site (of total workers)</th>
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<tr>
<th>E: Workers under 18 subject to hazardous work assignments? (Go to clause 3 – Health and Safety)</th>
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<tr>
<td>Yes</td>
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</tbody>
</table>

79% of audits ever uploaded onto Sedex Advance are SMETAs
93,000 SMETAs have been uploaded onto Sedex Advance
280,000 estimated SMETAs conducted worldwide
Drivers for the dairy sector - Customers

5. Global and domestic customers are making some of the sustainability rules for suppliers

Implement responsible sourcing in our supply chain

Working alongside NGO partners, we map our supply chains, and conduct supplier audits and farm assessments to ensure the procurement of 12 priority ingredients complies with our Responsible Sourcing Guideline criteria.

Objectives

By 2015, complete 10,000 responsible sourcing audits, 70% of them with full compliance.

Our progress

Our objective of conducting 10,000 audits has been exceeded and, already, 61% of the non-compliances identified have been addressed. We also achieved our traceability and responsible sourcing targets, and have set new objectives for 2016.

Supplier audits since 2010

10,950 2015
8,700 2014
6,500 2013
Drivers for the dairy sector - Investors

1. Investors are interested in the opportunities in the food sector - but also the risks

- Population growth and rising income levels in Asia
- Changing consumer trends - health & convenience
- Regulatory change - sugar tax, packaging
- Competition for natural resources – arable land and water scarcity
- Increased consumer awareness of ethical issues - globalised supply chains and transparency
- Climate change – regulatory changes & impacts of climate change on assets, resources & suppliers.

Drivers for the dairy sector - Investors

2. Investors are asking specific questions

- Are suppliers in areas of water stress?
- How is increasing energy cost being mitigated?
- What’s the greenhouse gas intensity of products?
- Understanding of supply chain & sourcing policy

- Exposure to regulation and costs associated with recalls
- Opportunities or costs associated with changing consumer preferences such as lower fat, sugar and salt
- Safety & costs in lost productivity

- Board diversity and independence of Directors
Drivers for the dairy sector - Investors

3. Investors are asking questions – which have specific implications for dairy

- Animal welfare
- Anti-biotic stewardship
- Hormones
- Plant-based protein

FACTORY FARMING: KILLER STATS INVESTORS CAN’T IGNORE

14% of global GHG emissions, more than the transport sector¹

NO 1 reason for rapid spread of bird (H5N2) and swine (H1N1) flu

$3.3bn industry losses due to US bird flu outbreak in 2015²

85% of all soy used globally is used in animal feed, a major cause of deforestation³

21% rise in heat stress days set to hit cattle industries due to warming climate

NO 1 user of antibiotics in the US

80% of all antibiotics in the US now used in animal factory farms⁴

NO 1 consumer of water in drought-stricken California

$250m and rising hit on profits of California dairies due to drought in 2015⁵

FAIRR - A COLLER INITIATIVE

FARM ANIMAL INVESTMENT RISK & RETURN
Drivers for the dairy sector - Investors

- BlackRock – manages $6 trillion USD in assets
- CEO – Larry Fink’s annual letter to the S&P 500:

  directors should “have demonstrable fluency in how climate risk affects the business” and how a given company will address it.

To prosper over time, every company must not only deliver financial performance, but also show how it makes a positive contribution to society.
Drivers for the dairy sector - Investors
Global context and frameworks

Paris Agreement on Climate Change 2015

195 of the world’s governments commit to prevent dangerous climate change by limiting global warming to well below 2 degrees celsius.

Targets adopted by companies to reduce greenhouse gas (GHG) emissions are considered “science-based” if they are in line with the level of decarbonization required to keep global temperature increase below 2 degrees Celsius compared to pre-industrial temperatures.
Global context and frameworks
Global context and frameworks

THE DAIRY DECLARATION OF ROTTERDAM

The dairy community accepts sustainability challenge

We, representatives of the one billion person global dairy community, gathered in Rotterdam at the World Dairy Summit, are committed to the sustainable development of the dairy sector to generate widespread benefits for people and the planet.

We recognize:

- the UN 2030 Agenda for Sustainable Development as the overarching framework that guides our actions towards sustainable development from a social, environmental, economic and health perspective;
Global context and frameworks

Tetra Pak developed the Dairy Hub concept to help local dairy processors to access more locally produced, better quality milk. In Bangladesh average milk yield per cow and day has increased by 110% and average income for the small holder has increased 145%.
The Australian Dairy Industry Sustainability Framework:
Aligning dairy goals and targets with the Sustainable Development Goals
Our Dairy Promise:
To provide nutritious food for a healthier world

We are committed to:
• Creating a vibrant industry that rewards dairy workers and families, their related communities, business and investors
• Providing nutritious, safe, quality dairy food
• Striving for health, welfare and best care for all our animals throughout their lives
• Meeting the challenge of climate change and providing good stewardship of our natural resources

We measure and publicly report our progress against our commitments.
Australian Dairy Industry Sustainability Framework

Enhancing economic viability and livelihoods

1. Increase the future competitiveness and profitability of the Australian dairy industry
2. Increase the resilience and prosperity of dairy communities
3. Provide a safe work environment for all dairy workers
4. Attract, develop and retain a skilled and motivated dairy workforce

Improving wellbeing of people

5. All dairy products and ingredients sold are safe
6. Dairy contributes to improved health outcomes for Australian communities

Providing best care for our animals

7. Provide best care for all our animals
   - All of industry complying with legislated Animal Welfare Standards
   - All of industry adopting relevant recommended industry practices:
     - Reduced use of routine calving induction
     - Don’t dock tails
     - Disbud prior to 2 months of age
     - Have a lameness strategy
     - Have cool infrastructure
     - Bobby calves fed within 6 hours prior to transport

Reducing environmental impact

8. Improve nutrient, land and water management
9. Reduce the consumptive water intensity of dairy manufacturers by 20%
10. Reduce greenhouse gas emissions intensity by 30%
11. Reduce waste to landfill by 40%
Previous Progress Reports and ongoing review

- View Dairy Industry Sustainability Framework - December 2012
### Progress Reporting

#### Dairy welfare, we care

#### Animal husbandry survey 2016

**A summary of our 2016 progress**

<table>
<thead>
<tr>
<th>Goals</th>
<th>Target</th>
<th>Baseline</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2020 Target</th>
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</thead>
<tbody>
<tr>
<td>5</td>
<td>All dairy products and ingredients sold are safe</td>
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<tr>
<td>5.1</td>
<td>Chemical residues non-compliance</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>5.2</td>
<td>Product recalls</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>0</td>
<td>0</td>
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<tr>
<td>5.3</td>
<td>Consumer sentiment</td>
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<tr>
<td>6</td>
<td>Dairy contributes to improved health outcomes for Australian communities</td>
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<tr>
<td>6.1a</td>
<td>Healthy diet</td>
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<tr>
<td>6.1b</td>
<td>Maintain recognition as five food group foods in ADG</td>
<td>Recognised</td>
<td>Recognised</td>
<td>Recognised</td>
<td>Recognised</td>
<td>Ongoing recognition</td>
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<tr>
<td>6.2</td>
<td>Daily intake</td>
<td>Under review</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Under review</td>
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<tr>
<td>7</td>
<td>Provide best care for all animals</td>
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<tr>
<td>7.1</td>
<td>All industry complying with legislated Animal Welfare Standards</td>
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<td>100%</td>
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<tr>
<td>7.2</td>
<td>All of industry adopting relevant recommended industry practices</td>
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<td>100%</td>
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</table>

**Progress**

- Currently 65% of farms have a documented animal welfare protocol.
- Almost all dairy farmers (94%) have a means of monitoring herd nutrition.
- The number of calving inductions has almost halved since the 2014 survey.
- Tail docking for management purposes has fallen significantly since the 2014 survey, from 13% of farms to 9%.
- 95% of farmers have a lameness prevention strategy.
- Nine out of 10 dairy farms have a heat stress mitigation strategy.
- Care for down cows has improved considerably, with 64% being nursed in a dedicated area, and 65% checked every eight hours.
- Calves are typically provided with additional colostrum always (61%) or mostly (20%).
- Antibiotic treatment of sale calves has dropped from 41% to 27% over the last two years and when calves are treated 98% of farmers have systems in place to ensure withholding periods are met.
- Approximately 96% of calves that are transported are fed within six hours of the start of transport.
- The 3-Stop Calf Plan is now being fully implemented in significantly more farms than two years ago (up from 40% in 2014 to 50%).
### A summary of our 2016 progress

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<th>2016</th>
<th>2020 Target</th>
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</thead>
<tbody>
<tr>
<td>8</td>
<td>Improve nutrient, land and water management</td>
<td>73%</td>
<td>-</td>
<td>76%</td>
<td>-</td>
<td>90%</td>
</tr>
<tr>
<td>8.1</td>
<td>Exclusion of stock from waterways</td>
<td>30%</td>
<td>-</td>
<td>58%</td>
<td>-</td>
<td>80%</td>
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<tr>
<td>8.2</td>
<td>Nutrient management plans</td>
<td>47%</td>
<td>-</td>
<td>54%</td>
<td>-</td>
<td>80%</td>
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<tr>
<td>8.3</td>
<td>Irrigation automation</td>
<td></td>
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<td>8.4</td>
<td>Managing land for conservation and biodiversity</td>
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<td>8.5</td>
<td>Noxious weeds identified as major land issue</td>
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<td>8.6</td>
<td>Recycle water on farm</td>
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<td>9</td>
<td>Reduce the consumptive water intensity of dairy manufacturers by 20%</td>
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<tr>
<td>9.1</td>
<td>Consumptive water intensity of dairy manufacturers (litres per litre of milk processed)</td>
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<tr>
<td>10</td>
<td>Reduce greenhouse gas emissions intensity by 30%</td>
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<tr>
<td>10.1</td>
<td>Emissions from dairy manufacturers (tonnes of CO2 equivalent per ML milk processed)</td>
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<tr>
<td>10.2</td>
<td>Farm emissions abatement actions</td>
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<tr>
<td>11</td>
<td>Reduce waste to landfill by 40%</td>
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<tr>
<td>11.1a</td>
<td>Waste to landfill intensity of dairy manufacturers (tonnes of waste per ML milk processed)</td>
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<tr>
<td>11.1b</td>
<td>Manufacturers: signatories to Australian Packaging Covenant (APC)</td>
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<tr>
<td>11.2</td>
<td>Farm level waste reduction</td>
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**Australian Dairy Carbon Calculator**

The Australian dairy industry is committed to a 30% reduction in greenhouse gas (GHG) emissions intensity across the dairy supply chain based on 2010/11 levels. To track industry progress, Dairy Australia has developed a GHG accounting tool linked to DairyBase called the Australian Dairy Carbon Calculator. This tool enables farmers, advisors and industry to estimate emissions on farm and identify areas where there are opportunities for improvement.

Farm data from DairyBase is used to pre-populate the carbon calculator, saving time entering data. The carbon calculator provides a breakdown of emissions sources and potential abatement strategies.

Measuring actual emissions on farm is expensive, and the Australian Dairy Carbon Calculator is an internationally recognised tool that can be used to estimate on farm emissions. It can also be used to estimate the impact of changes in management practices on emissions.
Progress Reporting

Environmental Sustainability Report

- 2007-08 Australian Dairy Manufacturing Industry Sustainability Report
- 2010-11 Australian Dairy Manufacturing Environmental Sustainability Report
- 2014/15 Dairy Manufacturing Environmental Sustainability Scorecard
- 2015/16 Dairy Manufacturing Environmental Sustainability Scorecard
Progress Reporting

Benchmarking and capacity building:

- Energy
- Greenhouse gas emissions
- Water
- Waste
- Wastewater
- Waste diversion
- COD losses
Research of issue and developing data collection methods

Initial data set - identification of gaps & improvement work

Baseline and a forward target agreed

Initial disclosure to DMSC

Year on year public reporting

Water consumption

External assurance

Public reporting

Reporting to DMSC scorecard or benchmarking

Data integrity

Food loss & waste

No baseline data, no consistent collection systems

Research of issue and developing data collection methods

Internal reporting only

Public reporting

Year on year public reporting

Initial disclosure to DMSC

Baseline and a forward target agreed

Initial data set - identification of gaps & improvement work

Water consumption

External assurance
Recognition for the Framework

Winner of the national Banksia Foundation Food for Sustainable Thought Award 2015

Unilever set a goal of sourcing 100% sustainable agricultural raw materials by 2020 and developed their own Sustainable Agricultural Code (SAC).

Following extensive benchmarking, Unilever declared all Australian milk production meets its SAC and can be sourced as 100% sustainably produced.

Australia was the first country to have the entire dairy sector declared compliant.

2nd place in the Corporate Register’s 2018 global reporting awards for innovation in reporting
### Next steps

<table>
<thead>
<tr>
<th>Enhancing Livelihoods</th>
<th>Improving Wellbeing</th>
<th>Reducing Environmental Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current (2013–2016)</strong></td>
<td><strong>Possible goals for further consideration in 2017</strong></td>
<td></td>
</tr>
<tr>
<td>1. Increase the future competitiveness and profitability of the Australian dairy industry</td>
<td>1. Increase the number of profitable dairy farmers and Australia’s share of global trade</td>
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<tr>
<td>2. Increase the resilience and prosperity of dairy communities</td>
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<tr>
<td>3. Provide a safe work environment for all dairy workers</td>
<td>3. Provide a safe and rewarding work environment which enables dairy to attract and retain the people it needs</td>
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<tr>
<td>4. Attract, develop and retain a skilled and motivated dairy workforce</td>
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<tr>
<td><strong>Enhancing Economic Viability and Livelihoods</strong></td>
<td><strong>Improving Wellbeing of People</strong></td>
<td><strong>Reducing Environmental Impact</strong></td>
</tr>
<tr>
<td>5. All dairy products and ingredients sold are safe</td>
<td>4. All dairy products and ingredients sold are safe</td>
<td>7. Improve land management (including no net deforestation)</td>
</tr>
<tr>
<td>6. Dairy contributes to improved health outcomes for Australian communities</td>
<td>5. Dairy contributes to improved health outcomes for all Australians</td>
<td>8. Water use efficiency</td>
</tr>
<tr>
<td>7. Provide best care for all our animals</td>
<td>6. Provide best care for all our animals for whole of life</td>
<td>9. Reduce greenhouse gas emissions intensity</td>
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<tr>
<td><strong>Reducing Environmental Impact</strong></td>
<td><strong>Enhancing Economic Viability and Livelihoods</strong></td>
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<tr>
<td>8. Improve nutrient, land and water management</td>
<td>8. Increase the number of profitable dairy farmers and Australia’s share of global trade</td>
<td></td>
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<tr>
<td>10. Reduce greenhouse gas emissions intensity by 30%</td>
<td>3. Provide a safe and rewarding work environment which enables dairy to attract and retain the people it needs</td>
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<tr>
<td>11. Reduce waste to landfill by 40%</td>
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</tbody>
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*Note: The table outlines strategies and goals for different sectors of the dairy industry.*
Next steps – priorities and challenges

**Best care for animals**

**Profitability**

**Sustainable Land Management**

**Nutrient, land & water management**

**Climate change & greenhouse gas emissions**
Next steps – emerging issues
Sign up for monthly newsletter
Questions?