

# Sustainability Report 2018



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## About this report

This report, prepared by Nufarm Limited, provides information relating to our sustainability practices and performance for the financial year ending 31 July 2018 (referred to in this report as 2018). This reporting period aligns with our financial reporting. Details of our annual and half yearly financial performance can be found in our financial reports, which are available on our website: [nufarm.com](http://nufarm.com), as is our 2017 sustainability report.

Our annual sustainability report reports on a range of parameters and activities including health, safety, environment, our people practices and community relations and covers Nufarm's significant locations and operations.

This report covers all Nufarm's businesses including wholly owned subsidiaries. The health and safety data includes permanent and non-permanent employees across Nufarm manufacturing sites, offices and regional service centres.

Environmental data is provided by our manufacturing plants and summarised for this report. At present, it does not include environmental data from Nuseed, our sales offices or distribution centres, however these represent a small percentage of our environmental footprint.

Nufarm finalised its manufacturing rationalisation during 2016. Historical data in this report includes former Nufarm operations. 2017 data reflects Nufarm's new manufacturing footprint. This year Nufarm sold a small manufacturing site located in Yenda, Australia. This was a minor operation and as a result was not included in Nufarm's environmental footprint historically. We consolidated our research facilities in 2017; final environmental data related to closure of our facility in Paris, France, is included in this report.

Last year, as a part of aligning our sustainability reporting with the GRI standard, we completed a preliminary materiality assessment. This report meets many of the core standards and some of the material, specific disclosures as per the GRI content index.

This report has been reviewed and approved by Nufarm's managing director and chief executive officer Greg Hunt.

For more information please contact Nufarm's head office on +61 (0) 3 9282 1000.









Nufarm at a glance

We develop and manufacture quality herbicides, fungicides, insecticides and seed treatment products

Revenue was  
\$3.3b

10 of our 12 Manufacturing sites LTI free for more than a year

Aquaterra™ omega-3 canola registered in  
3 countries

12 crop protection manufacturing and 15 seed production operations globally

Environment  
226 ML reduction in water withdrawal





Lost time injury  
frequency rate  
reduced by

↓ 78%

Target 0



Corporate Social  
Responsibility  
assessment of  
key suppliers

37%



24%

Female  
out of 3,217  
employees



## About us

Nufarm works with growers around the world to fight disease, weeds and pests and to increase crop yields. Nufarm is publicly owned and listed on the Australian Securities Exchange (ASX) (symbol NUF). Our companies manufacture, distribute and market crop protection chemicals. Our wholly owned subsidiary, Nuseed, grows and distributes seeds and seed treatment products.

Nufarm holds more than 3,300 crop protection product registrations in countries around the world. Significant active ingredients in our products include 2,4-D, MCPA, Glyphosate, Azoxystrobin, Tebuconazole and Imidacloprid and we sell these in leading brands such as: Crucial, Agroxone, Weedmaster, Stablan, Nuprid, Kaiso, Amicide, Credit, Tazer, Cuproxat and Mystic. Nuseed focuses on three specialty crops: canola, sorghum and sunflowers.

We market our products in 100 countries, with our primary markets being in Australia and New Zealand, Europe, North America, Latin America and Asia. Our products are sold into the agricultural distribution channel and directly to large farms in some regions.

Our global head office is located at Laverton North in Victoria, Australia, which is also the site of our largest manufacturing plant. Including those in Australia, Nufarm has manufacturing and seed production facilities in 27 locations across the world.

### Strategic alliances and acquisitions

The company has strategic alliances with a number of agricultural and chemical companies, including Sumitomo Chemical Company Limited, which holds 15.88 per cent of Nufarm Ltd shares. These alliances involve joint marketing rights to certain products, and research and development collaborations. This year Nufarm entered into a strategic alliance with Farmers Edge, a global leader in precision agriculture.

This year Nufarm made two significant portfolio acquisitions in Europe. The first was the acquisition of a portfolio of over 50 formulations and 260 product registrations from Adama and Syngenta. The second acquisition was a herbicide product portfolio from FMC, comprising eight formulations for use in cereal crops. Both acquisitions were completed in 2018 and have been integrated into our

European business. We expect to see a contribution from these additions to our portfolio and our environmental footprint in 2019.

### A strategy to meet growing global demand

The world needs to increase its food production to meet the needs of a growing population. Nufarm's strategy comprises of five key crop segments: corn; soybeans; cereals; trees, nuts, vines and vegetables; and pasture, turf and ornamentals, in four regions: Australia and New Zealand; Europe; Latin America, and North America. Nufarm focuses its resources on developing products in these segments to improve crop efficiency and yield for food production in our core regions.

Nufarm develops sustainable solutions to help address the growing global demand for food and feed. Global wild fish stocks are rapidly coming under pressure and in support of the move to sustainable aquaculture we developed Aquaterra™, a high DHA canola that is the first land-based source of omega 3. Just one hectare of this canola will deliver as much long-chain omega 3 as 10,000 kg of wild fish. In 2018 Nuseed received the world's first approval of long-chain omega-3 canola from Australian regulators, the Office of the Gene Technology Regulator (OGTR) and Food Standards Australia New Zealand (FSANZ). Subsequent to the end of the 2018 financial year, it has also been approved by the United States Department of Agriculture (USDA) in the United States. The project is on track for commercialisation in 2019.

In addition to developing omega-3 canola, our wholly owned subsidiary Nuseed has a strategy to develop top performing seeds, including drought and salt-resistant varieties and seeds with health-giving output traits such as, Monola®, a canola that has high oleic, low linoleic properties.

### Nufarm values

Wherever we operate around the world we aim to help farmers get more from their land.

Our core values are:

**Responsibility:** We are accountable for our decisions and our actions. We recognise that trust is at the foundation of relationships and that acting ethically, safely and responsibly creates that trust.

**Agility:** We are resourceful and adaptable in meeting the needs of our customers and our organisation.

**Respect:** We respect others – colleagues, customers and stakeholders – and our environment. We care for all of our resources.

**Empowerment:** We are an innovative, entrepreneurial organisation where individuals and teams can do what is best for the customer, the organisation and our stakeholders.





omega-3 harvest

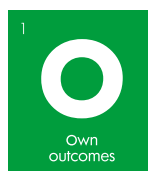
Nufarm has a code of conduct, approved by Nufarm's board of directors, to guide employees' decision making and behaviour. New employees are inducted into our code of conduct when they join the organisation. In support of our values and code of conduct, in 2018 we introduced nine new employee behaviours to guide our team in all their activities. This year we launched an education program to embed the new behaviours across the business.

It is Nufarm's objective to carry out its business with no adverse effect on its people, the community and the environment and to strive for sustainable development and continuous improvement. Our health, safety and environment (HSE) policy is available in the sustainability section of our corporate website.

### Our supply chain

Nufarm has 12 crop protection manufacturing facilities located in seven countries with the most significant locations being in Australia, Austria, UK and North America. Nuseed has seed production operations in nine countries with the most significant being in Australia and North America.

### Nine Elements, One Nufarm



Our distribution of manufacturing facilities across Europe, North America, Latin America, Asia and Australia enables us to tailor our products to suit local conditions and respond rapidly to customer needs. In 2019 we will commence the construction of a new formulation facility in Greenville Mississippi in North America which will enable a consistent, high-quality and efficient supply of our product to the southeastern U.S. region.

Supplier location is just one of many considerations that we evaluate when sourcing the raw materials and packaging needed by our manufacturing plants. We have significant suppliers located throughout Europe, Asia, North America, Brazil and Australia and more than 3,000 suppliers across all regions to support our global supply chain network. Our global procurement organisation operates out of three key hub locations in Australia, China and Switzerland.

We primarily sell our crop protection and seed products direct to channel partners,

who are distributors that sell directly to growers and offer other agricultural inputs and advice.

Next year we plan to refresh our sustainability strategy, continuing to drive improvement in this area and address the dynamic nature of sustainability challenges.

Our impact on and contribution to the economy is as important as our financial performance. Our contribution includes both direct and indirect employment, support of farming practices to improve efficiency and productivity, the support of local suppliers, capital investment programs, payment of taxes and contribution to local communities.

### Financial and economic performance

Our financial results are released annually and reflect the period 1 August to 31 July. We also release our half yearly results for the period 1 August to 31 January. These

reports are on our website and list all entities included in Nufarm's consolidated results. A number of entities are included in these statements that are not covered by the environmental data in these reports; however, it is estimated that this sustainability report addresses 90 per cent of Nufarm's environmental footprint. Table 1 provides a summary of our financial results while Table 2 shows out total capitalised breakdown.

Total group assets were \$5.05 billion.

### Sustainability at Nufarm

In a changing world, sustainability is a priority for all areas of our business. We are committed to acting responsibly while providing value for our stakeholders. Our sustainability strategy has six pillars: safety; environment; our people; ethical sourcing; product stewardship; and our community responsibilities.

We are now three years into the deployment of our four-year sustainability strategy. Execution of the strategy is

**Table 1 – Annual financial results**

Year ended 31 July

(\$'000)	Revenue			Operating Costs <sup>1</sup>			Underlying EBIT		
	2018	2017	Change %	2018	2017	Change %	2018	2017	Change %
<b>Crop protection</b>									
Australia and New Zealand	590,151	654,194	-9.8	580,915	602,565	-3.6	9,236	51,629	-82.1
Asia	170,680	165,633	3.0	148,500	141,204	5.2	22,180	24,429	-9.2
Europe	642,571	539,803	19.0	556,121	453,976	22.5	86,450	85,827	0.7
North America	833,705	761,050	9.5	756,254	690,785	9.5	77,451	70,265	10.2
Latin America	885,232	821,835	7.7	794,459	732,420	8.5	90,773	89,415	1.5
<b>Total crop protection</b>	<b>3,122,339</b>	<b>2,942,515</b>	<b>6.1</b>	<b>2,836,249</b>	<b>2,620,950</b>	<b>8.2</b>	<b>286,090</b>	<b>321,565</b>	<b>-11.0</b>
Seed Technologies – global	185,508	168,600	10.0	151,197	132,201	14.4	34,311	36,399	-5.7
Corporate	-	-	n/a	55,298	55,679	-0.7	(55,298)	(55,679)	-0.7
<b>Nufarm Group</b>	<b>3,307,847</b>	<b>3,111,115</b>	<b>6.3</b>	<b>3,042,744</b>	<b>2,808,830</b>	<b>8.3</b>	<b>265,103</b>	<b>302,285</b>	<b>-12.3</b>

1. Operating costs equals revenue less underlying earnings before interest and tax (EBIT).

**Table 2 – Capitalised breakdown**

	2018 (\$'000,000)
Net Debt	1,374
Equity	1,972
<b>Total capitalised breakdown</b>	<b>3,346</b>



largely on track at this stage, and as we move into the fourth and final year of our strategy we will continue to focus on the ethical sourcing, community and environment pillars. Next year we plan to refresh our sustainability strategy,

continuing to drive improvement in this area and address the dynamic nature of sustainability challenges.

The following table outlines what we have achieved in 2018 and what our objectives are for the next 12 months.

**Table 3 – Summary of achievements and objectives**

**Achievements for 2018**

<b>Safety</b>	Implemented a process safety management (PSM) program across our manufacturing facilities.
	Achieved our lowest ever lost time injury frequency rate (LTIFR) result of 0.37, which is down from 1.76 last year.
<b>Ethical sourcing</b>	Continued supplier corporate social responsibility (CSR) assessments with EcoVadis; increasing from 23% to 37% of our key suppliers.
	Implemented our supply chain risk assessment policy.
<b>Our people</b>	Successful global implementation of a new performance management system; Grow Plan Succeed (GPS).
	Hosted an inclusion and diversity conference in Australia and launched a global inclusion and diversity steering committee.
	Completed modern slavery risk assessments of all our operations and found them to be low risk.
<b>Environment</b>	Completed environmental gap analyses across all our manufacturing sites and implemented gap closure plans.
	Commenced ISO14001 implementation at our manufacturing site in Linz, Austria.
<b>Product stewardship</b>	Initiated projects to minimise the impact of our packaging by reducing waste and increasing recycling content.
<b>Community</b>	We had intended to progress development of a global community engagement strategy and framework in 2018, however this has been deferred to 2019.

**Objectives for 2019**

Embed the PSM initiatives.
Commence a safety and sustainability leadership development program for executive and senior managers.
Continue CSR assessments of our existing supplier base, increasing coverage.
Implement corrective action plans for suppliers with low CSR scores.
Begin execution of the global three year Inclusion and Diversity plan.
Extend our Inclusion and Diversity governance framework by establishing Inclusion and diversity councils in all regions. These councils will lead and deploy the regional initiatives against the regional action plans that are aligned to the global themes.
Commence modern slavery awareness training for our employees.
Progress the implementation of our environmental gap closure plans.
Obtain ISO14001 certification for our site in Linz.
Commence implementation of an ISO14001 environmental management system at our site in Port Klang, Malaysia and an ISO14001 equivalent environmental management system at our Pipe Road site, Australia.
Deliver projects initiated in 2018 and continue with packaging sustainability projects.
Commence the development of a community strategy and framework. Conduct an investor environmental, social and governance (ESG) risk and priority assessment.

**In progress**

<ul style="list-style-type: none"> <li>Establishing long term environmental footprint reduction targets.</li> <li>Implementing CSR assessment as a part of our new supplier evaluation process.</li> <li>Implementing a global sustainability awareness and training program for non-manufacturing employees.</li> <li>Reducing the environmental footprint of our products by sourcing more sustainable solvents and developing formulations with materials that have a lower end use impact.</li> <li>Optimising our product portfolio by rationalising pack sizes, which reduces resource consumption and waste.</li> </ul>
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## Managing director's message



**Greg Hunt**

Managing director and  
chief executive officer

Nufarm aims to be a responsible business, which means being transparent about our sustainability performance. In this report we highlight the work we are doing to make Nufarm a more sustainable company, by focusing on improving our safety performance, managing our impact on the environment and striving to build an inclusive and diverse workplace for our employees.

Safety remains our biggest priority and we are working to ensure all of our employees go home safely every day. We do this by building a culture where we take responsibility for our personal safety and the safety of our co-workers and where management leads by example.

Our most significant hazards relate to the potential loss of containment at our manufacturing sites. Our global process safety management (PSM) program introduced in 2017 is designed to manage these hazards. This year has seen our sites make great progress in implementing their PSM plans.

This year brought us closer to our goal of zero harm with our lost time injury frequency rates and serious injury frequency rates at the lowest levels ever reported at Nufarm. Of our 12 manufacturing sites, 10 have been injury free for more than a year. I am extremely proud of this year's safety performance.

Last year we put new environmental procedures in place to help us improve our environmental performance and this year we have built on that with gap analysis and closure plans developed for all our manufacturing sites. We have also implemented best practice

environmental management systems with three of our sites now ISO14001 certified and a fourth site expected to achieve certification next year.

Ensuring our raw materials are sourced ethically is important to our business. Last year we commenced a corporate social responsibility assessment program for our suppliers, which we have expanded in 2018.

This year we have also taken steps to make Nufarm a more diverse and inclusive place to work with the implementation of policies, programs and initiatives to ensure inclusion and diversity are embedded in the way we conduct our business. We have developed an inclusion and diversity strategy that will be implemented in 2019 and overseen by an executive-level inclusion and diversity steering committee.

At Nufarm we want to help farmers get more from their land. We are committed to providing our customers with great products and technical support and are focused on making our products more sustainable by reducing the waste associated with our packaging and sourcing lower impact ingredients. Looking ahead to 2019 we will refresh

our sustainability strategy and continue to work to improve our sustainability performance by progressing the objectives set out in this report.



**Greg Hunt**  
Managing director  
and chief executive officer.



# Materiality

Nufarm aims to be open and transparent with our stakeholders about our positive and negative environmental, social and economic impacts. In keeping with this objective, we are working to align our annual sustainability reporting with the core requirements of the Global Reporting Index (GRI) sustainability reporting standard. While not yet fully GRI

compliant we are moving towards this. Last year we completed a preliminary materiality assessment to identify the sustainability topics relevant to Nufarm and our industry. A survey was used to complete the study, which involved senior business decision makers, such as the board of directors and executive leadership team. We did not engage

directly with external stakeholders for this study given resource limitations but will conduct a full materiality assessment in the future.

The findings of this study can be found in figure 1 and they have been used to guide the environmental, social and economic disclosures made in this year's report.

Figure 1: Material topics







## Stakeholder engagement

Nufarm operates its businesses with the involvement, support and interaction of a range of stakeholders. These include our employees, customers, suppliers, the local communities we operate in, government regulators, financiers and investors. We engage with the stakeholders who influence or are influenced by our business, consulting with them to understand their concerns and expectations and using the feedback to help shape our business strategy and plans. Table 4 provides a list of our stakeholder groups and the frequency with which we engage with them.

We have a variety of approaches to engaging with our stakeholders. Our agronomists in the field are in direct contact with the farming community, providing expertise to support the growers while receiving feedback on the issues that matter to farmers. We have a formal customer feedback mechanism in Australia called The Voice of the Customer. In addition to our day-to-day interactions, we engage our distribution channel partners in these formal surveys three times per year to understand insights into their needs enabling us to enhance the service we provide. This year, in response to feedback, we made improvements including changes to our packaging that make it safer and more ergonomic for customers to handle and use.

We have formal mechanisms to engage with our employees, and at some of our manufacturing sites we work with the local community through community development programs. Through our participation in industry associations such as CropLife and various industry associations, we stay connected with industry-wide issues and contribute to their resolution. We often rely on these organisations to represent Nufarm's interests to relevant government authorities when a collective response is required. Our interactions with government regulators keep us engaged in the regulatory process.

We have open lines of communication with our investor community, enabling us to gather feedback on our activities and

monitor issues important to them. Some investors are beginning to engage with Nufarm on our sustainability performance.

To increase accessibility of information about our activities, we place a high priority on responding to feedback, questions or concerns and provide information on our corporate website.

Key topics raised by our stakeholders include:

- Adverse weather conditions: Nufarm maintains a geographically diverse footprint, allowing unfavourable conditions in one region to be offset by favourable conditions in other parts of the business.
- The risk to our product portfolio through regulatory restrictions on active ingredients, such as glyphosate. Glyphosate continues to be registered for use in all countries and Nufarm rapidly responded to Europe's regulatory composition changes for the product.
- Our omega-3 canola development program and perceived regulatory risk for our high Docosahexaenoic Acid (DHA) canola, Aquaterra™. Aquaterra™ has now been approved by the Office of the Gene Technology Regulator (OGTR), Food Standards Australia New Zealand (FSANZ) and the United States Food and Drug Administration (FDA).
- Nufarm's acquisition and integration of the FMC and Century portfolios into our business. Nufarm has kept the market informed of our strategic plans through investor and media communications. We have significant experience in successfully integrating large acquisitions into our business.







Table 4 – Stakeholder groups and engagement approach

Stakeholder group	Engagement approach	Frequency
<b>Investors</b>	<ul style="list-style-type: none"> <li>Financial reporting, one-on-one meetings and post result roadshows</li> <li>Investor conferences</li> <li>ASX announcements</li> <li>Annual general meeting</li> <li>Site visits and meetings</li> <li>Sustainability reporting</li> </ul>	<ul style="list-style-type: none"> <li>Twice a year</li> <li>Four times per year</li> <li>As required</li> <li>Annual</li> <li>At investor's request</li> <li>Annual</li> </ul>
<b>Financiers</b>	<ul style="list-style-type: none"> <li>One-on-one meetings</li> <li>Financial reporting</li> <li>Covenant requirements reporting</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> <li>Annual</li> <li>Quarterly</li> </ul>
<b>Employees</b>	<ul style="list-style-type: none"> <li>Employee opinion surveys</li> <li>Grow Plan Succeed</li> <li>Town hall meetings</li> <li>Newsletters</li> <li>Emails</li> </ul>	<ul style="list-style-type: none"> <li>Every two years</li> <li>Ongoing</li> <li>Regularly</li> <li>Regularly</li> <li>Ongoing</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>Customer surveys</li> <li>Customer relationship management</li> <li>Company website news</li> <li>Site tours</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> <li>Regularly</li> <li>Ongoing</li> <li>On request</li> </ul>
<b>Suppliers</b>	<ul style="list-style-type: none"> <li>Supplier audits</li> <li>Supplier relationship management</li> <li>Corporate social responsibility (CSR) assessments</li> </ul>	<ul style="list-style-type: none"> <li>Initial and then as needed</li> <li>Ongoing</li> <li>Annual</li> </ul>
<b>Non-government organisations</b>	<ul style="list-style-type: none"> <li>Industry group forums</li> <li>Meetings</li> </ul>	<ul style="list-style-type: none"> <li>Regularly</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>Media releases</li> <li>Interviews</li> <li>Site visits</li> </ul>	<ul style="list-style-type: none"> <li>Regularly</li> </ul>
<b>Local communities</b>	<ul style="list-style-type: none"> <li>Employee volunteers</li> <li>Community relations activities</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> <li>Ongoing</li> </ul>
<b>Regulators</b>	<ul style="list-style-type: none"> <li>Site visits and inspections</li> <li>Licence requirements reporting</li> <li>Meetings</li> </ul>	<ul style="list-style-type: none"> <li>Several times per year</li> <li>Annual</li> <li>As needed</li> </ul>

# Safety

Our priority is to ensure that all our people go home safely every day. We continue to work towards our goal of zero-harm by embedding the processes that identify risks, implement risk reduction measures and foster a culture where people's health and safety is front of mind in all we do. This section details our health and safety actions and improvements in 2018.

## Safety performance

This year we have invested significantly in our safety programs and safety related plant improvements. This commitment has helped to us to deliver our best safety performance yet, with our lost time injury frequency rate (LTIFR) and severity rate reaching the lowest levels ever recorded at Nufarm.

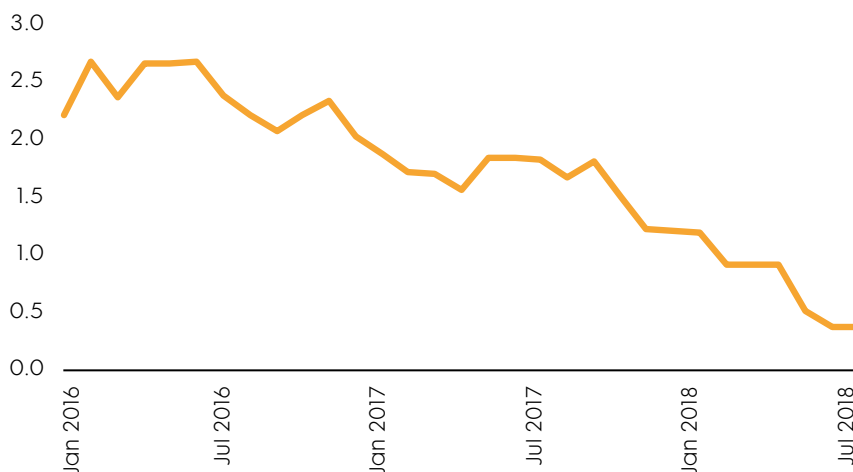
Since 2016 we have seen a sustained downward trend in the number of serious injuries (medical treatment and lost time injuries) and this year we delivered improvements across all global regions. This outcome reflects the increased effort from our manufacturing sites and other parts of the business in focusing on risk management, staff engagement and a strong safety culture; our leaders have made safety their top priority.

Our sustainability strategy has guided us on our improvement journey with initiatives including Nufarm's health, safety and environment (HSE) standard and procedures, process safety management (PSM) program, systematic risk identification and management methodologies, auditing of compliance, Nufarm's life saving rules, driver safety education programmes and safety training of leaders and staff all contributing to this improvement in safety performance across our business.

This year the nature of the injuries incurred by employees has been predominantly manual handling related injuries with some contact injuries, chemical irritations and a burn injury.

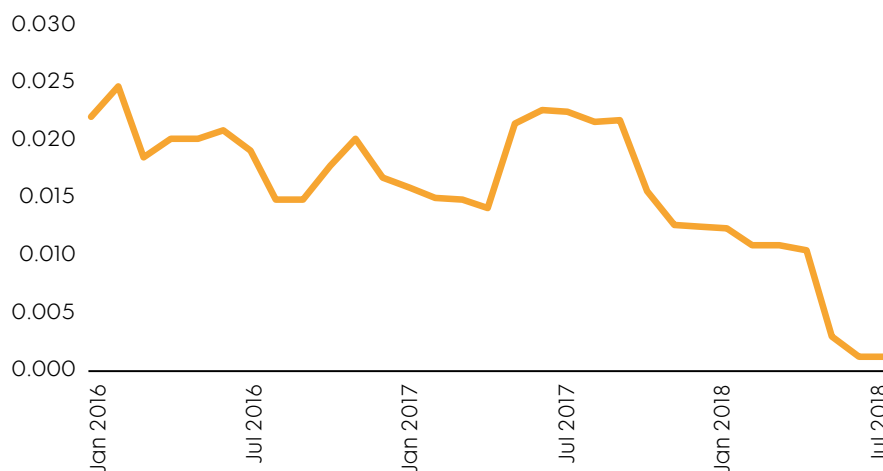
We have seen a reduction in the severity of incidents and our sites are experiencing record periods of time between occurrence of serious injuries. The severity of injuries is measured by the length of time a person is absent from work following the injury and is shown on the severity index graph in Figure 3.

Figure 2: 12 month rolling average lost time injury frequency rate<sup>1</sup>

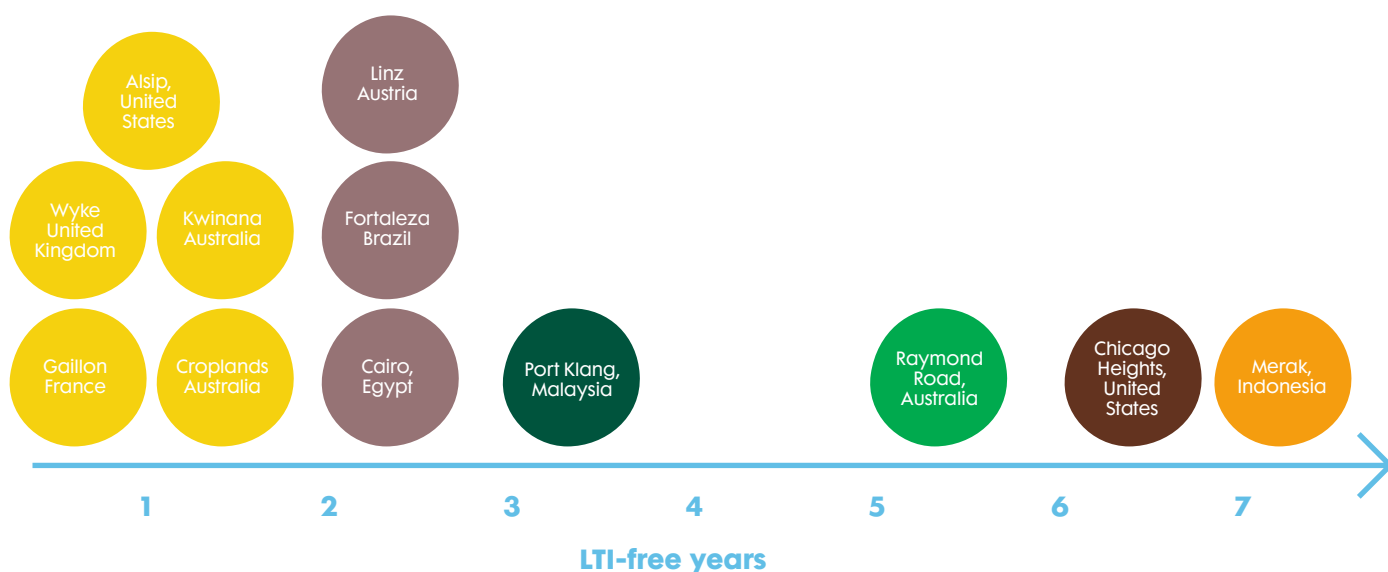


1. The lost time injury frequency rate (LTIFR) is calculated as the number of lost time injuries per million hours worked.

Figure 3: 12 month rolling average severity rate<sup>1</sup>



1. The severity rate is calculated as the number of lost days of work per thousand hours worked.



Note: Merak was incorrectly reported as seven years without an LTI last year, where the seven year anniversary occurred this year.

**Table 5 – Safety performance<sup>1</sup>**

	2016		2017		2018	
	Number	Rate	Number	Rate	Number	Rate
Work related fatalities	2	0.28	0	0	0	0
High-consequence work related injuries <sup>2</sup>	0	0	0	0	0	0
Lost time injuries	15	2.28	13	1.76	5	0.37
Recordable work related injuries <sup>3</sup>	28	3.99	33	4.48	21	2.62
Nufarm of hours worked	7,022,109		7,371,420		8,016,914	
<b>Lost time frequency rate<sup>4</sup></b>						
Australia and New Zealand	4.09		4.47		1.25	
Asia	1.97		0.00		0.63	
Europe	2.75		2.29		0.00	
Latin America	1.40		0.59		0.00	
North America	0.00		1.23		0.00	
<b>Group</b>	<b>2.28</b>		<b>1.76</b>		<b>0.37</b>	
<b>Severity rate<sup>5</sup></b>						
Australia and New Zealand	0.033		0.026		0.003	
Asia	0.022		0.000		0.003	
Europe	0.023		0.064		0.000	
Latin America	0.006		0.005 <sup>6</sup>		0.000	
North America	0.000		0.004		0.000	
<b>Group</b>	<b>0.019</b>		<b>0.022</b>		<b>0.001</b>	

- All injury counts include injuries of employees and workers whose work/workplace is controlled by Nufarm. Injury rates include the hours worked by Nufarm employees and the majority of the hours worked by workers whose work/workplace is controlled by Nufarm. Injury rates are based on 1,000,000 hours worked.
- A 'high consequence work related injury' is one where the worker cannot, does not, or is not expected to recover fully to pre-injury health within six months. This excludes fatalities.
- A 'recordable work related injury' is one that may result from death, days away from work, restricted work, or transfer to another job, medical treatment beyond first aid, or other significant injury as diagnosed by a physician or health care professional. However, some injuries that have resulted in restructured work or a transfer to another job may not be captured here.
- The lost time injury frequency rate (LTIFR) is the number of lost time injuries per million hours worked.
- Severity rate is the sum of lost days of work per thousand hours worked.
- There was a typographical error in last year's report with Latin America's severity rate erroneously reported as 0.05 in 2017. This should have read 0.005.



This year we have provided some preliminary data on safety performance by gender which shows that neither group is more exposed to injuries than the other, refer to Table 6.

**Table 6 – Safety performance by gender**

	2016	2017	2018
<b>Lost time frequency rate</b>			
Male	2.59	1.76	0.32
Female	1.24	1.77	0.54
<b>Group</b>	<b>2.28</b>	<b>1.76</b>	<b>0.37</b>
<b>Severity rate</b>			
Male	0.023	0.022	0.001
Female	0.005	0.022	0.001
<b>Group</b>	<b>0.019</b>	<b>0.022</b>	<b>0.001</b>

## A risk management approach to safety

The most significant hazards managed by Nufarm relate to the processing of various chemicals at our manufacturing sites. Our Pipe Road and Raymond Road facilities in Australia are classified as major hazard facilities (MHF) while our sites in Linz, Austria, Gaillon, France and Wyke, UK, all fall under Europe's Seveso III directive. A disciplined, structured approach to risk management is at the core of our safety systems.

Risk controls to enable safe processing of chemicals are well established across the global chemicals manufacturing industry. Depending on the type of hazard under

consideration, Nufarm uses industry best practice quantitative and qualitative risk assessment methodologies to understand the level of risk, the appropriate hierarchy of control and the layers of control to be applied.

These range from the relatively simple 5-Whys type approaches used for non-routine and routine tasks through to sophisticated hazard and operability studies (HAZOP) and layers of protection analysis (LOPA). For these types of assessments, we use specialist facilitators and a cross-sectional team to analyse complex, low frequency, high consequence scenarios that have potential to occur at major hazard facilities.

Nufarm has described these methodologies and their application in our corporate HSE standard and in its cascading detailed corporate procedures. Nufarm engineers, safety and other professionals are trained and experienced in their application. If the need is identified for further specialist expertise, Nufarm engages the relevant external resources to support the activity. Less complex hazard assessments carried out at a site's operations level are supported and facilitated by trained health and safety professional staff working with those staff supervising and operating the plant and equipment.



Members of the board visiting Nufarm's Maracanaú site in Brazil.

These hazard identification and risk assessment processes are subject to site level, corporate level and regulator audits to ensure the quality and effectiveness of these activities. Output from these audits are used as an additional input into improvements in Nufarm's safety management system (SMS).

We manage risks using a hierarchy of controls, with the first consideration being to remove the hazard entirely and, if this is not feasible, to manage the risks using engineering controls. The next option in order of priority and effectiveness is reducing the risks through administrative controls. Personal protective equipment is used to protect people as a last line of defence. Depending on the hazard type and the assessed risk level, multiple layers of risk controls are established such that if any single control fails, it will not result in a negative event occurring.

All Nufarm employees and non-Nufarm persons are expected to remove themselves from any situation where they believe illness or injury could result and to bring these unsafe conditions to the attention of management. This is documented in the Nufarm HSE standard and is emphasised regularly to staff. Across all sites globally staff do this

without any experience of adverse consequences. It is now part of Nufarm's culture.

Hazards and incidents are reported in Nufarm's incident reporting and investigation system which is available to all staff. Investigations are participatory and the methodologies used depend on the severity of the hazard or event or its potential. Each operating site runs incident management training programs and has trained HSE professionals and engineers to facilitate more complex investigations using methodologies such as root cause analysis (RCA). The high hazard to injury reporting ratio across Nufarm sites demonstrates that people feel safe in reporting hazards and near misses without the concern of adverse consequences. Serious incidents are escalated up to the Nufarm chief executive level within 24 hours of occurrence.

### Process safety management

Last year we launched our process safety management (PSM) program. The program was designed to take a systematic and best practice approach to identify and control hazards at manufacturing sites where a loss of containment could result in a catastrophic

incident involving fatalities inside and/or outside the site boundary and/or significant environmental damage or negative community impact.

At the core of this program is our PSM standard. This addresses critical risk control factors such as facility design and construction, hazard identification, assessment and control, operations process safety, hazardous materials management, asset integrity and reliability, management of change, competence and training and emergency planning and response. Compliance with PSM requirements is audited by Nufarm and by the regulators in the relevant jurisdiction and is subject to regulatory major hazard facility licensing in many of the jurisdictions in which we operate.

As a part of our PSM program, each site completed a detailed gap analysis against our PSM standard and used this as the basis of a PSM gap closure plan. This year our sites have focused on closing the gaps in accordance with their plan. We have now completed 52 per cent of the actions and expect to complete the plans entirely during 2020. This is a significant and critical undertaking for the business which is regularly monitored and reported through to executive management and the board HSE committee.



### Safety management systems (SMS)

Nufarm is a member of Responsible Care, an initiative of the international chemical industry to improve HSE performance of its operations. This program now operates in over 65 countries. Our SMS meets industry standards for the plastics and chemicals industry as described by relevant global and regional bodies such as Chemistry Australia. Nufarm's SMS also aligns well with other established standards such as ISO 18001.

Nufarm's SMS has been in place across our global operations for many years and is subject to continuous improvement arising from internal and external review and developments. It is managed from a corporate level down through to a regional and site level and is supported at each of these levels by qualified and industry experienced health and safety professionals and line managers. Where the need arises for very specialist advice, Nufarm engages appropriately qualified and experienced external consultants to advise on the issues at hand.

The Nufarm corporate health, safety and environment (HSE) policy, HSE standard, HSE procedures and site specific HSE procedures are the components that make up our SMS and apply to all Nufarm employees and non-Nufarm persons.

### Health and safety audits

Our SMS system is documented and self audited by sites at a set frequency. In addition, we undertake corporate audits every two years or more frequently if significant deficiencies are identified.

Since the inception of our sustainability strategy three years ago we have changed our approach to auditing, focusing on, and going more deeply into, fewer but higher risk incident hazards. Good practices identified during these audits are transferred across to other sites facing similar challenges. The reports and improvement actions arising from these site audits are discussed by the group executive and board HSE committee.

Typically our sites are regularly audited by government authorities to confirm compliance and Nufarm also uses external auditing organisations on an ad hoc basis to test particular sites if a need is identified.

The focus of our audit program is on our manufacturing sites at present as this is where the most serious hazards are located. Office environments, while subject to the relevant requirements of the Nufarm SMS, are not formally audited but will be included in future program scheduling.

### Safety training

All Nufarm staff and non-Nufarm persons undergo occupational health and safety induction training when joining the company. Further training is provided depending on a person's role in the organisation and the hazards they may encounter while performing their job. Workers on a chemical manufacturing site can receive training in areas such as chemical safe handling procedures, confined space entry, chemical and electrical isolation procedures, fire safety, permit to work and dangerous goods.

We use training needs assessments and competency based training approaches where appropriate. Delivery of training is normally a combination of classroom style training along with on the job, supervised training using qualified personnel. Individual training records are maintained and our training systems ensure follow-up refresher training is scheduled as required. This year we provided over 28,000 hours of safety training to our employees and non-Nufarm persons.

### Health and safety committees

At Nufarm, staff participation is central to the development and ongoing improvement of systems of work and procedures for safe operation of plant and equipment. In many regions, this is a regulatory requirement involving worker elected representatives with prescribed roles and powers. Nufarm complies with these regulatory requirements.

There are active HSE committees across our business starting at the top with the board HSE committee. Site based HSE committees provide an additional communication and planning channel to enable staff and management to work together. The committees identify improvements in staff engagement, safety culture and the SMS, and also review and deploy lessons arising from incidents.

### Health and safety compliance

The chemicals industry in which Nufarm is a global player is highly regulated in each of the jurisdictions in which the company operates and Nufarm works to comply with external requirements. This regulatory oversight and license to operate along with Nufarm's process safety management systems manages risk from the company's operations on surrounding neighbourhoods to a community acceptable level.

As an operator of major hazard facilities, safety authorities and regulators often require periodic confirmation and verification that we have adequate, effective and sustained hazard controls in place. For example, our Wyke site has recently submitted its five-yearly control of major accident hazards (COMAH) safety report to the government regulator for its review.

While we recorded five incidents of regulatory non-compliance with occupational health and safety requirements across our global operations this year, these were all promptly addressed to the satisfaction of the relevant regulator. Nufarm's objective is to be fully compliant with regulatory requirements in all jurisdictions in which it operates.

### Occupational health services

Nufarm provides access to occupational health services across all its operations globally. The type and arrangements vary between sites depending on need. Some sites have an onsite medical centre staffed by a company doctor, company occupational health nurses and ancillary health professionals; some sites have occupational health nurses, while others contract with a local provider to deliver those services.



We have medical surveillance programs specific to the type of manufacturing process, materials and potential exposures at our sites along with the requirements of the relevant health authorities. We maintain confidential employee medical records, in accordance with the medical profession's standards and practices.

### Employee wellbeing

In addition to health surveillance programs, our occupational health services also provide a range of health and lifestyle promotion programs to support the wellbeing of our employees. These are local programs, targeted to the needs of the local employees. For example, our site in Linz, Austria established a very successful workplace health committee to provide wellness initiatives for employees, such as a recent series of employee health days.

Some sites draw on community based resources and promotions such as 'RU OK Day' in Australia which promotes checking in on the mental health of colleagues and friends. In Australia and New Zealand close to 60 employees have trained as mental health first aid officers (MHFAOs). The role of a MHFAO is to approach or be available to someone who they believe may be experiencing some level of mental health concern and provide them with support and information on how to get professional help. Our site in Wyke, UK has also provided mental health awareness training to its employees.



Heart health, stress management and healthy eating are also topics covered in these health promotion programs. An on-line library of materials supporting these topics is available to all staff on the company intranet.

### Non-manufacturing safety

The most significant non-manufacturing hazard within Nufarm's global business involves our staff driving on public roads, often in rural environments, as a part of their job. This year we continued to deliver practical defensive driver training in all our regions with the launch of a personalised, interactive, behaviour-based, defensive driver training program. The AlertDriving program was rolled out to more than 600 employees who drive a high number of kilometres each week as a part of their

role. Employees access monthly training modules through an online portal and to date we have seen a good participation rate in this program. Nufarm's driver risk reduction program also includes specifying active and passive safety features on company vehicles, fatigue management, restricting mobile phone use and ensuring fitness to drive.

### Objectives for 2018

In 2019 we will continue to lock-in the gains we have seen over the last few years. Our PSM program will span a number of years and we will continue to drive these plans embedding the PSM initiatives. We also intend to start a safety and sustainability leadership development program for executives and senior management.



Managing director and CEO Greg Hunt with employees and a grower.

## Ethical sourcing

Nufarm recognises that our social and environmental responsibilities extend beyond our own footprint and we have a strategic objective to engage with our suppliers to uphold the same sustainability standards that we hold ourselves accountable to.

This year we progressed the implementation of our ethical sourcing strategy.

### Our supply chain values

Nufarm believes in acting ethically and responsibly in every aspect of our business and we expect our suppliers to do the same. These values help to guide supplier selection and the ongoing evaluation of our supplier relationships. We have a global supplier code of conduct that sets out our expectations of our suppliers' behaviour, addressing business conduct, environment, human rights, child and forced labour and employee health and safety.

Nufarm's human rights policy establishes our zero-tolerance stance on all forms of modern slavery in our operations and supply chain.

A copy of both our supplier code of conduct and human rights policy can be found in the corporate governance section of our website.

### Improving our purchasing systems platform

Over the last few years, Nufarm has undertaken an ambitious program to transform our global business systems, including our procurement systems.

In 2018, we commenced the implementation of Ariba, a global supplier and procurement management system and RiskMethods, a global supply chain risk monitoring system. The global roll out of these new systems will continue into 2019. These systems will provide our procurement teams with a consistent approach to negotiating and entering agreements with our suppliers in the future, giving us a greater capacity to integrate sustainability measures into our procurement processes. This year we continue to embed our new business systems into everyday operations.

### Supplier corporate social responsibility (CSR) assessment

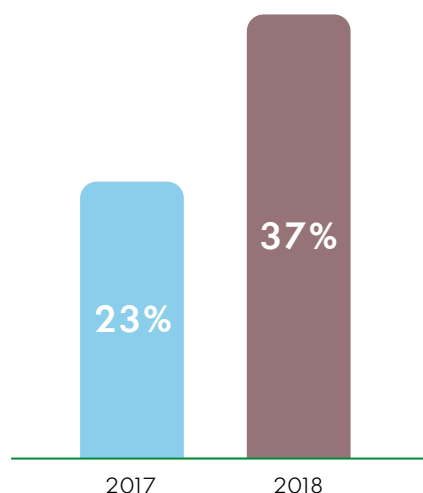
Nufarm has partnered with EcoVadis to conduct corporate social responsibility (CSR) assessments of our suppliers. This process increases our supply chain transparency and is an important step towards improving the sustainability of our supply chain.



EcoVadis is a global leader, providing CSR ratings and scorecards for over 30,000 companies. The collaborative platform evaluates suppliers' environmental, social, ethical and sustainable procurement policies, actions and results.

In 2017, Nufarm completed CSR assessments on 23 per cent of existing suppliers, and in 2018 we increased this to 37 per cent of existing suppliers (measured as a percentage of total spend). The average CSR performance of nearly all of our suppliers has also increased over this period. Once a supplier is onboarded to EcoVadis, their CSR assessment is repeated annually.

Figure 4: Percentage of suppliers in our CSR assessment program



The adoption of EcoVadis has provided us with valuable insight into our suppliers' sustainability practices. This year we established an internal minimum standard for our suppliers. In 2019, we will work with those suppliers who scored below this level to implement mutually agreed corrective action plans to help drive environmental and social improvements in our supply chain.

Our existing suppliers are our most important and the focus of our supply chain CSR program. New suppliers represent a small portion of our total spend and we have not screened them on social or environmental criteria this year, however we will expand the use of CSR assessment as an element of our new supplier evaluation process in the future.

### Supplier risk management

A risk based approach has been adopted to determine supplier priority for CSR assessment. Our supply chain risk management policy considers the risk associated with the supplier's country of operation, their importance to Nufarm and their industry. Nufarm has a number of important chemical suppliers in China and India who were given a high priority for CSR assessment based on country risk. 90% of these suppliers have now been invited to undertake an assessment.

Once RiskMethod is fully implemented across our business, when combined with EcoVadis it will provide Nufarm with a solid platform for monitoring and responding to a broad spectrum of supply chain risks.

### Environmental and social performance in our supply chain

Our suppliers are primarily chemical or packaging manufacturers. The potential significant environmental impacts of these industries are hazardous waste and air emissions, effluent, resource consumption and greenhouse gas emissions. The hazardous chemicals used by our suppliers present a higher occupational health and safety risk to their workers, however, these industries typically provide extensive safety training and this requires workers with above average skill



Inspecting a crop in Latin America.

and education levels. While we recognise the risk of modern slavery exists in all supply chains, our main suppliers are not as vulnerable to modern slavery practices as are industries that rely on workers to carry out manual or menial tasks.

Of the suppliers assessed in this reporting period, none were found to have significant actual or potential environmental impacts, however a ship carrying our cargo experienced very heavy seas off the eastern coast of Australia leading to the loss or damage of over 120 containers. None of the containers carrying our materials were damaged and none of our materials were released to the environment because of this incident.

Also, of our suppliers assessed this year, none were found to have significant actual or potential social impacts and

there was no clear evidence of child or forced labour. However, some suppliers failed to provide documentation to support their claims that they were compliant with globally acceptable labour practices and we recognise that some suppliers need more support in undertaking our CSR assessment process.

Nufarm has not needed to terminate any business relationships due to negative environmental or social impacts this year.

In 2019, we will roll out an education module to raise our employees' level of awareness of modern slavery, its occurrence in global supply chains, and actions they can take to help change this abhorrent practice.

In line with the requirements of the UK Modern Slavery Act, we publish a modern slavery statement on the actions we have taken to identify and prevent modern slavery in our supply chains. A copy of this can be found on the home page of our corporate website.





## Our people

Our people are integral to our business and their commitment and talent are a key component of our success. Nufarm is a global organisation that aims to provide an inclusive work environment where individuals are valued for their diversity and empowered to reach their full potential. We believe we are stronger when our plans and operations reflect the thinking of all our people, representing a broad range of backgrounds, cultures and experience.

Nufarm is focused on improving inclusion and diversity outcomes across the business as we believe this will help realise the potential of each employee. This year we established relevant policies, programs and initiatives to ensure inclusion and diversity are embedded in the way we conduct our business. Some examples include the establishment of an inclusion and diversity governance structure and executive steering committee, development of an inclusion and diversity strategy, and deployment of our global inclusion and diversity policy with a focus on increasing female representation at Nufarm.

### Nufarm's workforce

In 2018, we employed 3,217 full time equivalent (FTE) people across five regions, an increase of less than 1 per cent (28 FTEs), from the previous year. This slight increase can be attributed to our continued focus on our customers, with additional FTE headcount predominantly in the sales function.

Most of our workforce remains full time with 86 per cent permanent employees and 14 per cent contract or non-permanent employees. Where the nature of the role allows it, we support flexible work arrangements, with four per cent of our workforce operating with part time arrangements.

Our sites employ casual, contract labour to support some manufacturing activities, which include labelling and packing our products. These people are engaged for short periods of time to support seasonal demand. Nufarm will also engage the professional services of contractors who have unique knowledge or skills to support specific project activities. These include, but are not limited to, engineers

and information technology experts. Across the year, it is estimated that Nufarm had an additional 16% of our full time equivalent workforce working on our sites in contract roles. We endeavour to provide a more agile workforce in terms of non- permanent and contract labour to better respond to the needs of the business.

Employee data presented in this report has been sourced from our global human resource management system and local payroll systems. Unless otherwise specified, all data is reported as FTE. Further information on our workforce make up can be found in Tables 7 and 8.



Table 7 – Our employees by gender

	2017				2018			
	Female	% Female	Male	Total	Female	% Female	Male	Total
<b>Employee employment contracts</b>								
Permanent	687	25	2,055	2,742	701	25	2,050	2,751
Non-Permanent	43	10	404	447	67	14	399	466
<b>Total</b>	<b>730</b>	<b>23</b>	<b>2,459</b>	<b>3,189</b>	<b>768</b>	<b>24</b>	<b>2,449</b>	<b>3,217</b>
<b>Employee employment type<sup>1</sup></b>								
Full time	683	22	2,394	3,077	721	23	2,426	3,147
Part time	84	56	67	151	92	73	34	126
<b>Total</b>	<b>767</b>	<b>24</b>	<b>2,461</b>	<b>3,228</b>	<b>813</b>	<b>25</b>	<b>2,460</b>	<b>3,273</b>

1. Reported as head count.

Table 8 – Our employees' employment contracts

	2017			2018		
	Permanent	Non-permanent	Total	Permanent	Non-permanent	Total
<b>Employee region</b>						
Australia and New Zealand	666	27	693	677	13	690
Asia	347	372	719	338	335	673
Europe	887	18	905	840	93	933
Latin America	531	17	548	599	6	605
North America	311	13	324	297	19	316
<b>Total</b>	<b>2,742</b>	<b>447</b>	<b>3,189</b>	<b>2,751</b>	<b>466</b>	<b>3,217</b>

Parental leave was accessed by two per cent of the workforce. Men represented 18 per cent (less than one per cent of the male workforce) while women represented 82 per cent (seven per cent of the female workforce) of parental leave taken. Refer to Table 9.

## Women at Nufarm

Nufarm's gender diversity program is focused on empowering all our employees by actively addressing the barriers to equality, and creating a level playing field and inclusive culture for both men and women.

In 2018, we had a conscious focus on improving female representation across all areas of the business, with 30 per cent of new or vacant positions filled by female candidates. This was a 33 per cent increase in female placement from 2017 (23 per cent). Our new employee and turnover information can be found in table 10.

Globally, in 2018 we saw a slight increase in female representation to 24 per cent,

**Table 9 – Number of employees using parental leave**

	2017		2018	
	Female	Male	Female	Male
Took parental leave	41	32	57	13
Returned from parental leave	-	-	48	13

up from 23 per cent in 2017. This increase can be seen across most regions and functions at Nufarm.

Female representation increased in the Australia and New Zealand (ANZ) region by three per cent and is attributed to broader inclusion initiatives introduced during 2018 including, but not limited to, extending flexible working arrangements with the introduction of purchased leave and gender neutral parental leave policies, unconscious bias training and a forum to raise awareness of gender equality and women in agriculture. The ANZ region piloted some new recruitment strategies to reduce potential bias, including the introduction of inclusive language in advertisements to target wider talent pools. The European region

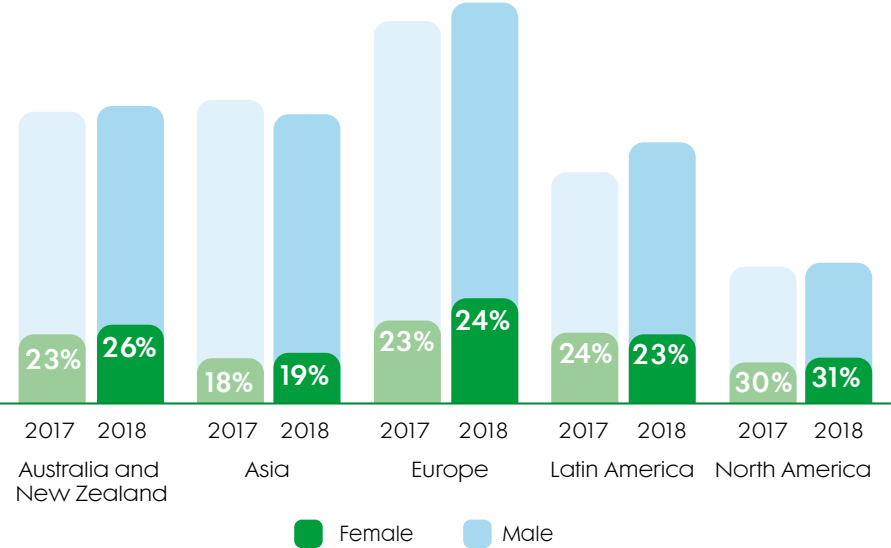
also continues to target gender equality. Most functions improved female representation, with the largest increase in sales and supply chain. The sales function had a 20 per cent increase in female representation compared to last year. Of the increased sales FTE headcount, 61 per cent of the roles were filled by females. The supply chain function saw a 14 per cent increase in the female population, representing an overall 2.7 per cent uplift in female population across our two largest functions. In the female dominated functions of finance and human resources, male representation increased in 2018. Refer over the page to table 11.

**Table 10 – Employee hire and turnover**

	New employees % <sup>1</sup>	Turnover % <sup>1</sup>
<b>Employee age group</b>		
Under 30 years old	32	-25
30-50 years old	54	-55
Over 50 years old	14	-20
<b>Employee gender</b>		
Female	30	-25
Male	70	-75
<b>Employee region</b>		
Australia and New Zealand	22	-24
Asia	15	-25
Europe	25	-21
Latin America	24	-14
North America	14	-16

1. New employee hires for each employee age group, gender and region are calculated as a percentage of the total new hires. Employee turnover percentages are calculated for each employee age group, gender and region as a percentage of the total turnover.

Figure 5: Employees and percentage of female employees per region



Board of directors and employee diversity

Our global footprint enables a culturally diverse workforce of leaders and teams, representing local cultures and customers in over 100 countries. Twenty-five per cent of the non-executive board reside outside of Australia and our leadership team is culturally diverse, with at least six different cultural backgrounds represented; we have one of the most culturally diverse leadership teams on the ASX200. Nufarm’s employee self-disclosed data indicates that our workforce originates from no less than 56 different countries and speaks at least 16 different languages.

Women continue to represent approximately 20 per cent of people leadership positions across Nufarm. Female representation at board level remains stable at 25 per cent





non-executive directors, while female representation increased at the executive and senior management level from 16 per cent in 2017 to 23 per cent this financial year.

## Inclusion programs

To help grow Nufarm's local talent we continued to expand our regional youth strategy through a variety of global programs. The 2018 financial year saw the addition of an 'Agriculture Future of America' program that supports the development of a pipeline of talent through engaging and mentoring future agriculture leaders in that region. We continue to recruit across the career lifespan with 32 per cent of new hires aged less than 30 years of age, 54 per cent between 30-50 years and 14 per cent over the age of 50. Our longer-term intent is to increase internal mobility, and

as we grow and develop our internal talent to fill more senior roles, we will increase numbers in our younger age groups to backfill the roles inherently left vacant.

Disability and inclusion programs offered in North America provide opportunities for individuals with developmental disabilities and/or those living with mental illness to work part time in areas that fit their skills. In Brazil, we continue to meet the agreed quotas to hire people with disabilities.

This year we also introduced NuLead, a One Nufarm leader development program. The program targets leaders at all levels of the business and aims to improve our inclusive leadership and coaching capability. The initial module focused on cultivating better connections through quality conversations that inspire employees to grow and learn, to plan

what is important, and ultimately succeed through enabling quick solutions to challenges. More than 68 per cent of all managers participated in this program. This capability helped provide our leaders with the tools and techniques to have more effective conversations across the organisation and complements the performance management cycle. The second module focused on using evidence to reduce the bias in people-related decision making.

The 2018 financial year saw the introduction of One Nufarm behaviours. The behaviours were launched with a One Nufarm celebration day in regions where all employees had the opportunity to celebrate our heritage and the achievement of over 100 years working with farmers and growers and our journey to becoming the company we are today.

Table 11 – Employee functional groups

	2017				2018			
	Female	% Female	Male	Total	Female	% Female	Male	Total
Supply chain	237	17	1,165	1,402	271	19	1,156	1,427
Sales	155	15	876	1,031	187	17	897	1,084
Portfolio solutions	97	35	179	276	99	36	175	274
Finance	139	58	100	239	127	53	112	239
Corporate	57	46	66	123	35	49	37	72
Information technology	8	11	63	71	11	15	60	71
Human resources	37	79	10	47	38	76	12	50
<b>Total</b>	<b>730</b>	<b>23</b>	<b>2,459</b>	<b>3,189</b>	<b>768</b>	<b>24</b>	<b>2,449</b>	<b>3,217</b>

Table 12 – Gender and overall age diversity of the board of directors and employees

	2017	Gender	2018		
	Gender		Overall age (male and female)		
	% Female	% Female	% < 30 years	% 30-50 years	% > 50 years
Board of Directors <sup>1</sup>	25	25			100
Key management personnel <sup>2</sup>	0	0		<1	<1
Executive and senior management	16	23	<1	2	2
People manager	21	19	<1	12	5
Professionals	22	27	9	29	9
Manufacturing shop floor	8	7	3	12	8
Administration	81	69	1	4	2
Other	45	41	<1		
<b>Total</b>	<b>23</b>	<b>24</b>	<b>15</b>	<b>59</b>	<b>26</b>

1. Greg Hunt, managing director and chief executive officer is included with the key management personnel in this table.

2. Key management personnel are defined in the director's report in our annual report which is available in the investor centre on our corporate website.

3. Age group percentages are based on 3,178 FTEs, rather than 3,217 FTEs, because disclosure of some personal data is not mandatory in our human resources business system.

### Performance and career development

Last year we redesigned our performance management program aligning it with industry best practice. We adopted a more agile approach to objective setting to ensure employee priorities and development goals are closely aligned with business objectives. We call this program Grow Plan Succeed (GPS) and as a part of this program, all employees are expected to engage in regular check-in conversations with managers and matrix managers to frequently discuss performance and development in real time. This is our first full year with the new program in place and we are seeing the success already with performance objectives captured in our new system for at least 74 per cent of women and 75 per cent of men.

Training and education is an important element of employee development and employees across all regions receive diverse training, relevant to their positions and responsibilities. Currently, training information is compiled by each site or department, however as a future development to our new global human resources management system, we will be implementing a training management module to provide greater visibility of global employee training and education metrics.

Apprenticeships are an important opportunity for young people to develop hands-on, practical experience in a real work environment. Our apprenticeship program continues at Wyke, UK with the intake of five new apprentices into process manufacturing, engineering and instrumentation and control roles. We also take on engineering apprentices at our sites in Maracanau, Brazil and Laverton North, Australia.

Nufarm provides career endings support for employees leaving the company due to termination of employment on a region by region basis. This could take the form of career transition support, language programs or other employee specific tuition programs.

### Human rights

Last year we developed a human rights policy to articulate our position on matters such as collective bargaining, modern slavery, inclusion and diversity and equal

opportunity. Our policy recognises and respects employees' rights and freedoms to join or not to join organisations of their choosing, to associate freely and bargain collectively: 31 per cent of our employees are covered by a collective bargaining agreement.

Employment and business decisions based on attributes unrelated to job performance, such as race, gender or sexuality, are not tolerated. This year we had no incidents of discrimination.

Nufarm has adopted a zero-tolerance stance to all forms of modern slavery, both in our operations and our supply chains. Last year we commenced modern slavery assessments of our operations, looking at the process and controls in place to prevent any form of modern slavery entering our business through our own recruitment practices or the use of third party labour providers. This year we completed these assessments. Nufarm's operations are not at significant risk of forced or compulsory labour or child labour (persons under 15 years of age). As a policy, we do not employ young workers (persons under 18 years of age) in hazardous areas and our operations have controls in place to ensure this policy is maintained. Under the UK Modern Slavery Act, we publish a modern slavery statement on our corporate website.

### Employee remuneration and benefits

Employee remuneration is determined at a regional level, taking into consideration the job description, local market remuneration rates, the skills and experience of the employee and criticality of the role. This year we began deploying a revised remuneration framework to formalise our standards. Nufarm determines its own employees' remuneration, engaging the external services of remuneration specialists or market data providers on a case by case basis.

Benefits provided to employees vary between regions and local employment conditions, however Nufarm contributes to retirement plans for all employees, meeting local regulatory requirements as a minimum.

In 2018, we completed a gender pay gap analysis in the UK, identifying that we were compliant and had no issues

to resolve. This year we also developed a three-year inclusion and diversity plan.

One of the deliverables of this plan will be to conduct a pay parity review across at least two other business regions and develop an action plan based on findings.

### Employee opinion survey

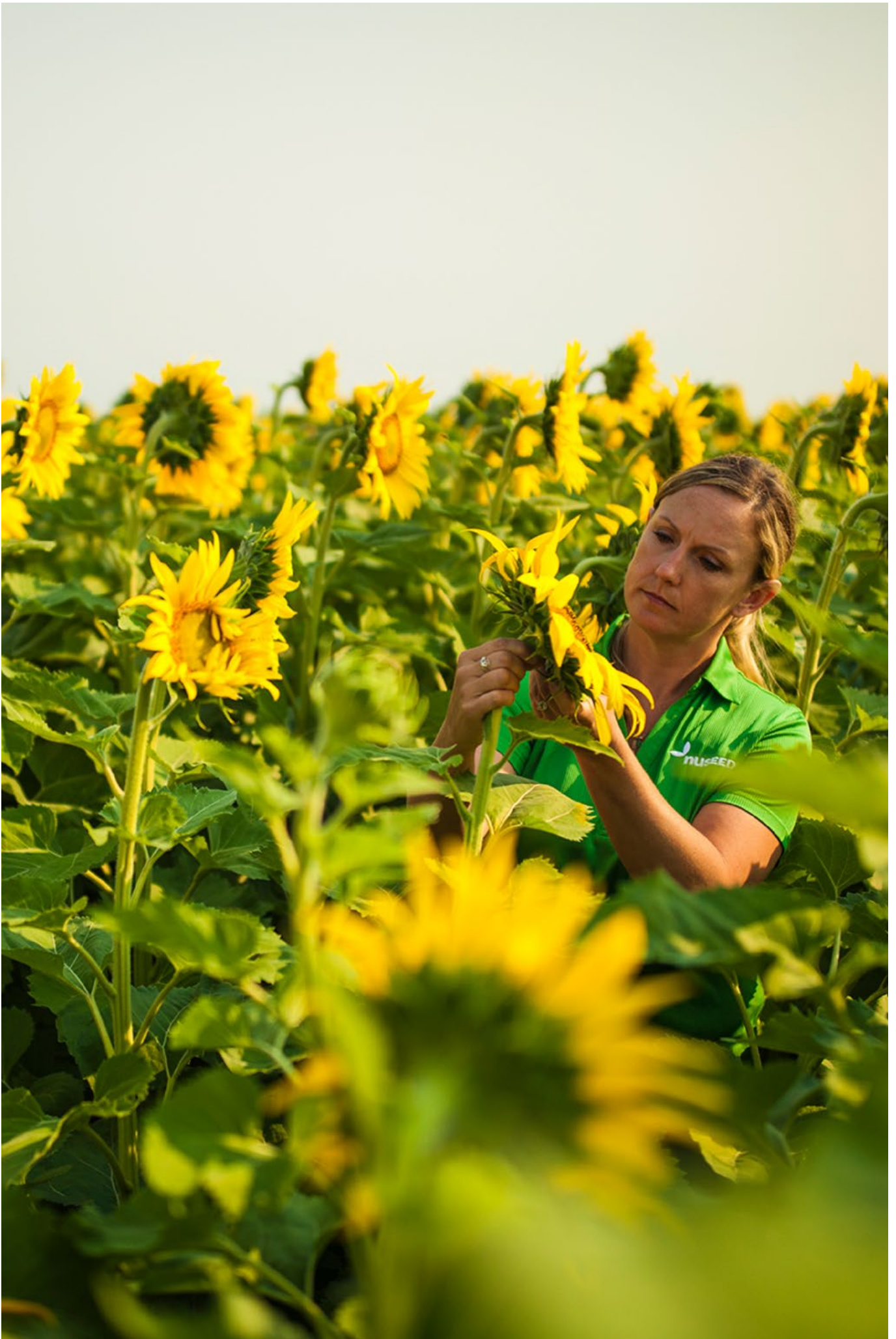
In 2018 we also introduced a #talktous employee opinion survey (EOS) to capture feedback from employees on the global initiatives introduced following the 2016 survey. Overall the result remained stable with sentiment moving in the right direction during a time of significant change. Progress against some of our global initiatives introduced following the 2016 EOS include:

- A positive sentiment towards the new contemporary and technology-enabled GPS cycle.
- Our information and technology transformation continues to extend our global systems and processes into each region, allowing employees to better serve our customers.
- Employee recognition is still an area for improvement and we recently introduced a global recognition program aligned to our One Nufarm behaviours.

### Looking ahead

Nufarm believes that inclusion and diversity are both critical to our sustainable growth. A key enabler to achieving growth is to develop our talent and continue to build an inclusive culture. As a continuation of our efforts we have now refreshed our strategic approach to inclusion and diversity and identified key themes to focus the company's attention and efforts. Over the next three years we will be executing our global inclusion and diversity plan and establish inclusion and diversity councils in all regions.

Initially the inclusion and diversity plan will focus on developing a clear vision for inclusion and diversity at Nufarm. We will provide education to increase awareness of unconscious bias and how each employee can help bring our inclusion and diversity vision to life. We will review all key people related policies with a lens to eliminate potential bias as well as extend our pay parity reviews to at least two more regions.





## Governance



**Donald McGauchie AO**

Joined 2003

Board chairman

Chairman of the board nominations and governance committee and board HR committee member



**Greg Hunt**

Joined 2015

Managing director and chief executive officer



**Anne Brennan**

Joined 2011

Board HR committee member and board audit and risk committee member



**Gordon Davis**

Joined 2011

Chairman of the board HSE committee, board HR committee member and board audit and risk committee member



**Frank Ford**

Joined 2012

Chairman of the board audit and risk committee and board nomination and governance committee member

Nufarm is committed to the highest standards of corporate governance and has a range of policies and procedures in place to support this aim. Details of board committees and their terms of reference, along with other corporate policies and protocols, can be found in the governance section of our website. Nufarm is listed on the Australian Securities Exchange (ASX) and we comply with the ASX Corporate Governance Principles and Recommendations (the Principles).

### Board of directors

The governing body of the company is the board of directors. The board's responsibility is to oversee the company's operations and ensure that Nufarm carries out its business in the best interests of all shareholders and with proper regard to the interests of all other stakeholders. The board charter defines the board's individual and collective responsibilities and describes those responsibilities delegated to the managing director and senior executives. A copy of the board charter is available on the corporate governance section of the company's website.

Board members are selected based on their experience and skills to ensure the board properly discharges its responsibilities.

There are nine members of the board with a majority being independent, non-executive directors, in line with the Principles. The exceptions are Greg Hunt who is the managing director and chief executive officer and Toshikazu Takasaki. As a major shareholder in Nufarm, Sumitomo's interests are represented by one board member position, which has been held by Takasaki-san since 2012.

The board reviews its composition and terms of reference annually. It also evaluates the performance and determines remuneration of the managing director and senior executives. Full details of the executive remuneration structure are set out in the remuneration report on pages 35 to 50 of Nufarm's 2018 annual financial report.

### Board committees

The board is supported by four committees: the audit and risk committee, the nomination and governance committee, the human resources (HR) committee, and the health, safety and environment (HSE) committee.

The HSE committee is responsible for reviewing and reporting to the board on strategic matters including significant environmental and safety issues. It provides oversight on the annual sustainability report and, in conjunction with the board, has approved the group's sustainability strategy.

The responsibilities of the HR committee include to review and make recommendations to the board in relation to Nufarm's board and executive remuneration strategy, structure and practice. The committee is responsible for seeking and approving independent remuneration advisers who will provide independent remuneration advice, as appropriate, on board, chief executive officer and other key management personnel remuneration strategy, structure, practice and disclosure.

The HSE and HR committees have joint oversight of Nufarm's material social aspects while making recommendations to the board on matters of policy and practice. Copies of both the HSE and HR committees' charters are available on the corporate governance section of the company's website. Our HSE Policy, which was approved by Nufarm's CEO, is also available on our website.



### **Bruce Goodfellow**

Joined 1991

Board nomination and governance committee member



### **Peter Margin**

Joined 2011

Chairman of the HR committee, board audit and risk committee member



### **Marie McDonald**

Joined 2017

Board audit and risk committee member and HSE committee member



### **Toshikazu Takasaki**

Joined 2012

Board HSE committee member

The responsibilities of the nomination and governance committee include composition of the board, reviewing the mix of skills and diversity on the board and recommending changes to the board membership and whether to support the re-election of a retiring director. In conjunction with the human resources committee, the nominations and governance committee ensures the diversity policy is applied to the selection of board members. In FY18, women comprised 25% of the Board's non-executive directors. A copy of the committee's charter and a summary of the policy and procedure for director appointments are available on the corporate governance section of the company's website.

Each year each board committee will self-assess whether it has discharged its responsibilities as set out in its charter.

### **Executive leadership**

The board has delegated authority for the daily management of Nufarm's environmental and social aspects to the executive leadership team. Reporting directly to the CEO, the group executive for manufacturing and supply chain, Elbert Prado, is responsible for environment and safety, while John Holding, group executive for people and performance, is responsible for the other social aspects of Nufarm's operations.

### **Conflict of interest**

Board members must identify any conflicts of interest they may have in dealing with the company's affairs and then refrain from participating in any discussion or voting on these matters. Further information on this policy can be found in the board charter, available in the corporate governance section of the company's website. Directors and senior executives must disclose any related party transaction in writing.

Information on cross board memberships and major shareholdings is made publicly available to interested parties as it arises through our annual financial report and statements released to the ASX.

### **Code of conduct**

Nufarm's code of conduct guides our work and represents our commitment to fair, ethical and professional business practices and legislative requirements. We require all Nufarm directors, employees, contractors and consultants to be familiar with and uphold the company's code of conduct in all business dealings. Wherever we operate, the health and safety of our people, our contribution to sustainable development, and conducting business with integrity are key priorities in delivering value to our shareholders and stakeholders. We build strong, mutually beneficial relationships with the communities we operate in, respecting their laws and customs. We are politically

impartial except where the board believes it is necessary to comment due to any perceived major impact on the company, its business or any of its stakeholders.

### **Other policies**

Where there are no legislative requirements with which to comply, we develop policy statements to support the code of conduct and ensure appropriate standards are met. These policies include the communications policy, diversity policy, security trading policy and continuous disclosure protocol. We have a whistle-blower policy to provide employees with a confidential mechanism to report any suspected unethical or illegal behaviour. Nufarm's Code of Conduct and additional policies can be found in the Corporate Governance section of the company's website.

Our regional legal counsel teams provide training in our anti-corruption policies every year. In the future, our new HR business system will track and record training.

### **Risk management**

The board is committed to identifying, assessing, monitoring and managing its material business risks. To that end, the board has implemented a sound risk management framework which it reviews at least annually to ensure its effectiveness.

The board is responsible for the oversight of the company's risk management system. The board ensures that appropriate policies are in place to ensure compliance with risk management controls and requires management to monitor, manage and report on business risks. A dedicated risk management system is in place to facilitate management's ownership, prioritisation and reporting of risks throughout the group. This includes reporting on the status of risks and mitigation across all risk categories.

The board delegates certain responsibilities to board committees and primarily to its audit and risk committee, which is chaired by an independent director. The audit and risk committee's responsibilities include providing an oversight of the effectiveness of Nufarm's enterprise-wide risk management and internal control framework.

In so doing, it considers the interests of all relevant stakeholders. The company recognises a number of operational risks related to its crop protection business including:

- market consolidation;
- climate conditions and seasonality;
- regulatory, freedom to operate, product registration, product use and business sustainability;

- human resources and change management;
- relationships with key suppliers and customers;
- licences and operating permits for manufacturing facilities; and
- liquidity and foreign exchange.

A detailed list of risks managed by Nufarm is set out on pages 24 to 30 of Nufarm's 2018 annual financial report. As a part of our annual risk review program, we assess all operations for risks related to corruption. Where relevant, mitigating controls are implemented.

Further information can be found in Nufarm's audit and risk committee charter and risk oversight and management, both available in the corporate governance section of the company's website.

Critical environmental or social concerns are reported directly to the board as they arise and delegated by the board to the relevant group executive for resolution. There were no critical environmental or social concerns reported to the board this year. There have been no new legal actions against the company for anti-competitive behaviour, anti-trust or

monopoly practice, and there have been no incidents of corruption. The ongoing investigation into overall industry anti-competitive behaviour in agribusinesses in Hungary was concluded and no fines were imposed on Nufarm.

### Memberships

While Nufarm does not subscribe to any externally developed sustainability charters or principles, we do practise the standards established by a number of industry groups to which we belong. Nufarm is a member of Responsible Care, a global, voluntary initiative developed by the chemical industry that operates in over 65 countries. We also participate in chemical industry associations in a number of countries such as the Chemical Industries Association (CIA) in the UK and Chemistry Australia and other associations such as CropLife.





# Environment

## Environmental performance

At Nufarm, we are working to prevent the actual and potential environmental impacts of our operations. In line with this commitment, this year we have invested AUD5.6 million in managing our environmental responsibilities and reducing our footprint.

## Energy

The primary energy consuming activities at our manufacturing sites are: boilers, which generate steam to heat materials or provide space heating; electricity for producing chlorine and powering process equipment; and fuel for manufacturing and distribution vehicles. Our production facilities formulate and synthesise chemicals with synthesis activities being our most energy intensive, consuming approximately 80 per cent of our total energy use.

This year our energy intensity (energy used per unit of production) decreased by 3 per cent however, our total energy use increased by eight per cent due to an even greater increase in production output. Our energy consumption can be found in Table 13. This improvement in energy intensity is the realisation of benefits from installing an economiser on our combined heat and power plant at Wyke, UK last year and efficiency gains from some sites upgrading their steam services. It can also be partly attributed to an increased production output of lower energy intensity products.

## Greenhouse gas emissions

Nufarm does not generate process greenhouse gas emissions, instead our Scope 1 greenhouse gas emissions are attributable to the use of energy. Our greenhouse gas emission intensity has fallen by 11 per cent despite the increase in energy use this year.

All activities undertaken this year to reduce energy have had a greenhouse gas emission benefit, however the most significant contributor to this reduction has been the change in the production output product mix and the continuing increase of renewable electricity available in electricity networks.

In 2017, we reported a leak of a non-ozone depleting refrigerant from one of our manufacturing facilities which accounted for four per cent of our total greenhouse gas emissions. This occurred over two reporting years, so the remaining half of the emissions are included in 2018's Scope 1 emissions. Preventative maintenance controls have been implemented to prevent a reoccurrence.

Table 13 – Energy and greenhouse gas emissions

	2016	2017	2018	Unit of measure
<b>Energy consumption<sup>1</sup></b>				
Fuel consumption (non-renewable)	47,282	50,400	49,890	GJ
Fuel consumption (renewable)	50	0	0	GJ
Electricity consumption	320,885	306,030	309,218	GJ
Heating (gas) consumption	269,562	246,904	242,356	GJ
Steam consumption	397,740	394,202	482,731	GJ
<b>Total energy</b>	<b>1,035,519</b>	<b>997,536<sup>2</sup></b>	<b>1,084,195</b>	<b>GJ</b>
<b>Energy sold</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>GJ</b>
<b>Energy intensity<sup>3</sup></b>	<b>2.43</b>	<b>2.27</b>	<b>2.21</b>	<b>GJ/tonne or M<sup>3</sup> of production</b>
<b>Greenhouse gas emissions<sup>4</sup></b>				
Scope 1 – direct	22,036	22,529	22,131	tonne CO <sub>2</sub> e
Scope 2 – energy indirect	81,580	83,965	83,700	tonne CO <sub>2</sub> e
Scope 3 – other indirect	n/a	n/a	n/a	
<b>Total greenhouse gas emissions</b>	<b>103,616</b>	<b>106,494<sup>5</sup></b>	<b>105,830</b>	<b>tonne CO<sub>2</sub>e</b>
<b>Greenhouse gas intensity<sup>6</sup></b>	<b>0.243</b>	<b>0.243</b>	<b>0.216</b>	<b>tonne CO<sub>2</sub>e/tonne or M<sup>3</sup> of production</b>

1. United States Energy Information Administration (EIA) conversion factors have been applied.

2. Energy consumption for 2017 has been restated, it was erroneously reported as 1,006,710 GJ.

3. Energy intensity includes only energy consumed within the organisation, as reported under energy consumption.

4. Intra-governmental Panel on Climate Change (IPCC) default emission and global warming potential factors have been applied to estimate emissions. Electricity retailer conversion factors were applied to electricity indirect emissions, where available. Greenhouse gases included in the calculations are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O and R422d.

5. Greenhouse gas emissions for 2017 have been restated, these were erroneously reported as 101,433 tonne CO<sub>2</sub>e.

6. Greenhouse gas intensity includes only the scope 1 and 2 emissions reported under greenhouse gas emissions.

## Other air emissions

Our manufacturing sites also generate other, non-greenhouse gas air emissions. We have combustion emissions from steam-generating boilers and vehicle use as well as hazardous air pollutants (HAP), volatile organic compounds (VOC) and particulate matter (PM) generated by our formulation processes.

To reduce the environmental impact of our process emissions we use scrubbers and activated carbon filters. At our site in Linz, Austria we constructed an incinerator to eliminate our principal HAP. This project represented a significant investment and we saw the unit successfully commissioned during the year. We have achieved a reduction in our HAPs and

in a full year, we expect to eliminate over 90 per cent of Nufarm's total HAPs due to this single point source being addressed. Using the knowledge gained from implementing this technology, the site is now designing a second incinerator to address a large, single point source of VOC emissions.

While we have become accustomed to the smell of our products, some of them can be malodorous to nearby communities. One such community is that at Maracanaú in Brazil. This year our site has undertaken several projects to upgrade and replace emission control systems. The results have been promising so far and the projects will continue into 2019.

Our site in Merak, Indonesia installed an activated carbon scrubber this year to reduce VOC emissions. This will reduce local air emissions in 2019, when the unit is scheduled to be commissioned.

This year we identified that some sites have office air conditioning units in place containing R-22 (an ozone depleting substance). Each site is assessing their units and putting controls in place to prevent leaks until the gas can be extracted and properly disposed of. This year's emissions of ozone depleting substances (ODS) is attributable to losses from such units. Details of our non-greenhouse gas emissions can be found in table 14.

**Table 14 – Other air emissions**

(tonne)	2016	2017	2018
<b>Air emissions<sup>1,2</sup></b>			
Nitrogen oxides (NOx)	40	48	50
Sulphur oxides (SOx)	< 1	1	1
Carbon monoxide (CO)	18	20	18
Volatile organic compounds (VOC)	33	23	24
Persistent organic pollutants (POP)	0	0	0
Hazardous air pollutants (HAP)	4	3	2
Particulate matter (PM)	3	3	3
Ozone depleting substances (ODS) (CFC-11 equivalent)	0	0	< 1
Other air emissions	< 1	< 1	< 1
<b>Total air emissions</b>	<b>98</b>	<b>98</b>	<b>99</b>
<b>Air emission intensity (gm/ tonne or m3 of production)</b>	<b>229</b>	<b>223</b>	<b>202</b>

1. Air emissions have been determined by a combination of direct, online measurement, emissions monitoring and estimation.

2. The combustion emissions were understated in previous reports. These have been restated here for 2016 and 2017.

## Water and effluent

At Nufarm, water is an essential component of our products and we also use it for cleaning and cooling our manufacturing equipment. Our largest use of water is single use cooling water. All our sites have third party supplied water available to them and high quality input water is important for maintaining the quality of our products. Some of our sites access river and groundwater, which is primarily used for cooling water.

Growers who use our products need to mix these with water before applying them to their paddocks or crops. Nufarm develops multi-action products and products that support more complex tank mixes, helping to reduce the grower's water and resource use when applying our products.

There are competing uses for the groundwater at our site in Gaillon, France so we have been working to reduce our groundwater abstraction. To achieve this, the site installed cooling equipment in one of its processing areas. This and other activities have resulted in a 26 per cent reduction in groundwater use and contributed to the overall 226 ML reduction in water withdrawal this year. The reduction in water use has led to a corresponding drop in water discharge. Further details can be found in Table 15.

Each of our manufacturing sites has been tasked with establishing a water stewardship program involving a comprehensive water balance, identification of water related impacts in their catchment and Nufarm's influence on these, an assessment of risk and control measures to measures quantify these risks.

Depending on the infrastructure and regulatory restrictions at the location of our operations, we treat our waste on site, dispose of it to domestic sewers and/or use third party waste water treatment facilities. At some locations, we also treat all rainwater that falls onto our sites to ensure that even very low levels of chemical are not released directly into waterways. Several of our sites are located on rivers and our treated and monitored effluent is approved by local regulators to be safely discharged back into these rivers. All effluent discharges are monitored and we are focused on complying with discharge limits established by the local regulators. Our largest facilities have online monitoring which immediately stops effluent from discharging if limits are approached.

There are strict quality and regulatory controls on our products that require us to thoroughly clean our production equipment between production campaigns. This can limit the suitability of the wash water for recycling and reuse applications. We are researching new advanced technologies to improve the quality of our effluent and will upgrade our water treatment plant at our facility at Maracanaú, Brazil and Merak, Indonesia, within the next year.

Last year we built a solvent extraction plant at our site in Wyke, UK, which we commissioned this year. This plant has successfully reduced raw material and process water consumption while eliminating 420 tonnes of chemical oxygen demand (COD) from the site's effluent. At Linz, Austria we installed carbon filters on an effluent stream reducing both the absorbable organic halides (AOX) and solvent components in the effluent by over 90 per cent.

The largest chemical component of our effluent is salt, which is a waste product of our phenoxy synthesis operations. This salt results in some of our wastewater discharges exceeding a total dissolved solids (TDS) concentration of 1,000 mg/L.

We had no significant impact on natural water bodies from either effluent discharges or run-off from our sites this year.

**Table 15 – Water withdrawal and discharge**

(ML)	2016	2017	2018
<b>Water withdrawal by source<sup>1</sup></b>			
Surface water (total)	4,134	4,176	4,099
Freshwater (≤ 1,000 mg/L TDS <sup>2</sup> )	4,134	4,176	4,099
Other water (> 1,000 mg/L TDS)	0	0	0
Groundwater (total)	702	601	442
Freshwater (≤ 1,000 mg/L TDS)	702	601	442
Other water (> 1,000 mg/L TDS)	0	0	0
Seawater (total)	0	0	0
Produced water (total)	0	0	0
Third-party water (total)	791	794	804
Freshwater (≤ 1,000 mg/L TDS)	791	794	804
Other water (> 1,000 mg/L TDS)	0	0	0
Rainwater collected and stored	1	0	0
<b>Total water withdrawal</b>	<b>5,628</b>	<b>5,571</b>	<b>5,345</b>
<b>Water withdrawal intensity (KL/tonne or M<sup>3</sup> of production)</b>	<b>13.19</b>	<b>12.70</b>	<b>10.91</b>
<b>Water discharge by destination<sup>3</sup></b>			
Surface water	4,711 <sup>4</sup>	4,586 <sup>4</sup>	4,445
Groundwater	< 1	< 1	0
Seawater	0	0	0
Third-party water (total)	648	659	687
Third-party water sent for use to other organisations	0	0	0
Unplanned discharge	0	0	0
<b>Total water discharge</b>	<b>5,359</b>	<b>5,245</b>	<b>5,132</b>
<b>Water discharge intensity (KL/tonne or M<sup>3</sup> of production)</b>	<b>12.56</b>	<b>11.96</b>	<b>10.47</b>
<b>Water discharge by freshwater and other water</b>			
Freshwater (≤ 1,000 mg/L TDS)	n/a	n/a	< 304
Other water (> 1,000 mg/L TDS)	n/a	n/a	≥ 383
<b>Water consumption</b>			
Total water consumption	269	326	211

1. All water withdrawal determined from direct, meter measurements or from municipal water supplier billing.

2. TDS is the total dissolved solids.

3. Water discharge (effluent) has been determined by direct meter measurement.

4. 11 ML of surface water discharge was erroneously reported as groundwater discharge in 2016. 10ML of surface water discharge was erroneously excluded in 2017. Both omissions have been corrected here.

## Waste

Responsible management and reduction of waste is a growing challenge faced by companies and communities alike, and Nufarm is no exception. Our manufacturing sites generate both hazardous and non-hazardous waste

originating from spent raw material packaging, cleaning operations and past use-by-date or obsolete product returned from customers. Where possible, we rework the wash waters and out-of-specification material to minimise generating additional waste.

Table 16 provides further details of our wastes, however this type of reuse of materials is not reported here.

This year, the increase in production has resulted in an increase in the total waste produced.



**Table 16 – Waste and waste transport**

(tonne)	2016	2017		2018	
	Waste	Non-hazardous	Hazardous	Non-hazardous	Hazardous
<b>Waste type and disposal<sup>1</sup></b>					
Reused	0	1	284	116	347
Recycled	7,953	4,762 <sup>2</sup>	540	5,264	718
Composted	0	0	0	0	0
Recovered (including energy recovery)	2,969	1,159	2,848	1,349	4,169
Third party treatment	1,781	278	1,580	411	1,464
Incineration	4,993	199	8,419	320	10,412
Deep well injection	4	0	2,051	0	912
Landfill	1,727	1,026	451	937	271
On-site storage	128 <sup>3</sup>	283	109 <sup>3</sup>	0	196
<b>Total waste</b>	<b>19,555</b>	<b>7,708</b>	<b>16,282</b>	<b>8,398</b>	<b>18,489</b>
<b>Waste intensity</b> (Kg/tonne or M <sup>3</sup> of production)	<b>45.8</b>	<b>17.6</b>	<b>37.1</b>	<b>17.1</b>	<b>37.7</b>
<b>Transport of hazardous waste<sup>4</sup></b>					
Hazardous waste transported	n/a	-	15,889	-	17,946
Hazardous waste imported	n/a	-	0	-	0
Hazardous waste exported	n/a	-	164	-	224
Hazardous waste treated	n/a	-	1,580	-	2,284
% of hazardous waste exported	n/a	-	1	-	1

1. Waste disposal method has been determined from information provided by the waste contractor.

2. Recycled, non-hazardous waste was erroneously reported at 4,830 tonnes.

3. Stored hazardous waste was erroneously omitted in early reports. This has been restated for 2016 and 2017.

4. All waste not reused or recycled on the same Nufarm site as it is generated is transported.

### Soil and groundwater

We provide primary and secondary containment for our chemicals at our manufacturing facilities to minimise the risk of a loss of containment to the environment. This year we have made solid progress in our process safety management (PSM) program, the objective of which is to prevent a loss of containment through application of rigorous layers of protection. Our sites have also been incorporating chemical spill containment and clean-up into their emergency response training programs.

Some manufacturing sites Nufarm acquired in the past operate on land that has a long history of chemical manufacturing. Where needed, we undertook some remediation activities when taking ownership of these properties. This year we continued with studies to identify potential legacy contamination at sites such as these to help us identify if further remediation will be needed in the future.

Unfortunately, we had two significant spills this year. The first was the leakage of an underground effluent tank at our site in Linz, Austria. Due to the leak detection

equipment in place, this was quickly detected and remediation activities initiated. These are now well progressed, with the leak being fully contained within the site. The second was the overflow of untreated water from the rainwater treatment system at our site in Kwinana, Australia. This incident was the result of a power outage in the supply network, during an extreme rain event. The unplanned release did not exceed discharge limits so no remediation was necessary. Neither incident resulted in off-site environmental impacts or presented a risk to human health.

**Table 17 – Significant spills and location**

(KL)	2016	2017	2018
Waste <sup>1</sup> to soil	n/a	3,000	1,000
(Location)		(Linz, Austria)	(Linz, Austria)
Water to soil	n/a		750
(Location)			(Kwinana, Australia)

1. Wastewater

## Environmental management systems

Last year we established new corporate environmental procedures to support our corporate health, safety and environmental (HSE) standard. These procedures set a higher level of environmental performance for our businesses. To embed the requirements of these procedures, we commenced an environmental improvement program at our manufacturing sites. This began with each site undertaking an environmental gap analysis against these procedures. This year we completed those analyses and developed environmental gap closure plans. These plans focus on the key, potential environmental impacts of our manufacturing sites, such as soil and groundwater, waste, effluent and emissions.

Recognising that a strong environmental management system sets the foundation for sustainable, best practice environmental management, there will be a focus on improving the principal elements of our environmental management systems next year as sites develop environmental compliance registers and calendars; prepare and risk assess aspects and impacts registers; and identify control measures to reduce environmental risk as low as reasonably practicable (ALARP). While next year will be a busy year for our sites, the long-term nature of some environmental monitoring activities means that the plans extend for several years. Our sites remain on target and have implemented 14 per cent of the planned environmental gap closure actions this year.

We have best practice environmental management systems (EMS) in place at our manufacturing sites in Wyke, UK, Gaillon, France and Merak, Indonesia, which are all certified to ISO14001. Our site in Linz, Austria is well progressed in implementing an ISO14001 EMS with certification planned for next year. Our Port Klang site in Malaysia will commence work on an ISO14001 EMS in 2019 while our Pipe Road site in Australia has begun work on an ISO14001 equivalent EMS.

## Environmental training

While we provide environmental training to our people, we learnt through our environmental gap analyses that we could do better. This year we provided over 2,000 hours of environmental training, up from 1,000 hours last year.

Through the implementation of our plans, we intend to increase the depth and breadth of this activity.

## Environmental compliance

Our sites operate under the environmental regulatory regime of the country of their operation. We are committed to being fully compliant with environmental regulations in the jurisdictions that we operate. From time to time incidents may arise that result in the regulators issuing remedial notices as a part of their regulatory oversight. Nufarm works with these regulators to ensure full compliance with their requirements and also addressing the underlying cause of the incidents. While we have a goal of zero non-compliance with regulatory requirements, this year we had 13. Two of these related to the significant spills detailed in the section on soil and groundwater. The balance related to remedial notices which were promptly actioned during the year, or have high priority projects underway that will be completed within the timeframes set out by the relevant regulator.

We have not received any monetary fines or sanctions related to these items.

Where required, sites undertake compliance testing of their air and water emissions to the environment. In 2016, we undertook a rationalisation of our manufacturing sites. By 2017 there were less sites to monitor and therefore less compliance tests carried out. This year some sites have expanded the number of environmental parameters they include as a part of their routine monitoring programs. We consistently comply with 99 per cent of these test as can be seen in Figure 6.

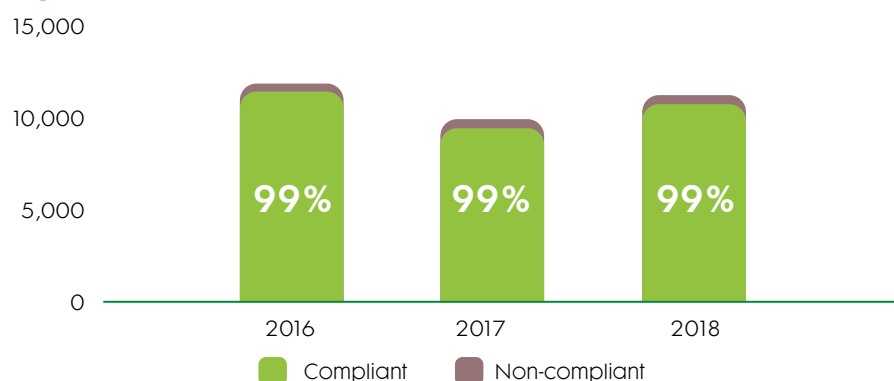
## Environmental complaints

While most of our sites are in industrial areas, some operate close to residential neighbourhoods and from time to time we receive complaints from our neighbours. We have complaint management processes in place at these sites to quickly investigate and respond to concerns raised by neighbours. This year we had two odour complaints where our investigations revealed our operations were the cause and a further two where we were potentially the cause. A project is underway at our site in Wyke to address the odour source. The second complaint was received at our site in Maracanau, Brazil, prior to upgrading our emissions controls at this site.

Table 18 – Environmental complaints

	2016	2017	2018
Number of complaints received where investigation revealed Nufarm was at fault	0	5	2
Number of complaints received where investigation revealed Nufarm was not at fault	2	2	3
Number of complaints where the cause was undetermined	3	2	2
<b>Total environmental complaints</b>	<b>5</b>	<b>9</b>	<b>7</b>

Figure 6: Environmental tests







## Product stewardship

Product stewardship is the way we bring responsible and ethical management to our agricultural chemicals and seeds. Through our sustainability strategy we are looking to further strengthen the responsibility we take for our products throughout their entire lifecycle.

All our new products undergo extensive evaluation and field trials to ensure that they comply with regulatory requirements. We refine our formulations and their use patterns to minimise their environmental impact and educate our customers and end users in their safe use and disposal.

### Working to reduce the environmental impact of our products

We are working to improve the environmental profile of products through a number of techniques such as substitution of solvents and adjuvants with either natural materials or ones with a low ecological profile. We also work to increase the concentration of our products to improve transportation efficiency and refine the formulations to support lower on-field chemical application rates.

In addition to improving our formulations, we have done extensive testing using different spray nozzles. This enables us to provide expert advice to growers on improving spray accuracy by using the best nozzles for the application.

### Supply chain

Our supply chain stewardship starts with sourcing raw materials and packaging. We are into our second year of corporate social responsibility (CSR) assessments with EcoVadis and have increased the number of supplier assessments in 2018. We have set a minimum standard for our suppliers and in 2019 we will work with suppliers who do not meet our standard to implement improvement plans.

In Europe, we have an ongoing process to ensure our existing purchased materials are REACH compliant. REACH, or registration, evaluation, authorisation and restriction of chemicals, is a European Union chemicals regulatory process, that has been put in place to further improve the protection of human health and minimise environmental risks. REACH compliance is now a standard element of our raw material sourcing process. It is also now a standard element in our new product development process.



Supply chain stewardship continues through to the distribution of our products. As a global business, it is necessary for us to rely on the services of third party distributors as well as our own. Transport of the company's products by road, rail and sea are very tightly regulated and the company uses specialist licensed service providers to transport its products in all regions. Where possible we manufacture locally, reducing the cost and environmental impact of transporting liquid products long distances. We apply United Nations (UN) packaging standards to our products to protect them on their journey so they arrive at our customers in the same condition as they left our sites.

### Sustainable packaging

We are working to minimise the impact of our packaging. We have several projects underway around the world to reduce packaging waste and increase the recycled content of our packaging. In Brazil we work with inpEV who operate a 'reverse supply chain' collecting used chemical containers from the field for recycling into new containers. inpEV supplies caps and drums made from 85 per cent recycled resin. Nufarm is working with the same supplier to develop new drums containing a higher amount of recycled material. In Australia, we are replacing our fluorinated containers with low environmental impact alternatives.

### Product labelling

Our products are heavily regulated in all jurisdictions in which they are marketed and sold, including the very specific requirements for product labelling and provision of safety data sheets. Regulatory controls require our products to be labelled with the active ingredient and its content along with relevant dangerous goods markings. Our safety data sheets provide further detail on the chemical composition of the product, safe use instructions and disposal, handling and storage and measures to take to protect the environment in the case of an accidental spill. In addition, we provide extensive technical information to assist growers to get optimal benefit from our products.

### Container management and obsolete stock

At the end of a product's life we partner with local service providers and non-profit organisations for the safe collection of empty containers. In Brazil, we work with inPEV, in Australia, drumMUSTER, in the United States, the Ag Container Recycling Council (ACRC) and with PAMIRA's agricultural packaging recovery system in Germany, to name a few. These organisations and others collect used agricultural chemical packaging from farmers and distributors and recycle the materials. Through these mechanisms, we reduce the impact our products have on landfill space and on non-renewable resources.

We have an ongoing project to rationalise our SKUs globally to reduce obsolete stock and drive efficiencies in our supply chain, reducing waste and impact to the environment.

### Integrated pest management

Integrated pest management is the combination of crop management methods aimed at delivering more effective and sustainable pest control strategies; some of these methods include biological controls, pest resistance and chemical controls.

#### Pest resistance

Pest resistance is an ongoing threat to global food security and a key driver of the need for integrated pest management. Nufarm continues to focus resources in this space, helping growers to improve crop productivity and food quality. We participate on CroLife's local and regional resistance committees: IRAC, FRAC and HRAC (insecticide, fungicide and herbicide resistance action committees). We are involved in research projects to further our understanding of resistance mechanisms.

We also have a range of initiatives and decision tools to support and educate growers in managing herbicide resistance. The CATS (CombAt Troublesome weeds) platform in the United States provides comprehensive integrated weed management solutions to help growers control and prevent the development of resistant weed populations. In conjunction with the Australian growers, we developed Weed Logic, a tool that



provides the growers with a medium-term strategy for sustainable and cost-effective resistance management.

In Australia, Nufarm is a sponsor of WeedSmart ([weedsmart.org.au](http://weedsmart.org.au)), a program where industry, governments and universities have partnered to enhance on-farm practices and promote the long term, sustainable use of herbicides.

### Responsible use

We actively work with growers to educate them in the responsible and safe use of our products. Globally we belong to CroLife, an international organisation that undertakes stewardship activities and advocates for the safe and sustainable use of crop protection products.

In all our regions we provide training and advice on using our products safely and sustainably.

In Australia, Nufarm continues to invest in SprayWise® Decisions, an innovative internet subscription service that helps rural landholders and contractors to better plan and match the timing of chemical applications to prevailing local weather. Nufarm also runs the SprayWise® program which has been instrumental in helping growers better manage their spraying activities, minimising drift, reducing chemical use and maximising spray effectiveness.

Nufarm continues to provide spray guidance to product users through hands on educational workshops. These workshops reiterate good spraying practices, nozzle selection and provide growers with opportunities to ask questions.

Excellence Through Stewardship (ETS) is a global industry-coordinated organisation that promotes the universal



adoption of stewardship programs and quality management systems for the full life cycle of biotechnology-derived plant products. Nuseed, our wholly owned subsidiary, belongs to this organisation ensuring our stewardship and quality management systems meet or exceed these internationally-recognised standards, and applying them to our biotechnology portfolio globally, including DHA omega-3 canola. ETS will facilitate third party audits of Nuseed's biotechnology processes as part of our continuous improvement process.

### Safety and quality

Our regulatory team members play an active role in regulatory reviews around the world. We respond to questions or issues raised by regulators either in our own right, or as part of the relevant industry taskforce, which will generate the necessary data. Nufarm participates in taskforces globally including the 2,4-D taskforce and the Glyphosate taskforce in Europe.

All our products are developed and manufactured to strict global quality and safety standards. These standards were designed with a focus on ensuring our products are safe to use, with industry regulatory requirements as the baseline. Our standards also consider grower needs and application requirements to ensure we deliver a safe, effective product.

We proactively work with our suppliers to consider the latest innovation trends for inclusion into our portfolio. These innovation trends could be driven by sustainability, performance or application safety. We have laboratories in all our regions where we extensively test our products to ensure quality and safety levels and to meet the stringent regulatory requirements needed to sell our products around the world. Throughout our development process our products undergo compliance checks in line with regional requirements, e.g. REACH compliance in Europe

### Regulatory changes

Glyphosate is one of our core molecules and while extensive scientific evaluation by public authorities has concluded that glyphosate poses no unacceptable risks to either health or the environment if used according to the manufacturer's label,

glyphosate continues to be a high-profile topic. There has been public concern about the impact of glyphosate on human health following a legal case in the US in August 2018. This matter is ongoing. In 2018 Glyphosate was re-licensed by the European Commission for five years, although this is a shorter time period than would normally apply.

Nufarm is a member of the European Glyphosate Task Force and our European strategy focuses on products that are fully compliant with the new, lower use rate conditions of registration. Nufarm has responded to the regulatory changes in Europe and our European glyphosate portfolio complies with the new European Union requirements for glyphosate composition.

In North America, we are a member of the Joint Glyphosate Task Force, formed to generate data in support of regulatory re-evaluation. In Australia, Nufarm is part of the glyphosate sustainability working group, an industry-based body that forms recommendations and advice on strategies to mitigate resistance issues.

Glyphosate continues to be approved as safe for use by regulatory authorities around the world, including the United States, Australia, New Zealand, Europe and Canada.

There have been regulatory challenges in 2018 with the restrictions of certain active ingredients in some regions. In April 2018, the European Union restricted three neonicotinoid products; clothianidin, imidacloprid and thiamethoxam to indoor use only, requiring growers to seek alternative solutions. However, these products are approved for use by regulatory authorities in other regions including Australia, Brazil and the United States.

### Partnerships

Nufarm has a number of partnerships with other organisations. In June 2018 Nufarm announced an alliance with Farmers Edge, a global leader in precision agriculture. Under this alliance, Nufarm's channel partners will be able to distribute the Farmers Edge suite of precision agriculture digital solutions. These include daily satellite imagery from the most comprehensive farm and risk management platform available called

Farm Command™. The platform provides growers with valuable rapid insights and analytics to maximise their crop productivity, profitability and sustainability. Nufarm has also partnered with other companies to market biological crop protection products. One of our partnerships is with Bio-ferm who have developed biological fungicides for use in vines and pome fruit trees. This year we launched Botector® in Australia, a biological fungicide developed by Bio-ferm that prevents botrytis in grapes. We also market Botector® in France, Portugal, Netherlands, Turkey, Greece and Canada. In Canada we also market Blossom Protect™ a biological fungicide that provides effective protection against fire blight for pome fruit trees.

These partnerships enable Nufarm to offer products that will improve productivity with minimal environmental impact.

**Botector®** 



Demonstrating personal protective equipment whilst spraying.



## Community

We are committed to building a company that delivers a sustainable future for our people, our customers and the communities in which we operate. We aim to make a positive contribution to these communities as well as society as a whole in the countries we operate in with a focus on rural communities.

We operate in a diverse number of locations and countries and our manufacturing sites develop their own community engagement programs that best fit their local environment. Many of our manufacturing sites are in industrial zones; however, there are several that are close to residential zones and in these locations we work closely with local communities. None of Nufarm's operations have a significant actual or potential negative impact on their local communities.

### Engaging with our local communities

In 2018 our manufacturing facility in Wyke established a relationship with the local primary school, Worthinghead Primary, which is located very close to the site. The partnership commenced with a group of Nufarm employees spending a day at the

school improving the gardens and play area. As well as strengthening community relations, we wanted to encourage interest in STEM (Science, Technology, Engineering and Maths) subjects and to increase awareness of safety and the importance of following rules and procedures. We organised for 60 of the older children and their teachers to spend an afternoon visiting the Nufarm site, to learn about what we do. The feedback from the children and teachers was extremely positive and the Wyke team are currently planning further activities and volunteering days for 2019.

This year, Nufarm's North American business has continued to support Greencare for Troops. Greencare for Troops provides lawn and landscaping services to the families of deployed military personnel and post 9/11 veterans. In 2018 Nufarm employees

have volunteered their time and made donations that have been matched by Nufarm. Nufarm continues to partner with Chicago High School for Agricultural studies (CHAS), hosting students at our sites on a regular basis.

At our Maracanaú site in Brazil we have had a corporate social responsibility program in place since 2009. Through the program we run a number of community engagement and support activities with employee support. This year we launched a new 'Conscious School' project which is an environmental awareness program for students at public schools in Maracanaú based around the 5 R's; Re-educate, Reduce, Reuse, Rethink and Recycle. One of the core activities was building a sustainable garden for a local school.

In Brazil, Nufarm has also continued to partner with Enactus, an international



Pupils from Worthinghead Primary School visiting Nufarm's Wyke site.

non-profit organisation that brings together student, academic and business leaders who are committed to using the power of entrepreneurial action to improve the quality of life and standard of living for people in need. Nufarm sponsored the Nufarm Award for Conscience and Ethics, focused on raising awareness in the correct use of agrochemicals by small agricultural producers in the Ceara region as well as supporting the National Enactus Competition.

In Merak, Indonesia, we assisted with maintenance of a high school building in Pontang area, Banten Province, repairing ceilings, painting the building and providing garbage bins. Students from the local high school are provided internship opportunities at our site.

At our manufacturing site in Port Klang Malaysia, we engaged with the National Autism Society of Malaysia (Nasom) Klang Branch, to provide learning opportunities for approximately 30 students at our manufacturing site. The site also made a financial contribution to this organisation.

Nufarm's Australian business continues its established partnerships with local agricultural colleges to provide students with insights into the crop protection industry and career opportunities available within agriculture. Throughout calendar year 2018, over 70 students visited the Pipe Road and Raymond Road facilities spending time engaging with Nufarm's sales, laboratory and manufacturing teams.

These programs would not be such a success without the dedication of Nufarm employees, who volunteered over 400 hours of their time to our local communities this year.

### Supporting global education and innovation in farming

The Nuffield Farming Scholarship program provides a unique opportunity for farmers and agribusiness professionals to travel

internationally for a minimum of 16 weeks, researching agricultural production, distribution, management and/or communication. 2019 will see us sponsor a scholarship in Brazil for the third year. Next year we will also support the re-establishment of the Nuffield scholarship program in Zimbabwe.

In addition to funding the scholarships, we have supported the program by providing travel support and advice to scholars through our global network.

In 2019 we will commence the development of a global policy that establishes expectations across Nufarm regarding community engagement as core to our business sustainability and social licence to operate.



Nufarm Maracanaú employee volunteers

# GRI content index

GRI Standard and disclosure titles	Reference	Comments
<b>General disclosures</b>		
<b>GRI 102: General disclosures 2016</b>		
102-1: Name of the organisation	Page 2 in About this report	
102-2: Activities, brands, products, and services	Page 6 in About us	
102-3: Location of headquarters	Pages 4-5 in Nufarm at a glance and page 6 in About us	
102-4: Location of operations	Page 6 in About us	
102-5: Ownership and legal form	Page 6 in About us	
102-6: Markets served	Pages 4-5 in Nufarm at a glance and page 6 in About us	
102-7: Scale of the organisation	Pages 4-5 in Nufarm at a glance and pages 6-8 in About us	
102-8: Information on employees and other workers	Page 24 in Our people	
102-9: Supply chain	Page 8 in About us	
102-10: Significant changes to the organisation and its supply chain	Page 2 in About this report and Page 6 in About us	
102-11: Precautionary principle or approach		Nufarm has a risk based approach to identifying potential social or environmental impacts of its operations or products.
102-12: External initiatives	Page 32 in Governance	
102-13: Membership of associations	Page 32 in Governance page 40 in Product stewardship	
102-14: Statement from senior decision-maker	Managing director's message, page 11	
102-15: Key impacts, risks, and opportunities	Pages 30-31 in Governance and pages 24 -30 in Nufarm's 2018 annual financial report	
102-16: Values, principles, standards, and norms of behaviour	Pages 6-7 in About us	
102-17: Mechanisms for advice and concerns about ethics	Page 7 of our Code of conduct which can be found at <a href="https://cdn.nufarm.com/wp-content/uploads/2018/10/08170437/Nufarm_Code-Of-Conduct-July2016.pdf">https://cdn.nufarm.com/wp-content/uploads/2018/10/08170437/Nufarm_Code-Of-Conduct-July2016.pdf</a> and page 31 in Governance	
102-18: Governance structure	Pages 30-31 in Governance	
102-19: Delegating authority	Pages 30-31 in Governance	
102-20: Executive-level responsibility for economic, environmental, and social topics	Pages 30-31 in Governance and refer also to the executive management section of our 2018 annual financial report, page 8	
102-21: Consulting stakeholders on economic, environmental, and social topics	Pages 14-15 in Engaging our stakeholders	
102-22: Composition of the highest governance body and its committees	Pages 30-31 in Governance, table 12 on page 27 in Our people and pages 1-4 of Nufarm's board charter, available at <a href="https://cdn.nufarm.com/wp-content/uploads/2018/10/16123022/NUFARM_BOARD_CHARTER-161018.pdf">https://cdn.nufarm.com/wp-content/uploads/2018/10/16123022/NUFARM_BOARD_CHARTER-161018.pdf</a>	
102-23: Chair of the highest governance body	Page 30 in Governance	
102-24: Nominating and selecting the highest governance body	Pages 8-9 of Nufarm's board charter, available at <a href="https://cdn.nufarm.com/wp-content/uploads/2018/10/16123022/NUFARM_BOARD_CHARTER-161018.pdf">https://cdn.nufarm.com/wp-content/uploads/2018/10/16123022/NUFARM_BOARD_CHARTER-161018.pdf</a> Refer also to Nufarm's policy on the nomination and appointment of directors, available at <a href="https://cdn.nufarm.com/wp-content/uploads/2018/10/08170455/Nufarm_Nomination-and-Appointment-of-Directors-Policy-2018.pdf">https://cdn.nufarm.com/wp-content/uploads/2018/10/08170455/Nufarm_Nomination-and-Appointment-of-Directors-Policy-2018.pdf</a>	
102-25: Conflicts of interest	Page 31 in Governance and also page 12 of Nufarm's board charter, available at <a href="https://cdn.nufarm.com/wp-content/uploads/2018/10/16123022/NUFARM_BOARD_CHARTER-161018.pdf">https://cdn.nufarm.com/wp-content/uploads/2018/10/16123022/NUFARM_BOARD_CHARTER-161018.pdf</a>	
102-26: Role of highest governance body in setting purpose, values, and strategy	Page 7 in About us, page 1 of management and oversight over the company, available at <a href="https://cdn.nufarm.com/wp-content/uploads/2018/10/08170450/Nufarm_Management-Oversight-of-the-Company-Oct2012.pdf">https://cdn.nufarm.com/wp-content/uploads/2018/10/08170450/Nufarm_Management-Oversight-of-the-Company-Oct2012.pdf</a> and Nufarm's health, safety and environment board committee charter, available at <a href="https://cdn.nufarm.com/wp-content/uploads/2018/10/08170446/Nufarm_Health-Safety-and-Environment-Committee-Charter-Mar2015.pdf">https://cdn.nufarm.com/wp-content/uploads/2018/10/08170446/Nufarm_Health-Safety-and-Environment-Committee-Charter-Mar2015.pdf</a>	
102-27: Collective knowledge of highest governance body		Information unavailable
102-28: Evaluating the highest governance body's performance	Refer to Nufarm's policy on performance of board and key executives, available at <a href="https://cdn.nufarm.com/wp-content/uploads/2018/10/08170457/Nufarm_Performance-of-Board-and-Key-Executives-Oct2012.pdf">https://cdn.nufarm.com/wp-content/uploads/2018/10/08170457/Nufarm_Performance-of-Board-and-Key-Executives-Oct2012.pdf</a>	
102-29: Identifying and managing economic, environmental, and social impacts	Pages 30-32 in Governance and Nufarm's health, safety and environment board committee charter, available at <a href="https://cdn.nufarm.com/wp-content/uploads/2018/10/08170446/Nufarm_Health-Safety-and-Environment-Committee-Charter-Mar2015.pdf">https://cdn.nufarm.com/wp-content/uploads/2018/10/08170446/Nufarm_Health-Safety-and-Environment-Committee-Charter-Mar2015.pdf</a>	



GRI Standard and disclosure titles	Reference	Comments
102-30: Effectiveness of risk management processes	Pages 30-31 in Governance and Nufarm's audit and risk board committee charter, available at <a href="https://cdn.nufarm.com/vwp-content/uploads/2018/10/08170430/Nufarm_Audit-Risk-Committee-Charter-180116.pdf">https://cdn.nufarm.com/vwp-content/uploads/2018/10/08170430/Nufarm_Audit-Risk-Committee-Charter-180116.pdf</a>	
102-31: Review of economic, environmental, and social topics	The board committees meet at least three times per year to review a range of topics, including economic, environmental and social topics.	
102-32: Highest governance body's role in sustainability reporting	This report was reviewed and approved by Nufarm's HSE board committee chair, Gordon Davies and by Nufarm's chief executive officer, Greg Hunt.	
102-33: Communicating critical concerns	Page 32 in Governance	
102-34: Nature and total number of critical concerns	Page 32 in Governance	
102-35: Remuneration policies	Pages 36-52 of Nufarm's 2018 annual financial report	
102-36: Process for determining remuneration	Page 28 in Our people	
102-37: Stakeholders' involvement in remuneration		Information unavailable
102-38: Annual total compensation ratio		Information unavailable
102-39: Percentage increase in annual total compensation ratio		Information unavailable
102-40: List of stakeholder groups	Pages 14-15 in stakeholder engagement	
102-41: Collective bargaining agreements	Page 28 in Our people	
102-42: Identifying and selecting stakeholders	Pages 14-15 in stakeholder engagement	
102-43: Approach to stakeholder engagement	Pages 14-15 in stakeholder engagement	
102-44: Key topics and concerns raised	Pages 14-15 in stakeholder engagement	
102-45: Entities included in the consolidated financial statements	Note 35, Group entities on pages 106-109 of Nufarm's 2018 annual financial report	
102-46: Defining report content and topic boundaries	Page 2 in about this report	
102-47: List of material topics	Page 12 in Materiality	
102-48: Restatements of information	Table 5 on page 17 in Safety. In Environment: table 13 on page 33, table 14 on page 34, table 15 on page 35, table 16 on page 36	
102-49: Changes in reporting		There have been no significant changes to material topics or boundaries in 2018.
102-50: Reporting period	Page 2 of About this report	
102-51: Date of most recent report	Page 2 of About this report	
102-52: Reporting cycle	Page 2 of About this report	
102-53: Contact point for questions regarding the report	Page 2 of About this report	
102-54: Claims of reporting in accordance with the GRI standards		While Nufarm continues to progress towards meeting the full requirements of the GRI sustainability reporting standards, this report does not yet meet all of the requirements of the standards.
102-55: GRI content index	Pages 44-49, GRI content index	
102-56: External assurance		This report has not had external assurance.
<b>Material disclosures</b>		
<b>GRI 201: Economic performance 2016</b>		
201-1: Direct economic value generated and distributed	Table 1 on page 8 in About us	
201-2: Financial implications and other risks and opportunities due to climate change		Information unavailable
201-3: Defined benefit plan obligations and other retirement plans	Note 26, employee benefits on pages 90-91 of Nufarm's 2018 annual financial report and page 28 of People	
<b>GRI 202: Market presence 2016</b>		
202-1: Ratios of standard entry level wage by gender compared to local minimum wage		Information unavailable
<b>GRI 203: Indirect economic impacts 2016</b>		
203-1: Infrastructure investments and services supported		No significant investments in infrastructure or services were made this year.
203-2: Significant indirect economic impacts		Information unavailable

GRI Standard and disclosure titles	Reference	Comments
<b>GRI 205: Anti-corruption 2016</b>		
205-1: Operations assessed for risks related to corruption	Page 32 in Governance	
205-2: Communication and training about anti-corruption policies and procedures	Page 31 in Governance	
205-3: Confirmed incidents of corruption and actions taken	Page 32 in Governance	
<b>GRI: 206 Anti-competitive behaviour 2016</b>		
206-1: Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	Page 32 in Governance	
<b>GRI: 301 Materials 2016</b>		
301-1: Materials used by weight or volume		Information unavailable
301-2: Recycled input materials used		Information unavailable
301-3: Reclaimed products and their packaging materials		Information unavailable
<b>GRI: 302 Energy 2016</b>		
302-1: Energy consumption within the organisation	Table 13 on page 33 in Environment	
302-2: Energy consumption outside of the organisation	Information unavailable	
302-3: Energy intensity	Table 1 on page 33 in Environment	
302-4: Reduction of energy consumption	Page 33 in Environment	We do not have the information available to quantify how much of this year's energy reduction is directly attributable to energy conservation activities.
302-5: Reductions in energy requirements of products and services		Information unavailable
<b>GRI: 303 Water and effluents 2018</b>		
303-1: Interactions with water as a shared resource	Page 34 in Environment	
303-2: Management of water discharge-related impacts	Pages 34-35 in Environment	
303-3: Water withdrawal	Table 15 on page 35 in Environment	
303-4: Water discharge	Table 15 on page 35 in Environment	
303-5: Water consumption	Table 15 on page 35 in Environment	
<b>GRI: 305 Emissions 2016</b>		
305-1: Direct (Scope 1) GHG emissions	Table 13 on page 33 in Environment	
305-2: Energy indirect (Scope 2) GHG emissions	Table 13 on page 33 in Environment	
305-3: Other indirect (Scope 3) GHG emissions		Information unavailable
305-4: GHG emissions intensity	Table 13 on page 33 in Environment	
305-5: Reduction of GHG emissions	Page 33 in Environment	
305-6: Emissions of ozone-depleting substances (ODS)	Page 34 in Environment	
305-7: Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Table 14 on page 34 in Environment	
<b>GRI: 306 Effluents and wastes 2016</b>		
306-1: Water discharge by quality and destination	Table 15 on page 35 in Environment	
306-2: Waste by type and disposal method	Table 16 on page 36 in Environment	
306-3: Significant spills	Table 17 on page 36 in Environment	
306-4: Transport of hazardous waste	Table 16 on page 36 in Environment	
306-5: Water bodies affected by water discharges and/or runoff	Page 35 in Environment	
<b>GRI: 307 Environmental compliance 2016</b>		
307-1: Non-compliance with environmental laws and regulations	Page 37 in Environment	
<b>GRI: 308 Supplier environmental assessment 2016</b>		
308-1: New suppliers that were screened using environmental criteria	Pages 22-23 in Ethical sourcing	
308-2: Negative environmental impacts in the supply chain and actions taken	Pages 22-23 in Ethical sourcing	
<b>GRI: 401 Employment 2016</b>		
401-1: New employee hires and employee turnover	Table 10 on page 25 in Our people	
401-3: Parental leave	Table 9 on page 25 in Our people	
<b>GRI: 403 Occupational health and safety 2018</b>		
403-1: Occupational health and safety management system	Page 20 in Safety	

GRI Standard and disclosure titles	Reference	Comments
403-2: Hazard identification, risk assessment, and incident investigation	Pages 18-19 in Safety	
403-3: Occupational health services	Pages 20-21 in Safety	
403-4: Worker participation, consultation, and communication on occupational health and safety	Page 20 in Safety	
403-5: Worker training on occupational health and safety	Page 20 in Safety	
403-6: Promotion of worker health	Page 21 in Safety	
403-7: Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Page 39 in Product stewardship	
403-8: Workers covered by an occupational health and safety management system	Page 20 in Safety	
403-9: Work-related injuries	Table 5 on page 17 in Safety	
403-10: Work-related ill health		Information unavailable
<b>GRI: 404 Training and education 2016</b>		
404-1: Average hours of training per year per employee	Page 28 in Our people	
404-2: Programs for upgrading employee skills and transition assistance programs	Page 28 in Our people	
404-3: Percentage of employees receiving regular performance and career development reviews	Page 28 in Our people	
<b>GRI: 405 Diversity and equal opportunity 2016</b>		
405-1: Diversity of governance bodies and employees	Table 12 on page 27 in Our people	
405-2: Ratio of basic salary and remuneration of women to men	Page 28 in Our people	
<b>GRI: 406 Non-discrimination 2016</b>		
406-1: Incidents of discrimination and corrective actions taken	Page 28 in Our people	
<b>GRI: 407 Freedom of association and collective bargaining 2016</b>		
407-1: Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Page 28 in Our people	
<b>GRI: 408 Child labour 2016</b>		
408-1: Operations and suppliers at significant risk for incidents of child labour	Page 28 in Our people and pages 22-23 in Ethical sourcing	
<b>GRI: 409 Forced and compulsory labour 2016</b>		
409-1: Operations and suppliers at significant risk for incidents of forced or compulsory labour	Page 28 in Our people and pages 22-23 in Ethical sourcing	
<b>GRI: 413 Local communities 2016</b>		
413-1: Operations with local community engagement, impact assessments, and development programs	Page 42 in Community	
413-2: Operations with significant actual and potential negative impacts on local communities	Page 42 in Community	
<b>GRI: 414 Supplier social assessment 2016</b>		
414-1: New suppliers that were screened using social criteria	Page 22 in Ethical sourcing	
414-2: Negative social impacts in the supply chain and actions taken	Pages 22-23 in Ethical sourcing	
<b>GRI: 416 Customer health and safety 2016</b>		
416-1: Assessment of the health and safety impacts of product and service categories		Information unavailable
416-2: Incidents of non-compliance concerning the health and safety impacts of products and services		Information unavailable
<b>GRI: 417 Marketing and labelling 2016</b>		
417-1: Requirements for product and service information and labelling	Page 39 in Product stewardship	
417-2: Incidents of non-compliance concerning product and service information and labelling		Information unavailable
417-3: Incidents of non-compliance concerning marketing communications		Information unavailable
<b>GRI: 419 Socioeconomic compliance 2016</b>		
419-1: Non-compliance with laws and regulations in the social and economic area	Page 20 in Safety	





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