

### **About this report**

This report provides information about the sustainability practices and performance of Nufarm's businesses including wholly owned subsidiaries for the year ending 31 July 2019 (referred to in this report as 2019). This reporting period aligns with our financial reporting.

Health and safety data in this report includes permanent and non-permanent employees across manufacturing sites, offices and regional service centres.
Environmental data excludes Nuseed, our sales offices and distribution centres, however these represent a small percentage of our environmental footprint.

In 2019 we commenced construction of a new formulation facility in Greenville, Mississippi in North America. We expect to begin including data for this facility in our 2020 report, once the plant is operational.

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, our report has been guided by the Global Reporting Initiative's (GRI) G4 Sustainability Reporting Standard, 2018.

In 2017 we completed a preliminary materiality assessment to identify the sustainability topics relevant to Nufarm and our industry. In response to the outcomes of our stakeholder engagement and analysis, we consolidate our material issues under the themes listed in this table of contents. We believe disclosure against these material issues will provide our stakeholders with a deeper understanding of our business, planning and actions.

This report has been reviewed and approved by Nufarm's Managing Director and Chief Executive Officer, Greg Hunt however it has not had external assurance.

Further information relating to our sustainability approach and performance is communicated through our website (www.nufarm.com), annual general meeting, annual report and disclosures to the Australian Securities Exchange (ASX). Our most recent previous sustainability report was released in 2018. This and previous annual reports can be downloaded from www.nufarm.com.

For further information about this sustainability report, please contact Nufarm's head office on +61 (0) 3 9282 1000.



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### **Managing Director's message**

When we launched our sustainability strategy in 2015 our aspiration was to achieve a step change in sustainability maturity and impact. As I reflect on our achievements and the improved disciplines, processes and structures we have put in place, I believe we have made the business stronger, more sustainable and more accountable to stakeholders for our performance.



Safety is our number one priority and the introduction of a global process safety management program has been a major element of the strategy implementation and a driver of improved safety performance.

In 2019, performance against our principal safety metric, Serious Injury Frequency Rate, deteriorated. This followed a long period of sustained improvement, including our best-ever performance in the prior year, and was a stark reminder that the road to zero harm is not necessarily a straight line. We have learned the importance of continually reinforcing safety as "top of mind", particularly in an environment where there has been a long period of improved performance. While we have expanded the focus of our sustainability efforts beyond safety and health over the past years, making sure every one of our colleagues gets home safely every day will continue to be our number one priority.

Improving environmental controls and outcomes has been another key area for progress during the period of strategy implementation. We have developed and implemented a global environmental standard that sets expectations around our key environmental risk areas of waste and emissions, soil and groundwater protection, and resource use and conservation. A gap analysis against the standard has been completed for all manufacturing operations and we have improved the principal

elements of our environmental management systems.

Our efforts have reduced the impact of our manufacturing facilities on the environment with reductions in water consumption, waste water discharge and air emissions since 2016 and we will continue to seek further improvement in these metrics.

In 2019 we made good progress closing gaps against our environmental standards and our management systems have been further strengthened with an additional two manufacturing sites obtaining ISO14001 certification. This brings the total number of our manufacturing sites with ISO14001 certification to five and this year we have committed to achieving certification at all manufacturing sites by 2024.

Our people and the Nufarm culture play a critical role in both delivering on the company's strategy and meeting community expectations. Over the past four years we have embedded common values and behavioural expectations that unite our global workforce and have helped us create "One Nufarm". We have formalised our position on matters such as modern slavery, equal opportunity and collective bargaining in our human rights policy and committed to lifting inclusion and diversity across our workforce. In 2019 we commenced execution of our three-year inclusion and diversity plan and established regional councils to support the achievement of our target of increasing female participation in our workforce.

Our product stewardship standards and processes support customers to meet growing societal concerns around the sustainability of modern agriculture. This will be an increasing focus for our product development and portfolio teams and will influence how we allocate funding to construct our portfolio of future products.

A significant milestone in advancing the maturity of our sustainability approach was the preliminary materiality assessment completed in 2017. This has helped confirm the issues relevant to Nufarm stakeholders and is an important step as we continue to broaden the focus of our sustainability efforts. In 2020 we will re-engage with external stakeholders to expand our materiality assessment to inform the next phase of our sustainability strategy.

There is more work to do. As we develop the strategy for the next phase of our sustainability journey, we will build on the strong base we have formed to further improve the impact of our operations and seek new ways to support growers in achieving their own sustainability goals.

**Managing Director and Chief Executive Officer** 

# Nufarm at a glance

#### **Global Footprint**



### **Our values**

#### At Nufarm, we live our RARE values everyday



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.



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



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



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

### Nufarm at a glance

Nufarm is a leading developer and manufacturer of crop protection solutions and seed technologies with 3,315 employees supporting customers in over 100 countries. Our business has two main reporting segments.

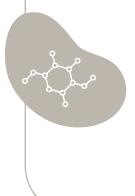


#### Seed **Technologies**

Seed technologies combines our seed treatment portfolio and the Nuseed business. Our seed treatment products provide protection and treatment for damage caused by insects, fungus and disease.

Nuseed is focused on plant-based solutions that deliver value BEYOND YIELD™. Through Nuseed we develop and distribute high yielding sunflower, sorghum and canola seed to customers in more than 30 countries.

We use our leading molecular capabilities, global genetics and industry collaboration to develop unique plant output traits with specific customer and consumer benefits such as our proprietary omega-3 canola.



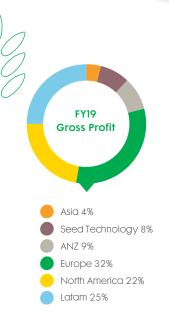
#### Crop **Profection**

We develop, manufacture and sell crop protection solutions including herbicides, insecticides and fungicides that help growers protect crops against weeds, pests and disease. We operate primarily in the off-patent market, providing customers with long-standing foundational products and unique formulations.

Our business is focused on five core crops across key geographies; Europe, North America, Asia Pacific and Latin America. Our key crops are cereals; corn; soybean; pasture, turf and ornamentals; and trees, nuts, vines and vegetables (TNVV).

Our global footprint means we manufacture, source and deliver high quality products at competitive prices.

We partner with leading industry and research organisations around the world to develop and offer new solutions to meet existing and emerging farmer needs across the lifecycle of our chosen crops.







### About us

For more than 100 years we've been finding more effective ways to fight disease, weeds and pests by turning world-leading scientific breakthroughs into local solutions. Our mission to "grow a better tomorrow" reflects our ambition for our customers, our people, communities and financial stakeholders.



#### Sustainability at Nufarm

Nufarm plays an important role supporting food security and nutrition for a growing population by helping farmers improve crop efficiency. We recognise the challenges they face in using limited natural resources in a sustainable way while responding to climate volatility and growing pressures on biodiversity.

We are committed to understanding these challenges and advancing change within our own organisation and throughout the value chain. We work in partnership with our customers, colleagues, suppliers, regulators, industry groups, and investors to assess, prioritise and manage sustainability-related risks and opportunities. We have adopted a risk-based approach to identifying potential social or environmental impacts of our operations or products.

Our approach focuses on the key areas where we have the most potential impact or the ability to influence positive change:

- Safety;
- Environment;
- People;
- Product stewardship and ethical sourcing; and
- Governance and ethical conduct.

These areas guided our materiality study which forms the basis of this report.

### Nufarm values and behaviours

To support our RARE values,
Nufarm has a board approved
code of conduct which guides
employees' decision making and
behaviour. New employees are
inducted into our code of conduct
when they join the organisation.
Our code of conduct has executive
ownership through the Nufarm
leadership team and can be found
in the Governance section of our
corporate website.

To support of our values and code of conduct, we have nine employee behaviours to guide our people in all their activities (see below).

It is Nufarm's objective to carry out our business with no adverse effect on our 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 products**

Nufarm holds more than 3,500 crop protection product registrations globally. 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, Stabilan, Nuprid, Kaiso, Amicide, Credit, Tazer, Cuproxat and Mystic.

Nuseed develops and sells canola, sunflower and sorghum seed.



















### About us (continued)

#### Our supply chain

We operate a global manufacturing and distribution platform with an extensive network of local distributors. This provides us with the benefits of global scale while delivering a responsive service to customers wherever they are located.

We have manufacturing and seed production facilities in 27 locations across the world. Our 12 crop protection manufacturing facilities are located in seven countries with the most significant locations being in Australia, Austria, UK, North America and Brazil. Nuseed has seed production operations in nine countries with the most significant being in Australia and North America.

Our distribution of manufacturing facilities enables us to tailor our products to suit local conditions and respond rapidly to customer needs. In 2019 we constructed a new formulation facility in Greenville Mississippi in North America to allow us to more efficiently supply our product in this market. This was opened early in our financial year 2020.

We primarily sell our crop protection and seed products direct to channel partners, who are distributors that sell directly to farmers and offer other agricultural inputs and advice.

Supplier location is just one of many considerations we evaluate when sourcing raw materials and packaging. We have significant suppliers located through Europe, Asia, North America, Brazil and Australia, and more than 3,000 suppliers around the world support

our global network. Our global procurement organisation operates out of three key hub locations in Australia, China and Switzerland.

### 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 percent of Nufarm Ltd shares. These alliances involve joint marketing rights to certain products, and research and development collaborations.

#### **Memberships**

Nufarm supports the global efforts towards achieving the United Nations Sustainable Development Goals, known as Transforming our world: the 2030 Agenda for Sustainable Development. We practise the standards established by a number of industry groups to which we belong. We are a member of Responsible Care, a global, voluntary initiative developed by the chemical industry that operates in over 65 countries.

We are a member of CropLife and belong to a range of regional and global taskforces that provide technical information relating to various products.

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.

### Financial and economic performance

Nufarm Limited is publicly owned and listed on the Australian Securities Exchange (ASX) (symbol NUF). Our global head office is located at Laverton North in Victoria, Australia.

The economic impact of our business extends beyond our own financial performance. Our contribution includes the direct employment of 3,315 people, along with the indirect employment that comes with significant operating locations, 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.

Our financial results are released annually and reflect the period 1 August to 31 July. We also release 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 percent of Nufarm's environmental footprint. Table 1 provides a summary of our financial results while Table 2 shows our total capitalised breakdown. Total group assets were \$5.68 billion up from \$5.05 billion last year.

Table 1 – Annual Financial Results

	Revenue			Ор	erating Cos	sts¹	Und	Underlying EBIT		
Year ended 31 July (\$000s)	2018	2019	Change	2018	2019	Change	2018	2019	Change	
Crop protection										
Australia and New Zealand	590,151	452,368	-23.3%	580,915	444,220	-23.5%	9,236	8,148	-11.8%	
Asia	170,680	190,285	11.5%	148,500	166,557	12.2%	22,180	23,728	7.0%	
Europe	642,571	814,845	26.8%	556,121	754,957	35.8%	86,450	59,888	-30.7%	
North America	833,705	1,020,448	22.4%	756,254	937,690	24.0%	77,451	82,758	6.9%	
Latin America	885,232	1,058,158	19.5%	794,459	967,779	21.8%	90,773	90,379	-0.4%	
Total Crop Protection	3,122,339	3,536,104	13.3%	2,836,249	3,271,203	15.3%	286,090	264,901	-7.4%	
Seed Technologies – global	185,508	221,486	19.4%	151,197	184,903	22.3%	34,311	36,583	6.6%	
Corporate	_	-		55,298	52,899		(55,298)	(52,899)		
Nufarm Group	3,307,847	3,757,590	13.6%	3,042,744	3,509,005	15.3%	265,103	248,585	-6.2%	

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

Table 2 – Capitalised Breakdown

Year ended 31 July (\$000s)	2018	2019
Net Debt	1,374,070	1,247,129
Equity	1,971,624	2,404,944
Total capitalised breakdown	3,345,694	3,652,073



<sup>2.</sup> A list of all entities included in Nufarm's consolidated financial statements can be found in pages 121 – 124 of our 2019 Annual Financial Report.



### 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.



#### Our approach to safety

The most significant safety hazards we manage relate to the processing of various chemicals at our manufacturing sites.

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, we apply 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 assessment, 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.

Our safety methodologies and their application are described 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, we engage relevant external resources to support the activity. The less complex hazard assessments carried out at a site's operations level are supported and facilitated

by trained health and safety professionals working with staff who supervise and operate the plant and equipment.

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 our 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.

Our HSE standard requires that all employees and non-Nufarm persons remove themselves from any situation where they believe illness or injury could result and to bring these unsafe conditions to the attention of management. They do this without fear of adverse consequence, and reporting safety risks is part of our culture.

#### Safety management systems (SMS)

Our SMS has been in place across our global operations for many years.

It comprises of our corporate health, safety and environment (HSE) policy, HSE standard, HSE procedures and site specific HSE procedures. These apply to all Nufarm employees and non-Nufarm persons.

The SMS 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, we engage appropriately qualified and experienced external consultants to advise on the issues at hand.

Our SMS meets industry standards for the plastics and chemicals industry as described by relevant global and regional bodies such as Chemistry Australia. It also aligns well with other established standards such as ISO 18001 Health and Safety Management Standard.

Our SMS is subject to continuous improvement arising from both internal and external review and developments.

We are a member of Responsible Care (an initiative of the international chemical industry to improve HSE performance) and through our membership we gain insight to advances in best practice that we can adopt across our own operations.

### Safety (continued)

### Process safety management

In 2017 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 our corporate teams and by regulators in the relevant jurisdiction. Compliance with PSM requirements is also subject to the major hazard facility (MHF) licensing regulations in many of the jurisdictions in which we operate. Our Pipe Road and Raymond Road sites in Australia are classified as MHF sites while our sites in Linz, Austria, Gaillon, France and Wyke, UK, all fall under Europe's Seveso III directive.

#### Incident Management

Hazards and incidents are recorded in our 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 notified to the Nufarm Chief Executive Officer within 24 hours of occurrence.

### Health and safety audits

Since the inception of our sustainability strategy four years ago, we have changed our approach to auditing, focusing on, and going more deeply into, fewer but higher risk incident hazards.

Our manufacturing sites are the current focus of our audit program as this is where the most serious hazards are located.

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.

Good practices identified during these audits are transferred to other sites facing similar challenges.
Reports and improvement actions arising from the audits are discussed by the group executive and board HSE committee.

Our sites are also regularly audited by government authorities to confirm compliance and we use external auditing organisations on an ad-hoc basis to test particular sites if a need is identified.

Office environments, while subject to the relevant requirements of the Nufarm SMS, are not formally audited but will be included in future program scheduling.

### Non-manufacturing safety

The most significant nonmanufacturing hazard within our global business involves our staff driving on public roads, often in rural environments, as a part of their job.

We have active and passive safety features for all company business vehicles.

Our corporate driver safety procedure incorporates requirements for fatigue management, restricts mobile phone usage and ensures fitness to drive.

We require all frequent drivers to undertake hands on defensive driver training, supplementing this with online training via the AlertDriving program. This program is a personalised, interactive, behaviour-based defensive driving training program. We have also made this program available to our broader employee base to help make them safer on the road.



#### Safety training

All employees 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.

#### Health and safety committees

We believe employee participation is central to the development and ongoing improvement of systems of work and procedures for safe operation of plant and equipment.

There are active HSE committees across our business starting at the top with the board HSE committee.

Site based health and safety committees provide an important communication and planning channel where employees and management work together to identify improvements in employee engagement, safety culture and the SMS, and also review and deploy lessons arising from incidents.

In many regions it is a regulatory requirement to involve employee elected representatives with prescribed roles and powers and we comply with these requirements.

#### Protecting the safety of our communities

Regulators play an important role in developing and enforcing industry standards to protect our communities and help maintain public confidence.

Strict regulatory oversight, combined with our own process safety management systems, ensure we manage the risk from our operations to 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. We are committed to full compliance with regulatory requirements in all jurisdictions in which we operate. We also belong to relevant industry groups and contribute to the development of industry standards through these forums.

#### Occupational health and wellbeing

Some of our employees work with hazardous chemicals as a part of our manufacturing operations.

We take the same risk-based approach to occupational health management as we do to safety, systematically assessing risk and implementing the hierarchy of controls.

We provide occupational health services to employees across all of our operations globally.

The type and arrangements vary between sites depending on the size of the manufacturing site, the nature of the hazards at that site and the availability of local medical services. 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**

Employee wellbeing contributes to productivity and the achievement of our business objectives.

We provide a range of health and lifestyle promotion programs to support the wellbeing of our employees.

The programs are developed locally, with input from employees to identify and target specific needs of each workforce.

An on-line library of materials supporting wellbeing topics is available to all employees on the company intranet.

#### **Customer safety**

Refer to the Product Stewardship section of this report for more information on how we support customer safety.

### Safety (continued)

#### 2019 performance

Despite some regions and operating sites achieving significant injury prevention milestones in 2019, overall company performance against our principal safety metric, Serious Injury Frequency Rate, deteriorated from our best ever performance recorded in the prior year.

The nature of the injuries incurred was predominantly manual handling related injuries with some contact and burn injuries.

The severity of injuries, as measured by the length of time a person is absent from work, increased, with one incident during the year causing permanent disability to one of our colleagues.

We acted quickly to identify and address the causes for the deterioration in performance and satisfy ourselves there had not been a systemic weakening of controls. Our efforts to refresh the focus on safety across our global workforce through stop work initiatives and safety leadership programs improved performance toward the end of the year.

One non-compliance with regulatory health and safety requirements relating to incorrect documentation was recorded during the year. This has been addressed to the satisfaction of regulators.

We made good progress in closing out action items identified during the PSM gap audit in 2017 with 83% of actions now completed (2018: 52%). The program remains on track for completion in 2020.

We continued to deliver practical defensive driver training in all our regions. 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.

This year we provided over 17,500 hours of safety training to our employees and non-Nufarm persons.

Table 3 – Safety performance<sup>1</sup>

	2017		2018		2019	
	Number	Rate	Number	Rate	Number	Rate
Work related fatalities	0	0.00	0	0	0	0.00
High-consequence work related injuries <sup>2</sup>	0	0.00	0	0	1	0.13
Lost time injuries	13	1.76	36	0.37	12	1.53
Recordable work related injuries <sup>3</sup>	33	4.48	156	1.876	29	3.70
Nufarm of hours worked	7,371,420		8,016,914		7,846,956	
Lost Time Frequency Rate⁴						
Australia & New Zealand		4.47		1.25		2.29
Asia		0.00		0.63		0.67
Europe		2.30		0.00		1.94
Latin America		0.60		0.00		1.42
North America		1.24		0.00		1.14
Group		1.76		0.37		1.53
Severity Rate⁵						
Australia & New Zealand		0.026		0.003		0.064
Asia		0.000		0.003		0.007
Europe		0.064		0.000		0.023
Latin America		0.005		0.000		0.014
North America		0.004		0.000		0.005
Group		0.022		0.001		0.023

<sup>1.</sup> 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.

<sup>2.</sup> 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 6 months. This excludes fatalities.

<sup>3.</sup> A "recordable work related injury" is one that may result from death, days away from work, restricted work, 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.

<sup>4.</sup> The lost time injury frequency rate (LTIFR) is the number of lost time injuries per million hours worked.

<sup>5.</sup> Severity rate is the sum of lost days of work per thousand hours worked.

<sup>6.</sup> In 2018, Lost time injuries was erroneously reported as 5, Recordable work related injuries was erroneously reported as 21 and the Rate of Recordable work related injuries erroneously reported as 2.62.

Table 4 – Safety performance by gender

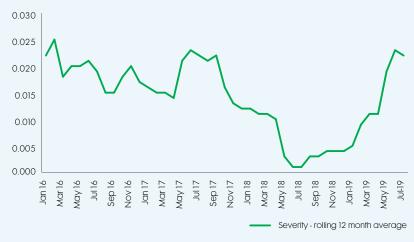
	2017	2018	2019
Lost Time Frequency Rate			
Male	1.76	0.32	1.82
Female	1.77	0.54	0.55
Group	1.76	0.37	1.53
Severity Rate			
Male	0.022	0.001	0.028
Female	0.022	0.001	0.002
Group	0.022	0.001	0.022

Figure 1 – 12 Month rolling average lost time injury frequency rate (LTIFR)<sup>1</sup> and serious injury frequency date (SIFR)<sup>2</sup>



- The lost time injury frequency rate (LTIFR) is calculated as the number of lost time injuries per million hours worked.
- The serious injury frequency rate (SIFR) includes both medical treatment and lost time injuries. It is also calculated as the number of injures per million hours worked.

Figure 2 – 12 Month rolling average severity rate<sup>1</sup>



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

## Objectives for 2020

- gap closure plans
- executive to regional
- training program in



### **People**

Our people and culture play an important role in delivering on our strategy and meeting community expectations. We aim to provide an inclusive and diverse work environment where individuals are valued for their diversity and empowered to reach their full potential.



#### Our approach

Our people are integral to how we create value for our customers and stakeholders. Their commitment and capability are a key component of our success.

#### Our workforce

We aim to provide an agile workforce that responds to the seasonal needs of our customers.

Most of our workforce is full time and where the nature of the role allows it, we support flexible work arrangements.

We employ casual, contract labour for short periods of time to support manufacturing activities such as labelling and packing during periods of high seasonal demand.

We 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.

#### **Human rights**

Our human rights policy sets out our position on matters such as collective bargaining, modern slavery, inclusion and diversity and equal opportunity.

The policy recognises and respects employees' rights and freedoms to join or not to join organisations of their choosing, to associate freely and bargain collectively.

Employment and business decisions based on attributes unrelated to job performance, such as race, gender or sexuality, are not tolerated.

We have a zero-tolerance stance to all forms of modern slavery, both in our operations and our supplier base.

As a policy, we do not employ young workers (persons under 18 years of age) in hazardous areas of our operations. Due to this and the complex nature of our business, our operations are not considered to be at significant risk of forced or compulsory labour or child labour.

We have processes 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.

#### Inclusion and diversity

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.

Our approach to inclusion and diversity is set out in our inclusion and diversity policy, and our strategies and programs are overseen by an executive steering committee and implemented by inclusion and diversity councils in each region.

Our program for the development of current and future leaders, NuLead, includes training to help our people use evidence to reduce the bias in people related decision making.

Our global footprint supports a culturally diverse workforce of leaders and teams, representing local cultures and customers in over 100 countries

The board of directors considers gender diversity as a relevant consideration in its succession planning and we are working towards a target of not less than 30 percent of either gender making up our workforce.

We recruit across the career lifespan. This is important to achieving our ambition of increasing the number of senior roles filled from internal appointments. As we make progress against this goal we expect to increase the number of employees in younger age groups to replenish our pipeline of talent.

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.

The Australian Workplace Gender Equality Act (WGEA) deems Nufarm as a designated relevant employer. We comply with the WGEA requirements.

### People (continued)

### Performance and career development

Our performance and career development program is called Grow Plan Succeed.

This is a company-wide program that aligns employee priorities and career development goals with business objectives.

All employees are expected to participate in this program, which includes regular check-in conversations with managers and matrix managers to discuss progress against agreed goals.

Our training programs are primarily aimed at providing employees with training that is relevant to their current role and responsibilities. These programs are broadly based across roles and regions. They span from training our sales people to employee apprenticeship programs at our manufacturing sites.

We also provide leadership development programs to build the skills that will develop our next generation of leaders.

We provide 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.

### Employee remuneration and benefits

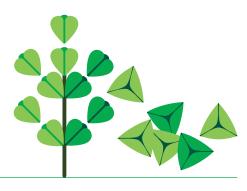
We use a global remuneration framework to govern remuneration decisions and practices.

The framework adopts a principal of equal pay for equal work and determines remuneration levels based on factors including job description, local market remuneration rates, the skills and experience of the employee and criticality of the role.

We engage external services from remuneration specialists or market data providers on a case by case basis.

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

Remuneration and remuneration policies for our board of directors and senior executives are disclosed on pages 29 to 52 of our 2019 annual report.



#### 2019 performance

#### Inclusion and diversity

In 2019 we commenced delivery of our global inclusion and diversity strategy. The strategy aims to embed inclusion and diversity in the way we conduct our business wherever we operate around the world. Key activities included:

- conducting six inclusion and diversity executive steering committee meetings;
- establishing a process and undertaking a global pay parity review;
- creating a checklist to assess our 'people policies' for bias, and commencing policy reviews around the world;
- continuing unconscious bias awareness training;
- raising awareness of inclusion and diversity through regular communications, assisting to improve employee consciousness of the benefits of a more inclusive work environment;
- continuing the introduction of our contemporary talent and succession planning methodology that reduces manager bias in the assessment and selection cycle, with a broader range of leaders now utilizing the methodology; and
- continuing to establish recruitment metrics that assist us to drive increased female representation at Nufarm.

Other key initiatives supporting inclusion and diversity included:

- continuing to introduce inclusive leadership training for all people managers as they are promoted or join Nufarm; and
- introducing our One Nufarm Behaviours recognition program where 565 people were recognised with 1,518 badges of appreciation.

#### Performance and career development

This is our second full year with the Grow Plan Succeed career development program. Performance objectives are now in place for 72 percent of women and 74 percent of men.

During the year we implemented a training system that will provide greater visibility of global employee training and education metrics. This will replace data on employee training that is currently compiled by each site or department.

#### Remuneration and benefits

We conducted gender parity reviews across all regions. Gender pay was analysed for employees performing the same type and level of job in the organisation. The methodology follows the principle of equal pay for equal work. Results of the gender pay parity review demonstrated that each region is remunerating employees at parity.

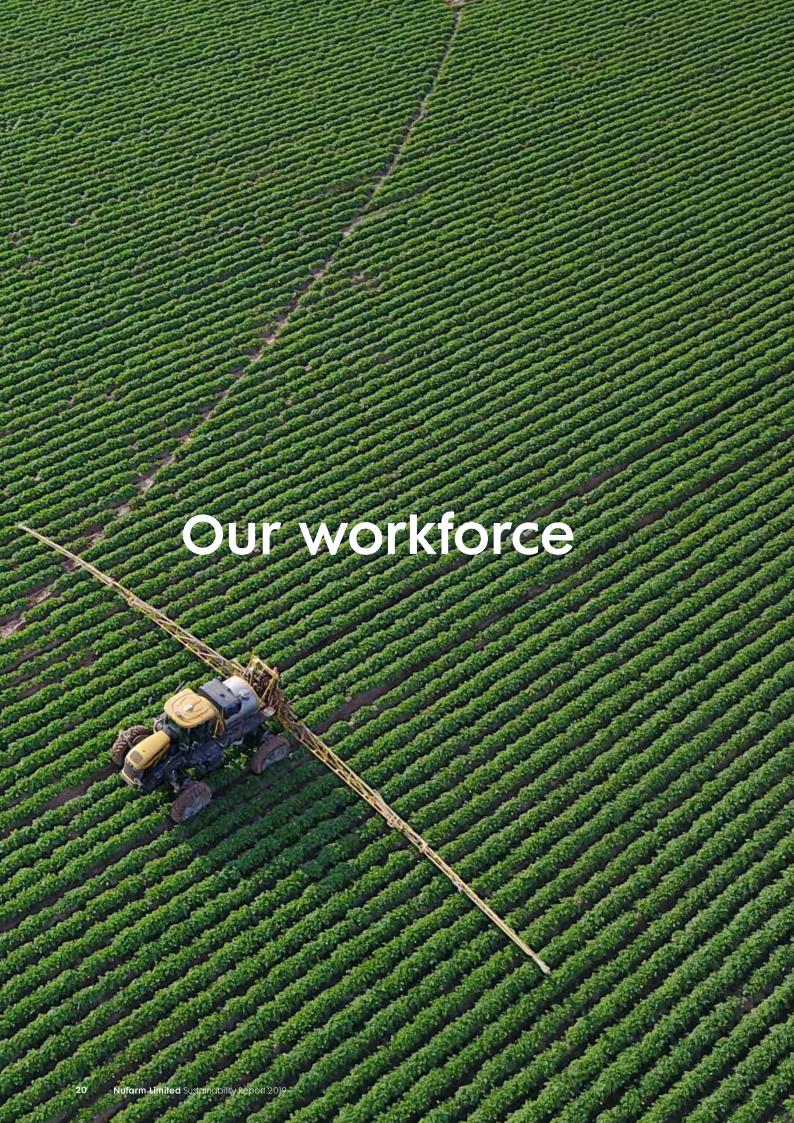
The remuneration structure for our senior executives was reviewed during the year to ensure it continues to align with the company's objectives and some changes were recommended for the 2020 year. Further information on these changes is provided on pages 29 to 52 of our 2019 annual report.

#### **Objectives** for 2020

In the second year of inclusion and diversity

- understanding of
- supporting policy
- developing greater gender equality within pipeline.

diversity goals can



### Our workforce

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 report as FTE.



#### Workforce overview

Our workforce increased three percent this year (98 FTEs) with more than half of this increase attributed to enhancing the sales and supply chain in Europe.

Additional corporate roles were also created to develop integrated business planning and commercial capabilities across the organisation.

Table 5 – Employees by functional group

		201	8		2019			
	Female	% Female	Male	Total	Female	% Female	Male	Total
Supply chain	271	19	1,156	1,427	277	19	1,186	1,463
Sales	187	17	897	1,084	190	17	922	1,112
Portfolio solutions	99	36	175	274	108	39	171	279
Finance	127	53	112	239	130	54	110	240
Corporate	35	49	37	72	51	53	44	95
Information technology	11	15	60	71	9	13	63	72
Human resources	38	76	12	50	41	76	13	54
Total	768	24	2,449	3,217	805	24	2,509	3,315

#### **Employee contract** structure

Most of our workforce remain full time. Drought conditions in Australia reduced the need for seasonal labour this year and we estimate an additional 12 percent of the FTE workforce was employed in

seasonal contract roles, which is less than previous years.

Thirty two percent of our employees are covered by a collective bargaining agreement.

Table 6 – Employee contract types

		2018			2019		
	Permanent	Non- Permanent	Total	Permanent	Non- Permanent	Total	
Employee region							
ANZ	677	13	690	651	10	661	
Asia	338	335	673	383	266	649	
Europe	840	93	933	971	14	986	
LATAM	599	6	605	657	5	661	
NA	297	19	316	355	4	359	
Total	2,751	466	3,217	3,017	299	3,315	

### Our workforce (continued)

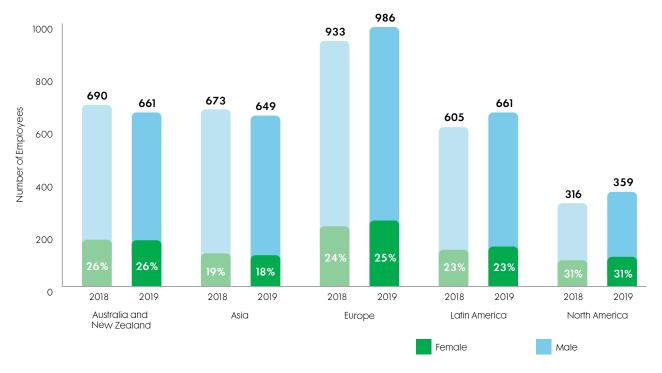
#### **Gender diversity**

Female representation was steady on the prior year at 24 percent, with 31 percent of new or vacant positions filled by female candidates (2018: 30 percent). Forty-six percent of external appointments to the senior management level were female, reflecting the benefits of our policy of having one female on the panel for all executive and senior management external appointments as well as one female on the shortlist for this group.

In contrast 14 percent of internal promotions to senior management level were female. Twenty-three

percent of all internal promotions across the organisation were filled by females compared to 26 percent last year. Lateral moves showed a higher female representation of 34 percent (2018: 20 percent) and 23 percent of all global mobility was represented by females. There were no reported incidents of discrimination.





Female representation on the board of directors increased due to the retirement of a board member and there was a small increase in female representation at the executive senior management level. Women represent approximately 19 percent of all leadership positions.

Table 7 – Gender diversity of board and employees

	20	)18	201	19
	Female %	Male %	Female %	Male %
Board of Director <sup>1</sup>	25	75	29	71
Other Employees				
Key management personnel <sup>2</sup>	0.0	100.0	0.0	100.0
Exec and senior management	22.8	77.2	23.4	76.6
People manager	19.0	81.0	19.1	80.9
Professionals	26.8	73.2	27.2	72.8
Manufacturing shop floor	7.3	92.7	9.3	90.7
Administration	68.7	31.3	66.3	33.7
Other	41.0	59.0	24.7	75.3
Total	24.0	76.0	24.3	75.7

 $<sup>1. \</sup>hspace{0.5cm} \textbf{Greg Hunt, Managing Director and Chief Executive Officer is included with the key management personnel in this table.} \\$ 

Males represented 33 percent of part-time workers, up from 27 percent in the prior year.

Table 8 – Gender diversity by employee contract type

		2018				2019			
	Female	% Female	Male	Total	Female	% Female	Male	Total	
Employee Employment Contracts <sup>1</sup>									
Permanent	701	25%	2,050	2,751	772	26%	2,245	3,017	
Non-Permanent	67	14%	399	466	34	11%	265	299	
Total	768	24%	2,449	3,217	805	24%	2,510	3,315	
Employee Employment Type <sup>2</sup>									
Full time	721	23%	2,426	3,147	761	23%	2,500	3,261	
Part time	92	73%	34	126	105	67%	51	156	
Total	813	25%	2,460	3,273	866	25%	2,551	3,417	

<sup>1.</sup> Measured using full time equivalent employees

<sup>2.</sup> 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.

<sup>2.</sup> Measured using actual head count.

### Our workforce (continued)

#### Diversity across the career lifespan

We continue to recruit across the career lifespan. This aligns with our longer-term intent to increase numbers in younger age groups, allowing us to grow and develop our internal talent to fill more senior opportunities more often.

Table 9 - Board and employees by age group

		2018			2019	
	30 years and younger %	30-50 years old %	Over 50 years old %	30 years and younger %	30-50 years old %	Over 50 years old %
Board of Director <sup>1</sup>			100			100
Other Employees						
Key management personnel <sup>2</sup>		<1	<1			<1
Exec and senior management	<1	2	2		2	2
People manager	<1	12	5	<1	12	6
Professionals	9	29	9	9	30	9
Manufacturing shop floor	3	12	8	3	12	7
Administration	1	4	2	1	3	2
Other	<1			<1	<1	
Total	15	59	26	15	59	26

<sup>1.</sup> Greg Hunt, Managing Director and Chief Executive Officer is included with the key management personnel in this table.

Table 10 – Employee hire and turnover

		2019   New Employees1   Turnove   Number   Rate   Number				
	New Em	ployees <sup>1</sup>	Turno	ver <sup>2</sup>		
	Number	Rate	Number	Rate		
Employee age group						
Under 30 years old	170	36%	97	21%		
30-50 years old	277	14%	223	11%		
Over 50 years old	66	7%	114	13%		
Employee gender						
Female	156	19%	123	15%		
Male	357	14%	311	12%		
Employee region						
ANZ	77	11%	107	15%		
Asia	69	10%	86	13%		
Europe	152	15%	109	11%		
LATAM	132	20%	84	13%		
NA	83	25%	48	14%		
Total	513	15%	434	13%		

<sup>1.</sup> The new employee hire rate is calculated as the percentage of full time equivalent (FTE) of employees hired out of the average FTE of employees.

<sup>2.</sup> 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.

<sup>3.</sup> Age group percentages are based on 3,296 FTE's because disclosure of some personal data is not mandatory in our Human Resources business system.

<sup>2.</sup> The employee turnover rate is calculated as the percentage of full time equivalent (FTE) of employees terminated (voluntary and involuntary) out of the average FTE of employees.

#### **Cultural diversity**

Our executive and senior management team is culturally diverse with at least 15 different cultural backgrounds represented. Self-disclosed data from our employees indicates that our workforce originates from no less than 63 different countries and speaks at least 19 different languages. Nufarm also has four percent of employees working in a different country to their birth country. Fifteen percent of non-executive board members reside outside Australia.

#### **Parental leave**

Parental leave was accessed by two percent of the workforce. Men represented 33 percent (less than one percent of the male workforce) while women represented 67 percent (five percent of the female workforce) of parental leave taken.

Table 11 – Parental leave

		2018			2019		
	Female	Male	Total	Female	Male	Total	
Took parental leave	57	13	70	39	19	58	
Returned from parental leave	48	13	61	31	16	47	





### **Environment**

We use energy, water and other chemicals to produce our products. This generates greenhouse gas and other air emissions as well as effluent and waste. We work to reduce our resource consumption and eliminate the potential environmental risks from our emissions through robust environmental management systems and a risk-based approach.



#### Our approach

#### Environmental management framework

The key potential environmental impacts of our manufacturing operations relate to soil and groundwater contamination, waste, effluent and emissions.

We manage our impacts through an environmental management framework comprised of corporate policies, standards and procedures.

We apply the same risk management principles to environmental risks as we do to safety. We systematically evaluate the environmental significance in our aspects and impacts and put control measures in place to reduce environmental risk to as low as reasonably practicable.

We are committed to being fully compliant with environmental regulations in the jurisdictions in which we operate.

Our manufacturing sites have environmental management systems that meet local regulatory requirements and align with the higher, internal standards that we have set for ourselves.

We provide environmental training to our employees and contractors as a part of their induction program.

We have an internal corporate audit framework in place to ensure ongoing compliance with our environmental standards and we undertake ongoing monitoring activities to ensure compliance with regulatory requirements.

#### Energy and greenhouse gas emissions

We undertake two primary types of manufacturing at our operations: synthesis and formulation. Synthesis involves chemical reactions, formulation does not. Synthesis activities are more resource intensive, consuming approximately 80 percent of our total energy use.

Our manufacturing operations generate scope 1 and scope 2 greenhouse gas emissions through combustion activities and purchased steam and electricity.

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.

We seek to continuously improve our energy efficiency and reduce greenhouse gas emissions through activities like improvements to steam systems or upgrading the energy efficiency of equipment or lighting.

Our site at Wyke in the United Kingdom operates a combined heat and power plant which is a highly efficient means of generating steam and electricity.

#### Other air emissions

Our manufacturing sites generate non-greenhouse gas air emissions. We have combustion emissions as well as volatile organic compounds (VOC) and particulate matter (PM) generated by our formulation processes.

We eliminate process emissions using scrubbers and activated carbon filters and we monitor the emissions to ensure ongoing compliance.

We use refrigerants in process equipment and air conditioning. Our manufacturing sites are progressively replacing any residual ozone depleting substances and have preventative maintenance plans in place to prevent leakage.

### **Environment** (continued)

#### Water and effluent

Water is an essential component of our products, both in the manufacturing process and when growers mix the product with water to spray their crops.

We support growers to optimise water usage by developing multi-action products and products that support more complex tank mixes. This allows growers to achieve their desired outcomes with reduced water and energy use.

Our manufacturing sites use water for production, cleaning and cooling. High quality fresh water is important for maintaining the quality of our products and all sites use third-party supplied water.

Each of our manufacturing sites has been tasked with establishing a water stewardship program. The program involves a comprehensive water balance, identification of water related impacts in the catchment area

and Nufarm's influence on these, an assessment of risk, and control measures to manage these risks.

Single-use cooling water is our largest water use. For our manufacturing facilities at Gaillon in France, this is taken from local groundwater and at our site in Linz, Austria, it is taken from the Danube. Uncontaminated cooling water is safely released back into the Seine in France and Danube in Austria in line with local environmental licences.

Monitoring and impact assessments have determined this has negligible environmental impact on the rivers.

Where we can, we reuse water internally, however 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 wash water for recycling and reuse application.

We treat our waste water on site, dispose of it to domestic sewers and/or use third party waste water treatment facilities. All sites have controls in place to protect surface water bodies and at some locations we also treat rainwater that falls onto our sites to ensure that even very low levels of chemical are not released directly into waterways.

There are local regulatory limits in place at all locations where we discharge water and effluent and we monitor these to ensure compliance. Our largest facilities have online monitoring which immediately stops effluent from discharging if limits are approached.

The largest chemical component of our effluent is salt, which is a waste product of our phenoxy synthesis operations.



#### 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.

We take responsibility for the waste packaging generated by customers using our products through container collection and recycling initiatives outlined in the product stewardship section of this report.

#### 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. We have a process safety management (PSM) program in place to prevent a loss of containment through application of rigorous layers of protection.

Some of our manufacturing sites are located on land that has a long history of chemical use prior to Nufarm ownership. As a result, these sites have a legacy of soil and groundwater contamination. When acquiring these sites, we undertook remediation works to make the sites safe to operate and prevent any offsite environmental impact.

We have ongoing groundwater monitoring programs in place to support management of this legacy and we are currently undertaking an assessment at our North Laverton site in Australia. Further remediation maybe required at some of our manufacturing sites in the future which would be done under direction of the local regulatory authority.

#### Biodiversity

Many of our sites are located in industrial zones with no direct or indirect impact on significant or protected areas. However, there are two protected areas on our site in Gaillon and another seven within 800m of the site. These areas are classified under Zone naturelle d'intérêt écologique, faunistique et floristique (ZNIEFF) and Natura 2000 as having high biological or ecological value. Our operations have had no impact on these areas, and we have not needed to protect or restore any habitats this year.

#### **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.



### **Environment** (continued)

#### Our performance

### Environmental management framework

Two years ago, we commenced an environmental improvement program at our manufacturing sites to strengthen and further improve our environmental management systems.

This began with each site undertaking an environmental gap analysis against the corporate requirements and implementing 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.

We made significant progress with environmental gap closure during 2019 with 65 percent of action items now complete, up from 14 percent last year. Our objective is to have 90 percent of activities complete by the end of next year. Due to the long-term nature of some environmental activities the plans will not be fully implemented for several years.

We further strengthened our environmental management system during the year with our sites in Linz, Austria, and Port Klang in Malaysia achieving ISO14001:2015 certification.

This brings the total number of sites with certification to five (other certified sites are Wyke, UK, Gaillon, France and Merak, Indonesia) and we have committed to certifying all twelve of our manufacturing sites to ISO14001:2015 by 2023.

Environmental training was an area for improvement identified through the gap analysis conducted two years ago. This year we provided 1,500 hours of environmental training and this will be an area of focus for a number of sites in 2020.

### Energy and Greenhouse Gas Emissions

Total energy consumption reduced in 2019 while greenhouse gas emissions increased due to increased fuel consumption.

Performance against energy intensity and greenhouse gas intensity measures deteriorated due an increase in the mix of synthesised products manufactured relative to formulated products (synthesis of products requires more energy and generates more greenhouse gas than formulation).

The change in mix was a result of a reduction in formulation of products in Australia where manufacturing was temporarily halted for several months due to ongoing drought conditions which reduced demand. Synthesis activities continued in Australia as these products also service an export market and were not as impacted by the drought.

Table 12 – Energy and greenhouse gas emissions

	2016	2017	2018	2019
Energy consumption <sup>1</sup> (GJ)				
Fuel consumption (non-renewable)	47,282	49,253	49,174	58,486
Fuel consumption (renewable)	50	0	0	0
Electricity consumption	320,885	306,030	309,218	309,690
Heating (gas) consumption	269,562	246,904	242,356	248,094
Steam consumption	397,740	394,202	482,731	455,269
Total energy consumption	1,035,519	996,389	1,083,479	1,071,539
Energy sold	0	0	0	0
Energy intensity <sup>3</sup> (GJ/tonne or M3 of production)	2.43	2.22	2.25	2.68
Greenhouse gas emissions⁵ (Tonne CO₂e)				
Scope 1 – direct	20,252	20,729	20,393	21,183
Scope 2 – energy indirect	75,661	73,711	72,203	72,830
Scope 3 – other indirect	Not Available	Not Available	Not Available	Not Available
Total greenhouse gas emissions	95,913	94,440	92,596	94,013
Greenhouse gas intensity <sup>6</sup> (Tonne CO <sub>2</sub> e/tonne or M3 of production)	0.225	0.211	0.192	0.235

- 1. United States Energy Information Administration (EIA) conversion factors have been applied.
- 2. Fuel consumption for 2017 and 2018 have been restated, they was erroneously reported as 50,400 GJ and 49,890 GJ respectively.
- 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 gasses included in the calculations are CO2, CH4, N2O and R422d where Nufarm has operational and financial control over the emissions.
- 5. Greenhouse gas emissions have been restated for all fiscal years. The primary correction made was to align the calculation of greenhouse gas emissions associated with our Combined Heat and Power (CHP) to The Greenhouse Gas Protocol's "Allocation of GHG Emissions from a Combined Heat and Power (CHP) Plant."
- 6. Greenhouse gas intensity includes only the scope 1 and 2 emissions reported under Greenhouse gas emissions.

A major driver of the improvement in other air emissions has been the installation of an incinerator to eliminate our primary hazardous air pollutants (HAP) at our site in Linz. We have now had a full year operating this unit and seen a greater than 95% reduction in these emissions.

#### Table 13 –Other air emissions

	2016	2017	2018	2019
Air emissions <sup>1,2</sup> (Tonne)				
Nitrogen oxides (NOx)	40	46	49	29
Sulphur oxides (SOx)	0	1	1	1
Carbon monoxide (CO)	18	20	18	25
Volatile organic compounds (VOC)	33	22	24	19
Persistent organic pollutants (POP)	_	_	-	0
Hazardous air pollutants (HAP)	4	3	2	0
Particulate matter (PM)	3	3	3	3
Ozone depleting substances (ODS) (Tonne of CFC-11 equivalent)	-	-	<1	<1
Other air emissions	<1	<1	<1	<1
Total air emissions	98	95	99	77
Air emission intensity (gm/ tonne or m3 of production)	229	215	202	193

- 1. Air emissions have been determined by a combination of direct, online measurement, emissions monitoring and estimation.
- 2. 2016, 2017 and 2018 NOx were overestimated but are unable to be restated. Combustion emissions have been aligned with adjusted fuel use, refer to Table 12.

#### Water and effluent

We reduced our water withdrawal and consumption again this year. This was achieved through improvements to groundwater extraction and cooling systems at our site in Gaillon, France. The resulting 315 ML reduction in water withdrawal over the last two years represents eight percent of the Nufarm Group's total water use and has led to a corresponding drop in water discharge.

As with energy, our synthesis activities require more water than formulation activities and generate more effluent.

Water and discharge intensity increased during 2019 as a result of an increase in the mix of synthesised products manufactured relative to formulated products.

Our plant in Merak, Indonesia installed a waste water treatment plant this year, improving the quality of waste water discharged from the

site and we are currently installing a treatment plant at our operation in Maracanau, Brazil.

We are continuing to research new advanced technologies to improve the quality of the effluent we discharge to domestic sewers to benefit downstream water users.

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

### **Environment** (continued)

Table 14 – Water withdrawal and discharge

	2016	2017	2018	2019
Water withdrawal by source <sup>1</sup> (ML)				
Surface water (total)	4,134	4,176	4,099	3,973
Freshwater (≤ 1,000 mg/L TDS²)	4,134	4,176	4,099	3,973
Other water (≥ 1,000 mg/L TDS)	0	0	0	0
Groundwater (total)	702	601	442	284
Freshwater (≤ 1,000 mg/L TDS)	702	601	442	284
Other water (≥ 1,000 mg/L TDS)	0	0	0	0
Seawater (total)	0	0	0	0
Produced water (total)	0	0	0	0
Third-party water (total)	791	794	804	715
Freshwater (≤ 1,000 mg/L TDS)	791	794	804	715
Other water (≥ 1,000 mg/L TDS)	0	0	0	0
Rainwater collected and stored	1	0	0	0
Total water withdrawal	5,628	5,571	5,345	4,972
Water withdrawal intensity (KL/tonne or m3 of production)	13.19	12.34	11.12	12.42
Water discharge by destination <sup>3</sup> (ML)				
Surface water	4,711	4,586	4,445	4,144
Groundwater	>1	>1	0	0
Seawater	0	0	0	0
Third-party water (total)	648	659	687	653
Third-party water sent for use to other organisations	0	0	0	0
Sewer/utilities	Not Available	Not Available	Not Available	449
Treatment	Not Available	Not Available	Not Available	204
Unplanned discharge	0	0	0	0
Total water discharge	5,359	5,245	5,132	4,797
Water discharge intensity (KL/tonne or m3 of production)	12.56	11.96	10.43	11.99
Water discharge by freshwater and other water (ML)				
Freshwater (≤ 1,000 mg/L TDS)	Not Available	Not Available	Not Available	4,147
Other water (≥ 1,000 mg/L TDS)	Not Available	Not Available	Not Available	650
Water discharge by quality				
Chemical Oxygen Demand (Tonne)	Not Available	Not Available	Not Available	> 12,2884
Water consumption				
Total water consumption (ML)	269	326	213	830⁵

<sup>1.</sup> All water withdrawal determined from direct, meter measurements or from municipal water supplier billing.

<sup>2.</sup> TDS is the Total Dissolved Solids.

<sup>3.</sup> Water discharge (effluent) has been determined by direct meter measurement.

 $<sup>{\</sup>it 4.} \quad \hbox{Chemical Oxygen Demand is not a standard waste water measure at every site.}$ 

<sup>5.</sup> In 2016, 2017 and 2018, water consumption was calculated as the difference between water withdrawal and water consumption. In 2019, water consumption is an estimate of the water used by Nufarm and no longer available to the local community or ecosystem.

#### Waste

Changing regulations in the United States several years ago resulted in us needing to dispose of all vessel wash water as hazardous waste. As our business grew in the US this led to a year on year increase in hazardous waste. The site applied for and now has just received regulatory approval to reuse some of these wash waters on site again. The project to implement appropriate controls for the

management of these washings is underway and we expect to see the amount of hazardous wash water generated from this region start to decline as we begin to progressively implement the improvements.

Table 15 – Waste and waste transport

		2017			2018			2019	
	Non- hazardous	Hazardous	Total	Non- hazardous	Hazardous	Total	Non- hazardous	Hazardous	Total
Waste type and disposal (Tonne)	nazaraoos	Hazaraoos	Total	Hazaraoos	Trazara do do	Total	nazaraous	Tid2did003	10101
Reused	1	188	189	116	212	328	98	75	173
Recycled	4,762	540	5,302	5,264	718	5,982	5,108	301	5,409
Composted	0	0	0	0	0	0	0	0	0
Recovered (including energy recovery)	1,159	2,848	4,007	1,349	4,169	5,518	691	3,472	4,163
Third party treatment	278	1,580	1,858	411	1,464	1,875	565	989	1,554
Incineration	199	8,419	8,618	320	10,412	10,732	4	12,452	12,456
Deep well injection	0	2,051	2,051	0	912	912	78	912	990
Landfill	1,026	451	1,477	937	271	1,208	749	189	938
On-site storage	283	109	392	0	196	196	0	170	170
Total Waste	7,708	16,282	23,990	8,398	18,489	26,887	7,293	18,560	25,853
Waste intensity (Kg/Tonne or m3 of production)	17.2	36.4	53.6	17.6	38.3	55.9	18.2	50.4	68.6
Transport of hazardous waste³									
Hazardous waste transported		15,889			17,946			18,368	
Hazardous waste imported		0			0			0	
Hazardous waste exported		164			224			692	
Hazardous waste treated		1,580			2,284			964	
% of hazardous waste exported		1%			1%			3%	

<sup>1.</sup> Waste disposal method has been determined from information provided by the waste contractor.

<sup>2.</sup> Reused hazardous waste reduced from 284 tonne in 2017 and 347 in 2018 due to incorrect classification of a by-product stream.

<sup>3.</sup> Waste that is not reused or recycled on the same Nufarm site it is generated is classified as transported waste.

### **Environment** (continued)

#### Soil and Groundwater

We had no significant spills this year.

Table 16 – Significant spills and location

	2016	2017	2018	2019
Waste to soil (KL)	Not Available	3,000	1,000	0
Location		Linz, Austria	Linz, Austria	
Water to soil (KL)	Not Available		750	0
Location			Kwinana, Australia	

#### **Environmental Complaints**

This year we had two complaints where our investigations revealed our operations were the cause.

One of these was an odour

complaint from at our site in Wyke, UK and the other a noise complaint at out site in Gaillon, France.

The improvements we've made to odour emissions control at

Maracanau, Brazil have been very successful at improving the air quality for the local community and we have not received any complaints this year.

Table 17 – Environmental complaints

	2016	2017	2018	2019
Number of complaints received where investigation revealed Nufarm was at fault	0	5	2	2
Number of complaints received where investigation revealed Nufarm was not at fault	2	2	3	0
Number of complaints where the cause was undetermined	3	2	2	2
Total Environmental Complaints	5	9	7	4



## Environmental Compliance and Monitoring

From time to time incidents may arise that result in the regulators issuing remedial notices as a part of their regulatory oversight. We work with these regulators to ensure full compliance with their requirements while also addressing the underlying cause of the incidents. While we have a goal of zero non-compliance

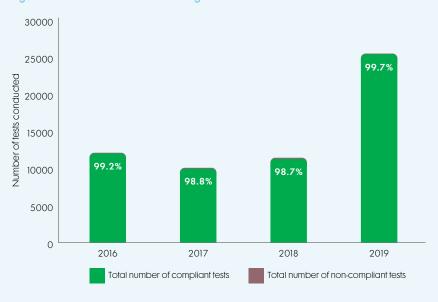
with regulatory requirements, this year we had ten incidents.

Seven of these related to minor but reportable exceedances on effluent and air emission parameters. The balance was for remedial notices issued in a prior year that are being actively addressed, one of which was closed early in our 2020 financial year. We have not received

any monetary fines or sanctions related to these items.

We continued to comply with release parameters for other, routine monitoring activities, exceeding 99.5 percent compliance. This year we have increased our monitoring, undertaking several soil and groundwater studies.

Figure 4 – Environmental monitoring



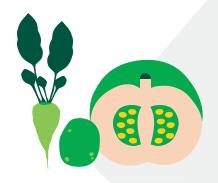
# Priorities for 2020

Our focus for 2020 is to embed our corporate environmental audit process and undertake the actions that arise from it and to drive environmental improvements activities progressing our environmental gap closure plans to 90 percent completion.



## **Ethical sourcing**

We recognise our social and environmental impacts extend beyond our own business to our suppliers and work with them to achieve the same standards we aspire to ourselves.



#### Our approach to sourcing

Our global supplier code of conduct sets expectations of our suppliers including business conduct, environmental performance, human rights, child and forced labour and employee health and safety.

The code guides our supplier selection and the ongoing evaluation of supplier relationships.

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

In line with the requirements of the UK Modern Slavery Act, our Modern Slavery Statement describes the actions we have taken to identify and prevent modern slavery in our supply chain.

We partner 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.

Our Modern Slavery Statement can be found on the homepage of our website and copies of our supplier code of conduct and human rights policy can be found in the corporate governance section of our website.

#### **Supplier Impacts**

Our most significant suppliers manufacture the chemicals and packaging we use to manufacture our products. We source from more than 3,000 suppliers located in over 20 countries.

Like us, they have the potential for environmental impact through air emissions, hazardous waste, effluent, resource consumption and greenhouse gas emissions.

The hazardous chemicals used by our suppliers also 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 and education levels.

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

#### Assessing supplier performance

We established a supplier CSR assessment process three years ago. We engaged EcoVadis, a global leader in this field, to undertake the program with us.

The assessments evaluate suppliers' environmental, social, ethical and sustainable procurement policies, actions and results.

We work to build long term relationships with our suppliers and there is not significant turnover in our major supplier base. We use a risk-based approach to determine supplier priority for CSR assessment. This considers the risk associated with the supplier's country of operation, their importance to Nufarm and their industry.

We have a number of important chemical suppliers in China and India who were given a high priority for CSR assessment based on country risk.

## Ethical sourcing (continued)

#### 2019 performance

In 2019 we increased the number of existing suppliers that have completed annual CSR assessments from 37 percent to 49 percent of total spend across 117 suppliers. This metric is measured as the spend with assessed suppliers as a percentage of total business spend. Our existing suppliers are our most important and continue to be the focus of our supply chain CSR program.

New suppliers are subject to our supplier code of conduct and ongoing evaluation process. As they represent a small portion of our total spend they have not been requested to undertake a CSR assessment this year.

Figure 5 – Suppliers in CSR assessment program as percentage of total spend

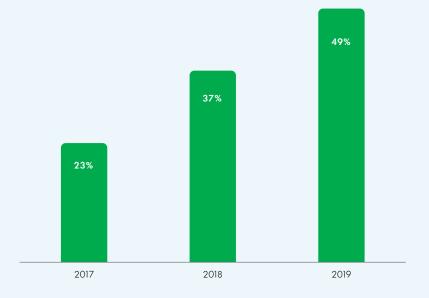
We also revaluated existing suppliers that had previously been assessed and found that overall, they had improved their CSR performance since their first assessment.

We benchmarked our suppliers' assessment scores with EcoVadis' extensive number of chemical sector assessments and found our suppliers outperformed the sector average across all themes; environment, labour, fair business practices and sourcing.

Of the suppliers we have assessed, none were found to have significant actual or potential environmental or social impacts in our supply chain this year.

We do not consider our suppliers to have a significant risk of incidents of child labour or forced or compulsory labour. We also found no evidence of modern slavery practices in our assessed suppliers this year.

We have not terminated any significant business relationships with suppliers on environmental or social grounds this year, however we have mutually agreed corrective action plans with two percent of our assessed suppliers to address both social and environmental considerations. These are suppliers who did not reach our minimum internal standards. An additional 25 percent of our assessed suppliers have self-initiated their own corrective action plans demonstrating a strong drive to improve sustainability performance.



# Objectives for 2020

In 2020 we will continue to expand our coverage for supplier CSR assessments





## **Product stewardship**

Product stewardship starts with our support for sustainable farming practices and extends through our supply chain.



#### **Integrated Pest** Management

We understand the pressures farmers face to increase yield while minimising impact on the environment and addressing concerns about the sustainability of modern agriculture.

We support integrated pest management practices that combine physical, biological and chemical methods to provide economically and ecologically sound solutions for pest control.

We do this by supporting industry bodies, such as CropLife, that fund research and education and by providing farmers with tools and training to help them improve the sustainability of farming practices.

Our major contribution to industry knowledge and practice draws on our expertise in the area of pest resistance management.

Pest resistance is an ongoing threat to global food security and a key driver in the need for the use of an integrated pest management approach.

We participate in various industry initiatives and are involved in research to understand resistance mechanisms.

In Australia, we sponsor WeedSmart (weedsmart.org.au), a program where industry, government and universities have partnered to enhance on-farm practices and promote the long-term, sustainable use of herbicides.

We have a range of initiatives and decision tools to directly support and educate farmers in managing herbicide resistance. The CATS (CombAt Troublesome weedS) platform in the United States provides comprehensive integrated weed management solutions to help farmers control and prevent the development of resistant weed populations.

In conjunction with Australian growers we developed Weed Logic, a tool that provides growers with a medium-term strategy for sustainable and cost-effective resistance management.

Through our alliance with Farmers Edge, a global leader in precision agriculture, we are also helping to provide farmers with access to digital solutions and risk management platforms to help them maximise their crop productivity and profitability while balancing their sustainability goals.

#### The regulatory framework

The Food and Agriculture Organisation of the United Nations (FAO) sets the foundation for the crop protection industry and its regulators, assessing pesticides and establishing the minimum standards for their use.

Regulatory bodies play an important role in directly setting and enforcing stringent product stewardship standards for the industry.

Before any agricultural chemical product can be manufactured or sold it must be assessed and registered by the relevant regulator. Regulatory bodies in major agricultural markets are independent government bodies, such as the Environment Protection Agency (EPA) in the United States of America, The European Chemicals Agency, and the Australian Pesticides and Veterinary Medicines Authority (APVMA). They conduct product assessments based on extensive evidencebased review of scientific data.

Regulatory assessments typically include studies of residue, toxicology, eco-toxicology, environmental effects, product chemistry and efficacy studies and occupational health and safety.

Regulators consider both published and unpublished scientific studies in determining whether a product is safe for use.

Based on their assessment, regulators decide whether to register the product, specify the conditions under which it is permitted for use, and prescribe specific safety precautions and warnings to be included on the product label.

Once a product has been registered for use, regulators have the right to reconsider the approval or registration at any time. Reconsideration may be initiated when new research or evidence raises concerns about the use or safety of the product. Regulators may also consider community concerns as part of their review.

## Product stewardship (continued)

We engage directly with regulators in relation to the registration of our products, or as part of the industry-wide taskforces which generate data and information required by regulators.

In some instances regulatory bodies in one jurisdiction may restrict a product for particular use and these bans may not be mirrored in other jurisdictions. For instance, neonicitinoids are a class of insecticides for which the regulatory requirements in Europe vary considerably to the regulatory requirements in other parts of the world.

Nufarm's policy is to comply with the regulatory requirements of each of the markets in which we operate. We do not apply the regulatory restrictions or approvals of any one jurisdiction across our global business.

#### **Product Development**

Product development starts with understanding emerging crop trends and identifying the needs of growers.

We combine these insights with our knowledge of the competitive landscape and increasingly stringent regulatory environment to develop new products.

Our product development is typically based on existing off-patent chemistry or new chemistry from industry partners which have been tested and licensed by regulators. We create unique formulations from these products that confer particular benefits to end users including efficacy, safety and environmental benefits. Each formulation is then tested and registered by the relevant regulatory bodies.

Examples of product development that address environmental issues include:

- products with increased concentrations to support lower on-field chemical application rates and improve transport efficiency;
- prioritisation of solvents and adjuvants with the lowest ecological profile, and where feasible, natural materials;
- development of spraying technologies to reduce chemical usage; and
- products with improved compatibility to enable farmers to mix different solutions together in the one tank, allowing for fewer sprays, reduced water and fuel usage.

Throughout our development process our products undergo compliance checks in line with regional regulatory requirements, e.g. REACH compliance in Europe.

#### **Biological solutions**

Biological-based crop solutions are another tool that can help farmers reduce the impact of farming on the environment.

Our biological product range and pipeline is developed through licensing, acquisition and development. While our current portfolio is small relative to our overall portfolio, it is growing and we believe it provides attractive alternatives for customers and will help mitigate regulatory product risk over a longer-term time frame.

The most significant addition to our biological portfolio in 2019 was Trunemco™, a biochemical and microbial seed treatment for soybean, cotton and corn crops.

Trunemco™ primes the plant's physiology and activates its own defence system to protect against nematode invasion. We will work to launch this product in 2020.

Development activities on a range of other biological products will continue through 2020 and beyond. This will include review of further acquisition opportunities, development with other industry partners and early stage research organisations.

#### **Product Application**

We support farmers in the efficient use of crop protection products to improve their accuracy and limit unnecessary use.

Our product development framework incorporates testing the use of different spray nozzles so we can provide expert advice to growers to improve spraying accuracy by using the best nozzles for application of our products.

We provide farmers with hands-on educational workshops that reinforce good spraying practices, nozzle selection and provide growers with opportunities to ask questions.

In Australia, we have invested in SprayWise® Decisions, an internet subscription service that helps rural landholders and contractors better plan and match the timing of chemical applications to prevailing local weather conditions. This helps them to minimise drift and its potential unintended impacts, reduce chemical use and maximise spray effectiveness.

#### Manufacture and supply chain

Information on managing the environmental footprint of our manufacturing plants is provided in the Environment chapter.

Our approach to supply chain management and ensuring our raw materials are ethically sourced is provided in the Ethical Sourcing Chapter.

#### **Product Quality**

Strict controls around the quality of crop protection products are important to ensure the quality of farmers' crops.

Our quality control systems and framework incorporate standards for raw material sourcing and product development to protect human health and minimise environmental risk.

All 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 have laboratories and trained technicians in all regions to test our products to ensure quality and safety levels meet the stringent regulatory requirements needed to sell our products around the world.

#### Sustainable packaging

We are working to minimise the impact of our packaging through initiatives aimed at reducing packaging waste and increasing the recycled content of our packaging.

#### Distribution

Where feasible, we manufacture locally, reducing the cost and environmental impact of transporting liquid products long distances.

Transport of our products by road, rail and sea is very tightly regulated. We use the services of specialist licensed service parties to transport products to supplement our own distribution capabilities.

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.

#### Safe and Responsible Use

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. All of our products have undergone a health and safety assessment as a prerequisite for the provision of this safety information for our customers.

Regulatory controls require our products to be labelled with the active ingredient and its content along with any 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 protect the environment in the case of an accidental spill.

We also provide extensive technical information to assist growers to get optimal benefit from our products.

This is supplemented by training and advice on using our products safely and sustainably.

Through our membership of CropLife and other industry associations we are also supporting advocacy and education for the safe and sustainable use of crop protection products.

#### **Container management** and obsolete stock

We take ownership for our product packaging through to the end of its life by partnering with local service providers and non-profit organisations for the safe collection of empty, used containers.

These include inpEV in Brazil, drumMUSTER in Australia, the Ag Container Recycling Council (ACRC) in the United States and PAMIRA's agricultural packaging recovery system in Germany. 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 product range to reduce obsolete stock and drive efficiencies in our supply chain. reducing waste and impact on the environment.

## Product stewardship (continued)

## Biotechnology-derived plant products

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. These standards are applied to our biotechnology portfolio globally, including omega-3 canola.

ETS facilitate third party audits of Nuseed's biotechnology processes as part of our continuous improvement process.

#### **Glyphosate**

Nufarm purchases glyphosate and formulates it with other chemicals for end use.

Independent regulators in major agricultural markets where Nufarm sells glyphosate have assessed the risks of glyphosate to humans and the environment. These regulators have determined that glyphosate is safe to use in accordance with label directions.

In 2015 the International Agency for Research on Cancer (IARC) listed glyphosate as a probable carcinogen in Monographs Volume 112.

The preamble to the Monographs explains that the Monographs represent the first step in carcinogen risk assessment and it carefully distinguishes between a cancer "hazard" and a cancer "risk". The preamble defines a cancer 'hazard' is an agent that is capable of causing cancer under some circumstances, and a cancer 'risk' as an estimate of the carcinogenic effects expected from exposure to a cancer hazard.

The Monograph notes that it evaluates cancer hazards (not cancer risks). It highlights that the distinction between a hazard and risk is important, and that the Monographs identify cancer hazards, even when risks are very low at current exposure levels.

As a result of these definitions, many common, everyday products, such as aloe vera, pickled vegetables and coconut oil, have been identified by IARC as probable carcinogens.

Regulatory bodies in major agricultural markets have reviewed their assessment of the risk of glyphosate to human health following the IARC decision. Each of these regulatory bodies has determined that glyphosate is safe to use in accordance with label directions.

In October 2019, the National Hazardous Substances Committee in Thailand voted to phase out the use of glyphosate.

We believe regulatory decisions should be independent and based on scientific data. We are confident that the scientific data supports the safety profile of glyphosate and continue to support our customers and farmers who use glyphosate.

Safety Data Sheets that provide further information on the safety of our glyphosate-based products can be found on the Nufarm website of the country in which we sell each product.





### Governance and ethical conduct

Nufarm is committed to high 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 third edition of 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 eight 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 Takasakisan 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 29 to 51 of Nufarm's 2019 annual financial report.

#### **Board committees**

The board is supported by four committees: the audit and risk committee; the nomination and aovernance 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 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.

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 ensure the diversity policy is applied to the selection of board members. In 2019, women comprised 29 percent 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.

## Governance and ethical conduct (continued)

#### **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.

#### **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 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 at least every two years to sales, marketing and procurement management and staff covering topics relevant to their region such as competition law and our anti-corruption and anti-bribery policies.

#### 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 19 to 24 of Nufarm's 2019 annual financial report.

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 health, safety and environmental concerns are reported directly to the Health, Safety and Environment (HSE) board sub-committee and delegated to the relevant group executive for resolution.

There were no critical environmental concerns reported to the HSE sub-committee this year.

There have been no new legal actions against the company for anticompetitive behaviour, anti-trust or monopoly practice, and there have been no incidents of corruption this year.



**Donald McGauchie AO** Joined in 2003 Board Chairman Donald is chairman of the nomination and governance

committee and a member of the human resources committee.



**Greg Hunt** Joined in 2015 Managing Director and Chief Executive Officer

**Gordon Davis** 

**Peter Margin** 



Joined in 2011 Anne is a member of the audit and risk committee and human resources committee.



May in 2011 Gordon is chairman of the health, safety and environment committee and a member of the audit and risk committee and the human resources committee.



Joined in 2012 Frank is the chairman of the audit and risk committee and a member of the nomination and governance committee.



Joined in 2011 Peter is chairman of the human resources committee and a member of the audit and risk committee.



**Marie McDonald** Joined in 2017 Marie is a member of the audit and risk committee and the health, safety and environment committee.



Toshikazu Takasaki Joined in 2012 Toshikazu is a member of the health, safety and environment committee.



# Materiality and stakeholder engagement

The feedback we collect from stakeholders helps shape our business strategy and plans by identifying the issues that are most material for Nufarm.



Our stakeholders are those who have a direct relationship with or who are potentially impacted by our activities. They include employees, customers, investors, suppliers, government regulators, local communities and nongovernment organisations.

The content included in our 2019 Sustainability Report has been guided by the Global Reporting Initiative's G4 Sustainability Reporting Guidelines.

The chapters in this document provide detail on sustainability issues we have determined to be material to Nufarm following engagement with internal leaders, employees, key partners, customers and external analysts.

Key topics and concerns raised by stakeholders throughout the year have also been considered when preparing this report. A summary of the areas of interests raised by our stakeholders is included in Table 18.

More information on material risks that could impact the achievement of our business objectives is provided in our 2019 annual report on pages 19 to 24.

#### Materiality Assessment

In 2017 we completed our first internal materiality assessment to evaluate our key sustainability issues. The assessment included a survey and review of important issues, from the perspective of internal leaders, employees, key partners and customers.

This assessment was the first step towards a more robust approach to identifying our material sustainability issues and the areas our stakeholders considered priorities for disclosure.

In 2020 we will undertake a further materiality assessment extending the scope of the first study by specifically engaging key stakeholder groups on material sustainability topics and overlaying additional insights from our discussions with sustainability and financial analysts.

Figure 6 – Material Topics

significance to stakeholders

Engaging with communities near our manufacturing operations, management of legacy soil and groundwater contamination, reducing air emissions and waste, ensuring our suppliers uphold our sustainability values, screening suppliers for corporate and social responsibility, supporting local community groups and projects.

promoting integrated pest management, encouraging and supporting the effective recycling of packaging, providing flexible work arrangements, upholding human rights regulations, reducing greenhouse gas emissions, freedom of association and collective bargaining agreements open to all employees, transparency of political affiliations and contributions.

Significance to NuFarm

# Materiality and stakeholder engagement (continued)

Table 18 – Engaging with our stakeholders

Stakeholder group	Areas of interest	Mode of engagement	Frequency
Employees	<ul> <li>Safety and health</li> <li>Inclusion and diversity</li> <li>Wages, benefits and recognition</li> <li>Career development</li> <li>Strategic direction of the business and performance</li> <li>Product stewardship</li> <li>Environmental performance</li> <li>Governance and business integrity practices</li> </ul>	<ul> <li>Code of conduct, policies and standards</li> <li>Conversations between leaders, managers and employees</li> <li>Performance feedback process</li> <li>Employee engagement surveys</li> <li>Employee communication channels (intranet Yammer, Teams, newsletters, emails, teleconferences)</li> <li>Training and development programs</li> </ul>	Daily, weekly, monthly, quarterly, half annually and annually; based on the mode of engagement
Customers	<ul> <li>Product information</li> <li>Product quality</li> <li>Product performance</li> <li>Product stewardship</li> <li>Environmental performance</li> <li>Technical expertise</li> <li>Cyber security</li> </ul>	<ul> <li>Safety data sheets</li> <li>On-site conversations with Nufarm agronomists and sales representatives</li> <li>Decision support tools</li> <li>Trade shows</li> <li>Customer surveys</li> <li>Company website news</li> <li>Site tours</li> </ul>	Ongoing
Investors and financiers	<ul> <li>Governance</li> <li>Strategy</li> <li>Financial and operational performance</li> <li>Safety, health and environmental performance</li> <li>Product stewardship</li> <li>Regulatory environment</li> <li>Compliance with financial covenants</li> <li>Climate change</li> </ul>	<ul> <li>Yearly, Half Yearly Financial Reports</li> <li>Sustainability Report</li> <li>Market Announcements</li> <li>Investor Seminars</li> <li>Annual General Meetings</li> <li>Site Tours</li> <li>Road Shows</li> <li>Regular Meetings And Communications</li> </ul>	Bi-annually, annually, as required

Stakeholder group	Areas of interest	Mode of engagement	Frequency
Suppliers	<ul> <li>Procurement opportunities</li> <li>Business strategy</li> <li>Financial and operational performance</li> <li>Responsible sourcing</li> <li>Compliance with Nufarm and industry standards</li> </ul>	<ul> <li>Supplier code of conduct, policies and standards</li> <li>Meetings and direct engagement</li> <li>Supplier Audits</li> <li>Corporate social responsibility assessments</li> </ul>	As required
Governments and Regulators	<ul> <li>Product information and research</li> <li>Taxes and royalties</li> <li>Government regulations, permits, licences and agreements</li> <li>Regulatory and legal compliance</li> </ul>	<ul> <li>Formal applications for product registrations</li> <li>Meetings and direct engagement</li> <li>Site visits and inspections</li> <li>Licence reporting</li> </ul>	As required
Non-Government Organisations and Industry Groups	<ul> <li>Agronomic trends and emerging issues</li> <li>Industry reputation and legacy</li> <li>Product stewardship</li> <li>Technology and innovation</li> <li>Best practice</li> </ul>	<ul> <li>Industry Group forums</li> <li>Meetings and direct engagement</li> </ul>	As required
Media	Transparent disclosure	<ul><li>Media releases</li><li>Interviews</li><li>Site visits</li><li>Direct engagement</li></ul>	As required

## **GRI** content index

GRI Standard and Disclosure Titles	Reference
General Disclosures	
GRI 102: General Disclosures 2016	
102-1: Name of the organization	About us: page 8
102-2: Activities, brands, products, and services	Nufarm at a glance: page 5 About us: page 7 Product Stewardship: page 44
102-3: Location of headquarters	About us: page 8
102-4: Location of operations	Nufarm at a glance: page 4 About us: Page 8
102-5: Ownership and legal form	About us: page 8
102-6: Markets served	About us: pages 7, 8
102-7: Scale of the organization	People: table 8 on page 23 About us: pages 7 and 8 and tables 1 and 2 on page 9
102-8: Information on employees and other workers	People: pages 14, 17 and tables 6 and 8 on pages 21 and 23 respectively
102-9: Supply chain	About us: page 8
102-10: Significant changes to the organization and its supply chain	About us: page 8
102-11: Precautionary Principle or approach	About us: page 7
102-12: External initiatives	About us: page 8
102-13: Membership of associations	About us: page 8
102-14: Statement from senior decision-maker	Managing Director's message: page 3
102-15: Key impacts, risks, and opportunities	Governance and ethical conduct: page 48 Refer also to pages 19 – 24 2019 Annual report, which can be found at https://nufarm.com/financial-reports/annual-report-2019
102-16: Values, principles, standards, and norms of behaviour	Nufarm at a glance: page 4 About us: page 7
102-17: Mechanisms for advice and concerns about ethics	Governance and ethical conduct: page 48 Also refer to page 7 of our Code of conduct, which can be found at https://nufarm.com/investor-centre/corporate-governance/
102-18: Governance structure	Governance and ethical conduct: page 47
102-19: Delegating authority	Governance and ethical conduct: page 48
102-20: Executive-level responsibility for economic, environmental, and social topics	Governance and ethical conduct: page 48 Also refer to the Key Management Personnel section on page 6 of our 2019 Annual report, which can be found at https://nufarm.com/financial-reports/annual-report-2019
102-21: Consulting stakeholders on economic, environmental, and social topics	Materiality and stakeholder engagement: pages 51 to 53
102-22: Composition of the highest governance body and its committees	Governance and ethical conduct: pages 47-49 People: tables 7 and 9 on pages 23 and 24 respectively Also refer to the Board of Director's section on pages 4 and 5 of our 2019 Annual report, which can be found at https://nufarm.com/financial-reports/annual-report-2019
102-23: Chair of the highest governance body	Governance and ethical conduct: page 49
102-24: Nominating and selecting the highest governance body	Page 8 of Nufarm's Board Charter, available at https://cdn.nufarm.com/wp-content/uploads/2019/09/18164340/NUFARM_BOARD_CHARTER-280819.pd: Refer also to Nufarm's policy on the Nomination & Appointment of Directors, available at https://cdn.nufarm.com/wp-content/uploads/2018/10/08170455/Nufarm_Nomination-and-Appointment-of-Directors-Policy-2018.pdf
102-25: Conflicts of interest	Governance and ethical conduct: page 48 Refer also to page 12 of Nufarm's Board Charter, available at https://cdn. nufarm.com/wp-content/uploads/2019/09/18164340/NUFARM_BOARD_ CHARTER-280819.pdf
102-26: Role of highest governance body in setting purpose, values, and strategy	Governance and ethical conduct: page 47 About us: page 7
102-27: Collective knowledge of highest governance body	Information unavailable
102-28: Evaluating the highest governance body's performance	Governance and ethical conduct: page 47 Refer also to Nufarm's Policy on Performance of Board & Key Executives, available at https://cdn.nufarm.com/wp-content/uploads/2018/10/08170457/ Nufarm_Performance-of-Board-and-Key-Executives-Oct2012.pdf
102-29: Identifying and managing economic, environmental, and social impacts	Governance and ethical conduct: page 48

GRI Standard and Disclosure Titles	Reference
02-30: Effectiveness of risk management processes	Governance and ethical conduct: page 48 to 49
02-31: Review of economic, environmental, and social topics	Governance and ethical conduct: page 47
02-32: Highest governance body's role in sustainability reporting	This report was reviewed and approved by Nufarm's Chief Executive Officer, Greg Hunt.
02-33: Communicating critical concerns	Governance and ethical conduct: page 49
02-34: Nature and total number of critical concerns	Governance and ethical conduct: page 49
02-35: Remuneration policies	Refer to pages 29 to 52 of our 2019 Annual report, which can be found at https://nufarm.com/financial-reports/annual-report-2019
02-36: Process for determining remuneration	Our people: page 18
02-37: Stakeholders' involvement in remuneration	Information unavailable
02-38: Annual total compensation ratio	Information unavailable
02-39: Percentage increase in annual total compensation ratio	Information unavailable
02-40: List of stakeholder groups	Materiality and stakeholder engagement: table 18 on pages 51 to 52
02-41: Collective bargaining agreements	Our people: page 21
02-42: Identifying and selecting stakeholders	Materiality and stakeholder engagement: pages 51 to 52
02-43: Approach to stakeholder engagement	Materiality and stakeholder engagement: table 18 on page 52
02-44: Key topics and concerns raised	Materiality and stakeholder engagement: page 52
02-45: Entities included in the consolidated in ancial statements	About this report: inside front cover About us: page 8 Refer also to pages 121-124 of our 2019 Annual report, which can be found at https://nufarm.com/financial-reports/annual-report-2019
02-46: Defining report content and topic Boundaries	About this report: inside front cover
02-47: List of material topics	Materiality and stakeholder engagement: figure 6 on page 51
02-48: Restatements of information	Safety: table 3, page 14 Environment: table 12 on page 30, table 13 on page 31, table 15 on page 33
02-49: Changes in reporting	There have been no significant changes to material topics or boundaries in 2019. Refer to About this report: inside front cover for commentary on our Greenville facility.
02-50: Reporting period	About this report: inside front cover
02-51: Date of most recent report	About this report: inside front cover
02-52: Reporting cycle	About this report: inside front cover
02-53: Contact point for questions regarding the report	About this report: inside front cover
02-54: Claims of reporting in accordance with the GRI Standards	About this report: inside front cover
02-55: GRI content index	GRI content index: pages 54 to 58
02-56: External assurance	About this report: inside front cover
Material Disclosures	
GRI 201: Economic Performance 2016	
201-1: Direct economic value generated and distributed	About us: page 8
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	People: page 18 Refer also to note 26 on Employee benefits on pages 101 to 103 of our 2019 Annual report, which can be found at https://nufarm.com/financial-reports/annual-report-2019
GRI 202: Market Presence 2016	
202-1: Ratios of standard entry level wage by gender compared to local minimum wage	Information unavailable
200 0 Proportion of conjurnamenagement bird from the	Information unavailable
202-2: Proportion of senior management hired from the ocal community	
ocal community	No significant investments in infrastructure or services were made in 2019.
ocal community  GRI 203: Indirect Economic Impacts 2016	No significant investments in infrastructure or services were made in 2019.  Information unavailable
ocal community  GRI 203: Indirect Economic Impacts 2016  203-1: Infrastructure investments and services supported	·

## GRI Content Index (continued)

GRI Standard and Disclosure Titles	Reference
GRI 205: Anti-corruption 2016	
205-1: Operations assessed for risks related to corruption	Information unavailable
205-2: Communication and training about anti-corruption	Governance and ethical conduct: page 48
policies and procedures	
205-3: Confirmed incidents of corruption and	Governance and ethical conduct: page 49
actions taken	
GRI: 206 Anti-competitive Behaviour 2016	
206-1: Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	Governance and ethical conduct: page 49
GRI: 301 Materials 2016	
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
GRI: 302 Energy 2016	
302-1: Energy consumption within the organization	Environment: page 27 and table 12 on page 30
302-2: Energy consumption outside of the organization	Information unavailable
302-3: Energy intensity	Environment: page 27 and table 12 on page 30
302-4: Reduction of energy consumption	Information unavailable
302-5: Reductions in energy requirements of products	Information unavailable
and services	
GRI: 303 Water and Effluents 2018	
303-1: Interactions with water as a shared resource	Environment: page 28
303-2: Management of water discharge-related impacts	Environment: page 28
303-3: Water withdrawal	Environment: table 14 on page 32
303-4: Water discharge	Environment: page 28 and table 14 on page 32
303-5: Water consumption	Environment: table 14 on page 32
GRI: 304 Biodiversity 2016	
304-1: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside of protected areas	Environment: page 29
304-2: Significant impacts of activities, products, and services on biodiversity	Environment: page 29
304-3: Habitats protected or restored	Environment: page 29
304-4: IUCN Red List species and national conservation list species with habitats in areas affected by operations	Information unavailable
GRI: 305 Emissions 2016	
305-1: Direct (Scope 1) GHG emissions	Environment: page 27 and table 12 on page 30
305-2: Energy indirect (Scope 2) GHG emissions	Environment: page 21 and table 12 on page 30
305-3: Other indirect (Scope 3) GHG emissions	Information unavailable
305-4: GHG emissions intensity	Environment: page 27 and table 12 on page 30
305-5: Reduction of GHG emissions	Environment: page 27
305-6: Emissions of ozone-depleting substances (ODS)	Environment: page 27 and table 13 on page 31
305-7: Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Environment: page 27 and table 13 on page 31
GRI: 306 Effluents and Wastes 2016	
306-1: Water discharge by quality and destination	Environment: table 14 on page 32
306-2: Waste by type and disposal method	Environment: page 29 and table 15 on page 33
306-3: Significant spills	Environment: page 29 and table 16 on page 34
306-4: Transport of hazardous waste	Environment: table 15 on page 33
306-5: Water bodies affected by water discharges and/or runoff	Environment: page 28
GRI: 307 Environmental Compliance 2016	
307-1: Non-compliance with environmental laws and regulations	Environment: pages 27 and 36
GRI: 308 Supplier Environmental Assessment 2016	
308-1: New suppliers that were screened using environmental criteria	Ethical Sourcing: page 38

GRI Standard and Disclosure Titles	Reference
308-2: Negative environmental impacts in the supply chain and actions taken	Ethical Sourcing: figure 5 and page 38
GRI: 401 Employment 2016	
401-1: New employee hires and employee turnover	People: table 10 on page 24
401-2: Benefits provided to full-time employees that are not provided to temporary or part-time employees	Information unavailable
401-3: Parental leave	People: table 11 on page 25
GRI: 403 Occupational Health and Safety 2018	
403-1: Occupational health and safety management system	Safety: page 11
403-2: Hazard identification, risk assessment, and incident investigation	Safety: page 11
403-3: Occupational health services	Safety: page 13
403-4: Worker participation, consultation, and communication on occupational health and safety	Safety: page 13
403-5: Worker training on occupational health and safety	Safety: page 13
403-6: Promotion of worker health	Safety: page 13
403-7: Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Safety: page 13 Product stewardship: page 43
403-8: Workers covered by an occupational health and safety management system	Safety: pages 11 and 12
403-9: Work-related injuries	Safety: page 14 and tables 3 and 4 on pages 14 and 15 respectively
403-10: Work-related ill health	Information unavailable
GRI: 404 Training and Education 2016	
404-1: Average hours of training per year per employee	People: page 19 Safety: page 14 Environment: page 27
404-2: Programs for upgrading employee skills and transition assistance programs	People: page 18
404-3: Percentage of employees receiving regular performance and career development reviews	People: page 19
GRI: 405 Diversity and Equal Opportunity 2016	
405-1: Diversity of governance bodies and employees	People: tables 7 and 9 on pages 23 and 24 respectively
405-2: Ratio of basic salary and remuneration of women to men	People: page 19
GRI: 406 Non-discrimination 2016	
406-1: Incidents of discrimination and corrective actions taken	People: page 22
GRI: 407 Freedom of Association and Collective Bargaining 2016	
407-1: Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	People: page 17
GRI: 408 Child Labour 2016	
408-1: Operations and suppliers at significant risk for incidents of child labour	People: page 17 Ethical sourcing: page 38
GRI: 409 Forced and Compulsory Labour 2016	
409-1: Operations and suppliers at significant risk for incidents of forced or compulsory labour	People: page 17 Ethical sourcing: page 38
GRI: 413 Local Communities 2016	
413-1: Operations with local community engagement, impact assessments, and development programs	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 community. At our Maracanau 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.
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# GRI Content Index (continued)

GRI Standard and Disclosure Titles	Reference
413-2: Operations with significant actual and potential negative impacts on local communities	Our manufacturing sites are in industrial zones; however for five sites the industrial zones are close to residential areas 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. Refer also to page 34in Environment
GRI: 414 Supplier Social Assessment 2016	
414-1: New suppliers that were screened using social criteria	Ethical Sourcing: page 38
414-2: Negative social impacts in the supply chain and actions taken	Ethical Sourcing: figure 5 and page 38
GRI: 416 Customer Health and Safety 2016	
416-1: Assessment of the health and safety impacts of product and service categories	Product stewardship: page 43
416-2: Incidents of non-compliance concerning the health and safety impacts of products and services	Information unavailable
GRI: 417 Marketing and Labelling 2016	
417-1: Requirements for product and service information and labelling	Product stewardship: page 43
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
GRI: 419 Socioeconomic Compliance 2016	
419-1: Non-compliance with laws and regulations in the social and economic area	Safety: page 14

