Helping farmers get more from their land

Annual Report 2019

1



Nufarm

Grow a better tomorrow

2019 Highlights



Contents

Chairman's Message	2
Managing Director's Message	3
Board of Directors	4
Key Management Personnel	6
Operating and Financial Review	7
Corporate Governance	24
Directors' Report	25
Remuneration Report	29
Lead Auditor's Independence Declaration	53
Consolidated Income Statement	54
Consolidated Statement of Comprehensive Income	55
Consolidated Balance Sheet	56
Consolidated Statement of Cash Flows	57
Consolidated Statement of Changes in Equity	58
Notes to the Consolidated Financial Statements	60
Directors' Declaration	129
Independent Auditor's Report	130
Shareholder and Statutory Information	136
Corporate Directory	IBC



Helping farmers get more from their land

For more than 100 years we've been finding more effective ways to fight disease, weeds and pests to increase the yields of growers' crops.

Keeping customers at the heart of our business has always been the key to our success. As our customers grow and the industry evolves, we're finding new ways to grow with them to meet more of their needs across the crop life-cycle. We focus on what the farmers and growers need and partner with distributors so they get the right product at the right time. That's why more and more people are depending on us to help them grow.

Chairman's Message





Donald McGauchie AO Chairman

Dear Shareholder,

In 2019 your company reported net profit after tax of \$38 million, including individually significant items of \$51 million. Underlying earnings before interest, tax, depreciation and amortisation increased to \$420 million from \$386 million in the prior year.

Earnings growth was achieved despite significant external headwinds, reflecting the benefit of recent investments and the quality and resilience of the business. A full year contribution from the European portfolios acquired last year and strong performances in North America, Seed Technologies and Asia combined to offset weaker earnings in Australia and flat earnings in Latin America. The contribution from the European portfolios was impacted by supply issues and while this was a disappointment, the acquisition has transformed our presence in this market and provides a strong base to support improved earnings in the short and medium term.

The balance sheet was strengthened with the support of shareholders for the equity raising in the first half of the year. This allowed us to reduce debt and manage the impact of extreme weather conditions and supply disruptions while meeting the needs of our growing business.

Improving margins and generating cash are key priorities for the coming year. The Board is confident the management team has taken the necessary steps to ensure a timely recovery from the headwinds and issues that impacted performance in 2019 and 2020 will see improved performance.

On 30 September 2019 we announced our intention to divest the South American businesses to Sumitomo Chemical Company for \$1.188 billion and customary net working capital adjustments on completion. The Board believes this transaction will deliver compelling, up-front value for shareholders and refocus the company on regions where we can generate higher margins and stronger cash flows. Shareholders will receive more information and have an opportunity to vote on the proposal later in the 2019 calendar year.

The Nufarm culture continues to play an important role in delivering the company's strategy and meeting community expectations. Board members have observed first-hand the commitment of employees from around the world to Nufarm's values, stakeholders, and to achieving Nufarm's goals. This extends from contributing to communities, protecting the environment, and developing new products to help farmers increase yield, adapt to changing growing conditions and address growing societal concerns about the sustainability of modern agriculture.

On behalf of the Board of Directors, I thank our management team and employees for their dedication and commitment. We also thank outgoing director, Bruce Goodfellow, for his guidance over his many decades of involvement with the company.

In closing, I also thank our shareholders. With your support we have built a valuable global distribution network, quality product portfolio and promising pipeline of new product development. Your Board is confident the significant reinvestment we have made over recent years will deliver value to shareholders in the coming year and for years to come.

Managing Director's Message



Greg Hunt Managing Director and Chief Executive Officer

Dear Shareholder,

2019 was a trying year for our industry but even in this constrained environment we continued to see strong support from our customers. Managing external headwinds and strengthening our business to improve returns was a major focus in every region.

In 2019 we faced continued drought in large parts of Australia, flooding in major cropping regions in the United States and supply conditions which impacted product availability and increased costs in Europe. Despite these difficult conditions, earnings grew in all regions except Australia, with earnings in Latin America steady on the prior year.

In Europe we completed the integration of the portfolios acquired in 2018 and accelerated the transfer of product registrations to improve product availability for the coming year. While tight supply conditions for technical materials sourced from China are expected to continue to pressure costs in 2020, demand for the acquired products is strong. These portfolios are an important extension to our business and are expected to drive further earnings growth in the coming years.

In North America we maintained earnings momentum despite severe flooding in the United States and dry conditions in Canada which reduced demand and increased competition in an oversupplied market. Our new formulation facility in Greenville, Mississippi, is now ready for commissioning and will support growth into North America.

In Australia we responded to a second year of extreme drought with an unprecedented temporary closure of manufacturing lines and by launching the next phase of our transformation program to reduce costs. These actions set us up to improve margins and working capital efficiency in 2020 while retaining upside exposure to a recovery in weather conditions. Latin America benefited from both favourable weather and strong commodity demand and we continued our focus on meeting customer needs while maintaining discipline on margins in an increasingly competitive market.

The Seed Technologies business achieved another year of earnings growth with higher seed treatment, sunflower and sorghum seed sales. The acquisition of the nematicide, Trunemco, is expected to support growth in coming years and first sales of Nuseed's proprietary omega-3 canola product, Aquaterra", are on track for 2020, with a positive earnings contribution expected from the 2021 financial year.

Improving working capital efficiency to generate cash was a focus in all regions and cash flow generation improved significantly on the prior year.

Keeping our people safe, improving margins, and generating cash are the key priorities for the 2020 year. Over recent years we have invested in the transformation of our cost base and the growth of our business. We have broadened our product portfolio and strengthened our pipeline of new products, including the development of the commercially significant omega-3 canola. Our investment has created a strong platform for future growth and we are excited by the opportunities before us. In closing I thank our dedicated and talented people across the world and our shareholders for their continued support.

Board of Directors



Donald McGauchie AO Chairman

Donald McGauchie AO joined the board in 2003 and was appointed chairman on 13 July 2010.

He has wide commercial experience within the Agricultural, food processing, commodity tradina, finance and telecommunication sectors. He also has extensive public policy experience, having previously held several high-level advisory positions to the government including the Prime Minister's Supermarket to Asia Council, the Foreign Affairs Council and the Trade Policy Advisory Council. He is a former member of the board of the Reserve Bank of Australia.

Donald is chairman of Australian Agricultural Company Limited and a director of Graincorp Ltd.

In the past three years, Donald was a director of James Hardie Industries plc.

Donald is chairman of the nomination and governance Committee and a member of the human resources committee.



Greg Hunt

Managing Director and Chief Executive Officer

Greg Hunt joined the Board and was appointed chief executive officer in 2015.

He has extensive executive and agribusiness experience having held senior executive positions and advisory roles. Greg was formerly the managing director of Elders Australia Limited, a position he held from 2001 to 2007, and was also a director of Tandor Ltd and Costa Group Holdings. He has worked with various private equity firms focused on the agriculture sector and acted as corporate advisor to Australian and international organisations in agribusiness related matters.



AB Brennan

Anne Brennan joined the board on 10 February 2011.

She has a bachelor of commerce (hons) from University College Galway and is a fellow of the Institute of Chartered Accountants in Australia and a fellow of the Australian Institute of Company Directors.

She was formerly the executive finance director for the Coates Group and chief financial officer for CSR.

Prior to this Anne was a partner in professional services firms Ernst & Young, Andersen and KPMG.

Anne is a director of Charter Hall Group and Argo Investments Limited. She is also a director of Rabobank Australia Limited and Rabobank New Zealand Limited.

Anne is a former director of Myer Holdings Limited and Metcash Limited.

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



Gordon Davis

Gordon Davis joined the board on 31 May 2011.

He has a bachelor of forest science (Hons), master of agricultural science and holds a master of business administration.

Gordon is a director of Primary Health Care Limited and Midway Limited and was managing director of AWB Limited between 2006 and 2010.

Prior to this, he held various senior executive positions with Orica Limited, including general manager of Orica Mining Services (Australia, Asia) and general manager of Incitec Fertilizers. He has also served in a senior capacity on various industry associations.

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



Frank Ford

Frank Ford joined the board on 10 October 2012.

Frank has a master of taxation from the University of Melbourne and a bachelor of business, accounting from RMIT University and is a fellow of the Institute of Chartered Accountants. Frank is a former managing partner of Deloitte Victoria after a long and successful career as a professional advisor spanning some 35 years. During that period, Frank was also a member of the Deloitte global board, global governance committee and national management committee. Frank is a director of Tarrawarra Museum of Art.

Frank is the chairman of the audit and risk committee and a member of the nomination and governance committee



Peter Margin

Peter Margin joined the board on 3 October 2011.

Peter has a bachelor of science (hons) from the University of NSW and holds a master of business administration from Monash University.

Peter has many years of leadership experience in major Australian and international food companies. His most recent role was a chief executive of Goodman Fielder Ltd and before that Peter was chief executive and chief operating officer of National Foods Ltd.

He has also held senior management roles in Simplot Australia Pty Ltd, Pacific Brands Limited (formerly known as Pacific Dunlop Limited), East Asiatic Company, HJ Heinz Company Australia Limited and is currently executive chair of Asahi Beverages ANZ.

Peter is a director of ASX Listed Companies Bega Cheese Limited, PACT Group Holdings Limited and Costa Group Holdings Limited.

In the past three years Peter was a director of PMP Limited and Huon Aquaculture Group Limited.

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



Marie McDonald

Marie McDonald joined the board in 2017.

Marie has a bachelor of laws (honours) and a bachelor of science (honours) and was a senior partner at Ashurst until 2014, specialising in mergers and acquisitions, corporate governance and commercial law.

She was widely recognised as one of Australia's leading corporate and commercial lawyers.

Marie is a director of CSL Limited, Nanosonics Limited and the Walter and Eliza Hall Institute of Medical Research.

She was chair of the corporations committee of the Business Law Section of the Law Council of Australia from 2012 to 2013, having previously been the deputy chair, and was a member of the Australian Takeovers Panel from 2001 to 2010.

Marie is a member of the audit and risk committee and the health, safety and environment committee.



Toshikazu Takasaki

Toshikazu Takasaki joined the board in 2012.

Mr Takasaki represents the interests of shareholder Sumitomo Chemical Company (SCC).

He has a bachelor of business administration from the University of Tokyo and is a former executive of SCC holding senior management positions in businesses relating to crop protection, both within Japan and in the US. He is now a business consultant with a national qualification registered by the Japanese Ministry of Economy, Trade and Industry as a small and medium sized enterprise consultant.

He brings broad industry and international experience to the board.

Toshikazu is a member of the health, safety and environment committee.

Key Management Personnel



Greg Hunt

Managing Director and Chief Executive Officer

Greg Hunt joined the Board and was appointed chief executive officer in 2015.

He has extensive executive and agribusiness experience having held senior executive positions and advisory roles. Greg was formerly the managing director of Elders Australia Limited, a position he held from 2001 to 2007. and was also a director of Tandor Ltd and Costa Group Holdings. He has worked with various private equity firms focused on the agriculture sector and acted as corporate advisor to Australian and international organisations in agribusiness related matters.



Paul Binfield

Chief Financial Officer

Paul joined Nufarm in November 2011. He has held senior strategic financial roles at Coles Liquor and Hotels, a major division of Wesfarmers Ltd, and at Mayne Group.

Paul has extensive experience in publicly listed and private company finance functions, both in Australia and the United Kingdom.



Niels Pörksen

Group Executive Portfolio Solutions

Niels joined Nufarm in 2014 as director, business improvement in Europe, and was appointed director, commercial operations in 2015.

In October 2016, Niels joined the global team in Australia to represent the portfolio function, as part of the Nufarm executive team.

Niels has significant experience in the crop protection industry and was an executive board member at Nordzucker and worked at BASF Chemicals in various senior management roles for over 17 years.



Elbert Prado

Group Executive Manufacturing and Supply Chain

Elbert, a chemical engineer, joined Nufarm in July 2013 after extensive international experience in senior operations roles within the chemical industry.

He has a strong focus on safety, supply chain and manufacturing excellence. Elbert was global manufacturing and supply chain director for Rohm and Haas.



Brent Zacharias

Group Executive Nuseed

Brent joined Nufarm in 2006 after a 14-year career with Dow AgroSciences.

Brent has a degree in agricultural economics and held senior roles in Nufarm's Canadian business prior to transferring to Australia as Nuseed general manager in 2008.

Now based in Canada, Brent holds global responsibility for Nuseed – Nufarm's agricultural seed and traits division.

Operating and Financial Review

Our strategy and operating model

Nufarm is a leading developer and manufacturer of crop protection solutions and seed technologies with more than 3,000 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.

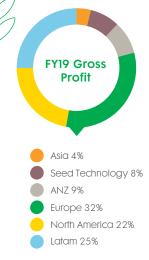
We use our leading molecular capabilities, global genetics and industry collaboration to develop unique plant output traits with specific customer and consumer benefits such as our proprietary Omega-3 canola. Crop Protection

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 longstanding foundational products and unique formulations.

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

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 life-cycle of our chosen crops.







Strategy

We aim to build a cost-competitive business and improve the quality of earnings to create a strong platform to support continued, profitable growth. We allocate capital to our areas of existing strength and potential growth opportunities that will maximise returns.

Our scale and global distribution footprint make us an attractive partner for major manufacturers and research organisations.

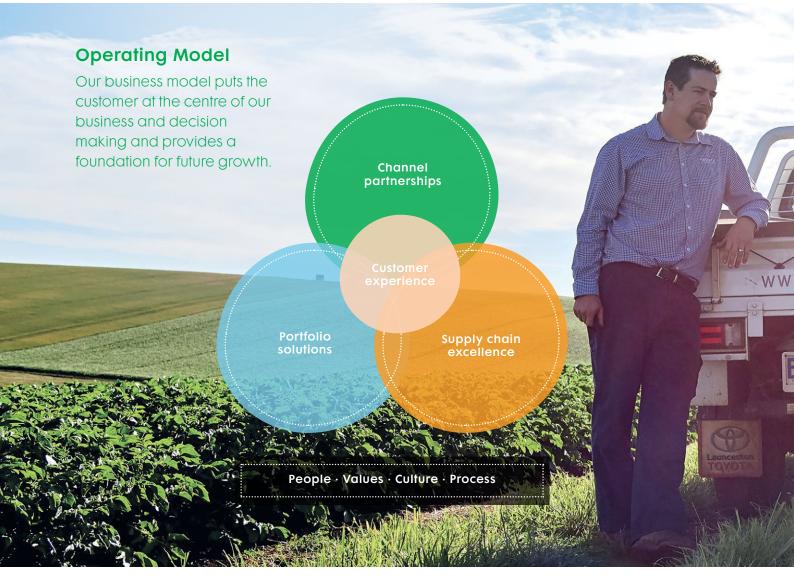
By collaborating with these industry participants, we are able to offer

our customers high-quality products at competitive prices and a growing range of new, differentiated products to meet more of their needs across the crop lifecycle.

We believe our product and geographic diversity, along with our long-term customer relationships, help protect our business from adverse seasonal or commercial pressures in any one market while also providing a range of expansion opportunities in major cropping markets around the world.



We have teams based in more than 30 countries supporting channel partners and growers in over 100 countries around the world. This platform also allows us to establish close relationships with our customer base, including independent distributors and dealers as well as end users of our products – contributing to our understanding of the evolving needs of growers and thereby helping us optimise our product development activities.





Supply chain excellence

We have crop protection formulation and manufacturing facilities in nine countries, and seed-related research, development and marketing operations in Australia, North America, Latin America and Europe.

Our global manufacturing and distribution platform allows us to deliver products to our customers with short lead times, which is critical given the weather dependent nature of cropping and related crop protection product demand patterns.



With strategically located laboratories across the world, we have proven product development and registration expertise in our key markets that enables us to develop innovative, differentiated and value-added products and formulations relevant to the region's growers and bring them to market quickly. This provides us with a strong pipeline of new product opportunities and supports the profitable growth of our business. We have a strategic alliance with our largest shareholder, Sumitomo Chemical Company, with whom we have a range of collaboration agreements covering product distribution, development and manufacturing. We also have commercial relationships with other major crop protection companies which we believe strengthen our business in a variety of areas, including research and development, procurement, manufacturing, distribution and sales.



Sustainability

Our mission to "grow a better tomorrow" reflects our ambition for our customers, our people, communities and financial stakeholders.

With the world's population increasing in size and prosperity, Nufarm plays an important role in helping farmers deliver food security and improved nutrition to a growing population. 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. Our approach focuses on the following key areas:

- Safety
- Environment
- People
- Product stewardship and ethical sourcing
- Governance

Financial year 2019 is the final year of the sustainability strategy launched in 2015. When we launched the strategy our aspiration was to achieve a step change in sustainability maturity and impact, with the health and safety of our people being the priority of the strategy for the first two years.

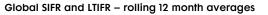
We have made significant progress in safety risk management since 2015 through investment in safety related plant improvements, safety standards, systems and processes and safety awareness programs. The improvement in performance over the four years reflects the positive impact of the strategy with our safety metrics approaching industry best practice.

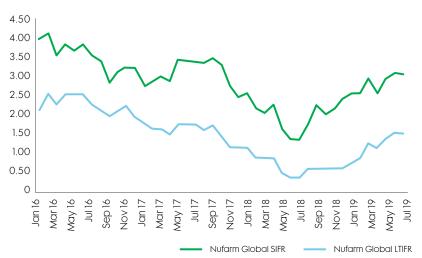
While some regions and operating sites achieved significant injury prevention milestones in 2019, overall company performance against our principal safety metric, Serious Injury Frequency Rate, deteriorated in the first half of the year from our best ever performance recorded the prior year.

We acted quickly to identify and address the causes 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.

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 performance has been another key area of 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.

In 2019 we made good progress closing gaps against our standards and our environmental management systems have been further strengthened with an additional two manufacturing sites completing ISO14001 accreditation. This brings the number of manufacturing sites with ISO14001 accreditation to five and this year we have committed to achieving accreditation at all manufacturing sites by 2024. We further reduced our water use this year and have set ourselves an objective to improve waste water treatment at our sites.





Serious Injury Frequency Rate (SIFR) is an indicator that includes the two principal serious injury metrics (Lost Time and Medical Treatment).

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 established inclusion and diversity councils to support the achievement of our target of increasing female participation in our workforce.

Our product stewardship standards and processes support our customers to meet the 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 last year. 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 beyond our internal organisation and into the value chain. The increased discipline, processes and structures the organisation has put in place to ensure we are measuring and managing our business in a way that allows us to be accountable for our performance are testament to the achievement of the aspirations of the strategy we launched in 2015.

There is more work to do and in 2020 we will re-engage with external stakeholders to expand our materiality assessment to inform the next phase of our sustainability strategy. The strategy will build on the work we have done to advance change within our organisation and seek to influence change beyond our business, particularly through how we support our customers in achieving their own sustainability goals.



Group Results

A full year contribution from the acquired European portfolios and strong performances in North America, Seed Technologies and Asia were the key drivers of earnings growth.

External headwinds constrained performance with the continuation of drought conditions in large parts of eastern Australia, extreme flooding in major cropping regions in the United States and supply disruptions in Europe.

Year ended 31 July	2019 \$000	2018 \$000	Change
Revenue	3,757,590	3,307,847	13.6%
Underlying gross profit	1,034,667	963,434	7.4%
Underlying EBITDA ^{(1) (2)}	420,293	385,653	9.0%
Underlying EBIT ⁽¹⁾	248,585	265,103	(6.2%)
Operating profit	197,815	175,499	12.7%
Underlying financing costs	116, 866	118,334	(1.2%)
Underlying net profit after tax $^{(3)}$	89,080	98,396	(9.5%)
Net profit after tax	38,310	(15,588)	345.8%
Net operating cash flow	98,131	(88,169)	211.3%
Underlying basic earnings per share (cents)	21.2	28.2	(25.0%)
Total dividend per share declared in respect of period (cents)	_	11.0	(11.0)

Earnings

Statutory net profit after tax of \$38 million increased \$54 million on the prior year loss of \$16 million and included material items of \$51 million (2018: \$114 million).

Group revenues increased 14 per cent to \$3.76 billion (2018: \$3.31 billion) with growth in all regions except Australia/ New Zealand with large parts of the Australian east coast impacted by continued drought conditions.

The increase in revenues was partially offset by the impact of increased competition in Latin America, cost pressures in Europe and pricing pressure in North America resulting in a decline in gross profit margins from 29.1 per cent in the prior year to 27.5 per cent. Underlying earnings before interest, tax, depreciation and amortisation (EBITDA) increased nine per cent to \$420 million with a full year contribution from the European portfolios acquired in 2018 and strong earnings in North America, Seed Technologies and Asia offsetting a weaker performance in Australia/New Zealand and flat earnings in Latin America.

Underlying earnings before interest and tax (EBIT) declined six per cent primarily due to the inclusion of a full year of depreciation and amortisation for the European portfolios acquired in 2018. Financing costs (comprising net interest and foreign exchange costs) were in line with the prior year, with higher interest costs offset by lower foreign exchange costs. Underlying interest costs increased by 17 per cent to \$107 million (2018: \$92 million) in line with higher average debt levels throughout the year. Foreign exchange losses declined 64 per cent to \$10 million (2018: \$27 million) as Latin American hedging costs of approximately \$15 million, which were in line with the prior year, were offset by gains from other foreign exchange exposures.

Underlying basic earnings per share declined to 21.2 cents with earnings growth less than the increase in issued equity.

Material items

Year ended 31 July 2019	Pre-tax \$000	After-tax \$000
Material items by category		
Legal costs	(10,517)	(10,517)
Idle plant capacity	(21,386)	(21,386)
Asset rationalisation and restructuring	(18,867)	(18,867)
Total material items	(50,770)	(50,770)

Material items of \$51 million were comprised primarily of unrecovered overhead costs relating to the unprecedented temporary closure of manufacturing lines in Australia following continued drought conditions, business restructuring costs relating to implementation of the performance improvement program in Australia, integration costs for the acquired European portfolios and legal costs for the action brought in the United States to enforce Nufarm's rights in relation to the omega-3 canola patent estate.

Dividend

Directors suspended dividends for the 2019 year. This decision reflects the company's immediate focus on reducing debt levels.

Cash flow

Year ended 31 July	2019 \$000	2018 \$000	Change
Cash generated from operations	242,734	58,583	184,151
Net interest paid	(102,608)	(98,652)	(3,956)
Taxes paid	(42,060)	(48,112)	6,052
Dividends received	65	12	53
Net operating cash flows	98, 131	(88,169)	186,300
Cash flows from investing activities	(173,980)	(965,574)	791,594
Cash flows from financing activities	269,994	1,112,430	(842,436)
Net increase in cash and cash			

Net increase in cash and cash			
equivalents	194,145	58,687	135,458

Net operating cash flows increased \$186 million on the prior year primarily due to higher earnings and a smaller increase in net working capital requirements compared to the prior year. Net investing cash flows reduced, with the prior year including the acquisition of product portfolios in Europe.

The major financing activity during the year was an equity raising that raised net proceeds of \$296 million.



Balance Sheet Management

Year ended 31 July	2019 \$000	2018 \$000	Change
Net debt	1,247,129	1,374,070	(9.2%)
ANWC/sales (%)	46.8%	40.3%	6.5%
Leverage (with pro forma adjustment in FY18)	2.97	3.00	(0.03)
Interest coverage ratio (with pro forma adjustment in FY18)	3.92	4.99	(1.07)
Gearing %	34.1%	41.1%	(7.0%)
ROFE	7.1%	9.4%	(2.3%)

Net debt was reduced by nine per cent, with the equity raising in the first half of the financial year reducing debt and strengthening the company's financial position.

Average net working capital to sales increased to 46.8 per cent. This was primarily due to higher average inventories held in Australia and North America due to climatic factors impacting sales, and higher average inventories and receivables in Europe.

Improving working capital efficiency across all regions remains a key focus for all levels of the organisation with a medium-term target to return to 2018 levels of average net working capital to sales, and in the longer term to return this ratio to the range of 35 to 37 per cent.

Improving inventory levels in Australia, North America and Europe will be a key driver to meeting this goal. Inventory levels in Australia have been significantly reduced during 2019 and this will benefit 2020. Inventory levels in North America are expected to normalise as the region recovers from flooding that impacted industry sales in 2019. In Europe, Nufarm will have full control of the supply chain for the majority of the acquired portfolio in 2020 and this will drive improved inventory management. The leverage ratio of 2.97 times is a small improvement on the prior year, reflecting lower net debt and higher earnings.

Interest coverage reduced to 3.92 times reflecting the increase in interest costs on higher average debt levels during 2019.

2020 outlook

On 30 September 2019 the company announced its intention to divest the crop protection and seed treatment assets in South America (including in Brazil, Argentina, Chile and Colombia) for cash proceeds of \$1,188 million and customary net working capital adjustments on completion. The proposal is subject to review by an independent expert, shareholder and competition approvals by relevant South American regulatory bodies. Completion of the transaction is targeted during the first half of the 2020 calendar year. Nufarm will continue to operate these businesses until completion of the transaction.

Nufarm expects continued growth in sales, cost saving benefits and improvements in supply chain efficiencies to drive earnings growth in the remaining businesses in 2020. The performance improvement program in Australia is forecast to deliver increased earnings before interest, tax, depreciation and amortisation of between \$10 million to \$15 million in 2020. The business is well positioned to benefit further from improved weather conditions if they occur.

Resolution of the supply issues that impacted product availability in Europe in 2019 is expected to contribute positively to earnings for 2020. The tight supply conditions for some technical ingredients sourced from China experienced in 2019 are expected to continue to impact negatively on the cost of goods in this region during 2020. The net impact of these factors is expected to benefit earnings before interest and tax by approximately \$15 million. There is no major planned plant maintenance shut down scheduled for the region in the 2020 financial year.

Competitive market conditions are expected in North America due to the current high levels of inventory in sales channels and lower farm incomes. Continued support from existing customers is forecast to deliver sales growth and commissioning of the Greenville formulation facility in the first half of 2020 will support future growth into south-eastern states of the United States. The full earnings benefit of the Greenville facility is expected to be realised when manufacturing throughput reaches planned capacity in 2021.

Earnings from Seed Technologies will be reduced by the impact of the divestment of the South American seed treatment assets to Sumitomo if this transaction proceeds. Earnings from the remaining assets are expected to grow with continued momentum from product launches supplemented by increased canola sales if weather conditions in Australia improve. First commercial sales of omega-3 canola are expected in 2020 with a positive earnings contribution forecast for 2021. Forecast net interest expense of \$105 million to \$110 million in 2020 includes an estimated \$30 million of interest costs relating to the South American businesses that are proposed to be divested.

Forecast hedging and net foreign exchange costs of \$20 million includes an estimated full year hedging cost of approximately \$12 million relating to the South American businesses that are proposed to be divested.

The company's effective tax rate is expected to be approximately 33 per cent in 2020.

Capital expenditure is forecast to be approximately \$150 million.

Forecast depreciation and amortisation of \$190 million

includes a full year forecast of \$8 million relating to the South American businesses.

Earnings before interest, tax, depreciation and amortisation for the first half of the 2020 financial year are expected to be in line with the prior year. This assumes a full half contribution from the South American businesses and average seasonal conditions for the major selling periods in our key markets, with the exception of Australia where continued drought conditions are expected to impact the east coast for the summer cropping season. No material impacts from government policy changes or additional third party supply interruptions are assumed in this forecast.

Operating segments results

Sales and earnings increased in both the crop protection and seed technologies segments.

		Revenue Underlying EBITDA			Underlying EBITDA		
Year ended 31 July (\$000s)	2019	2018	Change	2019	2018	Change	
Crop protection		·					
Australia and New Zealand	452,368	590,151	(23.3%)	20,685	23,736	(12.9%)	
Asia	190,285	170,680	11.5%	26,979	25,229	6.9%	
Europe	814,845	642,571	26.8%	167,608	149,873	11.8%	
North America	1,020,448	833,705	22.4%	107,762	99,487	8.3%	
Latin America	1,058,158	885,232	19.5%	97,276	97,377	(0.1%)	
Total Crop Protection	3,536,104	3,122,339	13.3%	420,310	395,702	6.2%	
Seed Technologies – global	221,486	185,508	19.4%	50,736	43,580	16.4%	
Corporate	-	-	n/a	(50,753)	(53,629)	(5.4%)	
Nufarm Group	3,757,590	3,307,847	13.6%	420,293	385,653	9.0%	

Crop Protection

Crop protection sales and earnings increased in all regions except Australia/New Zealand which was impacted by continued drought conditions in large parts of the east coast of Australia, and earnings were flat in Latin America. Further detail on the drivers of performance in each region is provided below.

Herbicide sales increased eight per cent to \$2.29 billion with growth in phenoxy herbicides offsetting a three per cent decline in glyphosate sales due to unfavourable weather conditions in Australia. Glyphosate sales represented approximately ten per cent of total company gross margin in 2019. Other herbicide revenues were up 21 per cent on the prior year with Dicamba, Flumioxazin, Bromoxynil and Fluazifop the major contributors.

Insecticide sales were up 21 per cent to \$462 million with growth driven primarily by a full year contribution from the acquired European portfolios and continued growth in Brazil.

Fungicide sales grew by 30 per cent to \$410 million. Growth was driven primarily by a full year contribution from the acquired European portfolios with tebuconazole and prochloraz mixtures delivering strong growth despite constrained supply limiting sales.

Europe

Sales and earnings grew in flat market conditions with a full year contribution of \$75 million from the product portfolios acquired in 2018 the main driver of growth. This was below the forecast contribution as a result of supply issues increasing costs and impacting ability to meet customer demand. The acceleration of product registration transfers for the acquired product portfolios is expected to improve product availability in 2020. Dry winter conditions in the central and northern Europe impacted earnings in the first half of the year, and biennual planned maintenance shutdowns also impacted earnings by \$5 million.

North America

Extreme wet conditions in the US south and midwest delayed the season, reduced area planted and impacted crop protection and turf applications with dry conditions in Canada also impacting sales. High channel inventories in the US and Canada from impending tariffs and the reduction in seasonal applications resulted in aggressive industry pricing.

A strong contribution from the turf and ornamental segment in the first half and market share gains in crop protection products from existing and new customers in the second half offset the impact of external headwinds.

Working capital levels were elevated as a result of lower and later than expected sales following the extreme weather conditions.

Australia/New Zealand

Continued dry conditions for large parts of the east coast of Australia following extreme drought last year and a late season for the west coast impacted demand and sales of crop protection products. Elevated levels of inventories in Australian sales channels due to a second year of drought conditions resulted in aggressive industry pricing that kept margins at reduced levels for a second year.

In response to the low levels of demand and high inventory levels, manufacturing lines in Australia were temporarily closed to enable an orderly reduction in excess inventory. This action resulted in the company incurring overhead costs of \$21 million that could not be allocated to manufacturing production and these were recorded as a material item in the financial accounts. Inventory levels have been reduced by approximately \$100 million and manufacturing has recommenced in the 2020 financial year.

The next phase of the performance improvement program was launched during the year to deliver greater efficiencies, reduce earnings volatility and improve the company's competitive position. The program is expected to deliver a sustained improvement in EBITDA performance with an improvement of \$10 million to \$15 million dollars forecast in 2020. Costs of \$10 million to implement the program have been incurred to date and included as a material item in the 2019 results.

Asia

Drought conditions, low pest outbreaks and low commodity prices led to a decline in the overall market in Indonesia. Nufarm gained market share with the support of new product launches and increased sales of differentiated products to achieve a small increase in sales and earnings.

Sales and earnings momentum continued in China with a full year contribution from the new joint venture. Sales and earnings also increased with strong customer support in Japan, Malaysia and Sri Lanka and a new product launch in Vietnam.

Latin America

Increased soy plantings in Brazil and a return to more normal climatic conditions in Argentina drove volume and revenue growth across all key product groups. Strong early demand for the summer season drove sales late into the second half of 2019, which also resulted in an increase in working capital balances.

Strong competition on foundational products reduced margins, this was offset by increased sales volumes and an improved product mix to deliver a steady EBITDA outcome for the period.

Seed Technologies

Seed Technologies combines the seed treatment portfolio and the Nuseed business.

Revenues increased 19 per cent to \$221 million, with seed treatment revenues increasing 17 per cent to \$98 million and Nuseed revenues increasing 20 per cent to \$123 million.

Growth in seed treatment revenues and earnings was driven by higher sales of Sumitomo products into Latin America and European sales grew with a full year contribution of seed treatment products acquired in the prior year. This more than offset a decline in Australian sales and sales into North America remained stable on the prior year.

Nuseed secured market share gains across its three focus crops of sunflower, sorghum and canola. This was despite challenging seasonal conditions in Australia which negatively impacted canola plantings and in the United States, which resulted in lower plantings of sunflower and sorghum. New varieties were successfully launched in all regions, helping to drive both increased sales and stronger margins. Europe was a stand-out performer, with new sunflower hybrids contributing to a significant increase in sales over the prior year.

Substantial progress was achieved in relation to Nuseed's proprietary omega-3 canola, which is being commercialised initially as a feed input for the aquaculture industry branded under the name 'Aquaterra"'.

During the period, a regulatory approval for cultivation was secured from the United States Department of Agriculture and regulatory filings were submitted in several other markets including Europe. The regulatory submissions relating to consumption (food and feed) approval in both the USA and in Canada are also progressing.

The first commercial crop of 35,000 acres was planted in Montana and North Dakota in the US and is currently being harvested. This crop will be stored on-farm prior to delivery to mill for crush and oil production in the first quarter of next calendar year.

Next generation varieties of omega-3 canola with improved agronomic performance, including higher yields, are currently in seed production and will be available for commercial planting in the US next year. The introduction of these new varieties will continue to improve oil production per planted acre, reduce grain transport costs and progressively lower the cost of goods.

Extensive fish feeding trials, involving more than one million fish, were undertaken with several aquaculture firms during the period. Initial data confirms earlier independent findings by NOFIMA that production metrics such as growth, feed conversion, and mortality are competitive with fish oil. The data also suggests enhanced fillet colour for fish that were fed Aquaterra diets with increasing inclusion rates, which is an important feature for the final market. The trial results validate the performance and fit of Aquaterra in potential customers' existing feed manufacturing and fish farm systems on a large scale.

Positive initial commercial discussions have been undertaken with the key aquafeed and farm companies in Norway and Chile. Nuseed is targeting to have first commercial supply agreements in place before the end of the calendar year.

The intellectual property estate which protects the proprietary omega-3 technology platform continued to strengthen, with new patents secured during the period.

Proceedings were instigated in the Eastern District of Virginia asserting infringement of valid patents held by Nuseed and its collaborative partners, CSIRO and GRDC. The result of this court action does not impact Nuseed's freedom to operate. The court action is scheduled to be heard in October 2019, with a decision anticipated before the end of the year.

IFRS and Non-IFRS financial information

Nufarm results are reported under International Financial Reporting Standards (IFRS) including Underlying EBIT and Underlying EBITDA which are used to measure segment performance. This release also includes certain non-IFRS measures including Underlying net profit after tax and Gross profit margin. These measures are used internally by management to assess the performance of our business, make decisions on the allocation of our resources and assess operational management. Non-IFRS measures have not been subject to audit or review.

The following notes explain the terms used throughout this profit release:

(1) Underlying EBIT is earnings before net finance costs, taxation and material items. Underlying EBITDA is Underlying EBIT before depreciation and amortization of \$420.293 million for the year ended 31 July 2019 and \$385.653 million for the year ended 31 July 2018. We believe Underlying EBIT and Underlying EBITDA provide useful information, but should not be considered as an indication of, or an alternative to, Profit/(loss) for the period as an indicator of operating performance or as an alternative to cash flow as a measure of liquidity.

(2) Underlying EBITDA is used to reflect the underlying performance of Nufarm's operations. Underlying EBITDA is reconciled to Operating Profit below.

Year ended 31 July	2019 \$000	2018 \$000
Underlying EBITDA	420,293	385,653
less depreciation and amortisation excluding material items	(171,708)	(120,550)
Underlying EBIT	248,585	265,103
Material items impacting operating profit	(50,770)	(89,604)
Operating profit	197,815	175,499

- (3) Non-IFRS measures are defined as follows:
 - Underlying gross profit comprises gross profit less material items.
 - Underlying net profit after tax comprises profit/(loss) for the period attributable to the equity holders of Nufarm Limited less material items.
 - Average gross margin defined as average gross profit as a percentage of revenue.
 - Average gross profit defined as revenue less a standardized estimate of production costs excluding material items and non-product specific rebates and other pricing adjustments.
 - Net external interest expense comprises interest income external, interest expense – external/debt establishment transaction costs and lease amortization – finance charges as described in note 10 to the 31 July 2019 Nufarm Limited financial report.
 - ROFE defined as underlying EBIT divided by the average of opening and closing funds employed(total equity plus net debt).
 - Net debt total debt less cash and cash equivalents.
 - Average net debt net debt measured at each month end as an average.
 - Net working capital current trade and other receivables, non-current trade receivables/trade finance receivables, and inventories less current trade and other payables.
 - Average net working capital net working capital measured at each month end as an average.
 - Constant currency comparison removing the impact from the fluctuation in exchange rates between all foreign denominated amounts and the Australian dollar.
 - Underlying free cash flow net cash from operating activities excluding material items less net cash from investing activities excluding material items.

Risk Management

A summary of the material risks that could impact the achievement of Nufarm's business objectives is included below. The Group's processes for managing risk are set out in the Group's Corporate Governance Statement which is available on our website: www.nufarm.com/investor-centre/corporate-governance/



Economic and Business Risks

Climate and seasonality

As an input supplier to global agriculture, demand for crop protection products is influenced by climatic conditions that help determine the timing and extent of cropping activity as well as weed, pest and disease pressures. While certain conditions may increase demand for crop protection products, extreme climatic conditions, such as prolonged drought, may reduce demand for those products.

In addition, the timing of weather seasons in the geographies in which Nufarm operates is uncertain and varies from year to year. Consequently, there is a risk that unusually early or late seasons may have a negative impact on demand for Nufarm products in a particular year and therefore its financial performance.

Nufarm's operations are global, providing geographic diversification to climatic and seasonality risks. Our product portfolio is diverse, supporting a wide range of agricultural applications. At an operating level, Nufarm's business planning processes incorporate forecasting and supply planning based on typical weather conditions. These plans are reviewed on an ongoing basis as the seasons progress to align supply with changing demand.

Commodity prices

International commodity prices can impact the profitability of crop protection companies. This relates to fluctuations in the prices of commodities that are associated with chemical intermediates used in the manufacture of crop protection products, and to international prices for various crops ('soft' commodities) that can affect demand for those crops and growers' decisions to plant them. The crop protection products market can be volatile and pricing can change rapidly. This volatility, in combination with foreign exchange changes, could have a material impact on Nufarm's ability to compete and may impact the financial performance and prospects of the business.

Nufarm has entered into numerous arrangements with suppliers and customers to assist in the management of our supply chain costs to ensure we can compete in changing and competitive markets. Nufarm's business planning processes help inventory management to reduce price risk of stock on hand.

Foreign exchange

Global crop protection companies such as Nufarm purchase inputs and determine selling prices in a range of international currencies and are therefore exposed to fluctuations in exchange rates. Further, a substantial portion of Nufarm's revenues, costs, assets and liabilities are denominated in currencies other than Australian dollars. As a result, exchange rate movements affecting these currencies may impact the financial performance and future prospects of the business of Nufarm.

Nufarm has implemented a range of financial risk management policies and procedures to assist with the management of foreign exchange exposure. The group treasury function manages financial risks in accordance with these policies. Where possible, currency and interest rate risk is managed through hedging strategies.

Industry consolidation

The industry in which Nufarm conducts business has undergone a period of consolidation with a number of large mergers and acquisitions (including, for example, ChemChina's acquisition of Syngenta, Dow's merger with DuPont, FMC's acquisition of certain assets from DuPont's crop protection business, Bayer's acquisition of Monsanto, UPL's acquisition of Arysta and BASF's acquisition of a portfolio of assets from Bayer). Completion of these transactions is expected to result in a change to the industry landscape and competitive environment, producing larger market competitors with an increased market presence.

Nufarm continues to actively monitor the market to identify specific risks and opportunities presented by industry consolidation. We have taken a disciplined approach to participation in opportunities presented, ensuring all decisions are strategically aligned and execution risks are understood and managed. Analysis of the industry post consolidation occurs on an ongoing basis as input to strategic marketing and operational decisions.

Geopolitical risks

Nufarm is subject to a number of geopolitical risks in certain markets that Nufarm may or may not operate in, including political instability and policy changes. The introduction of Chinese and US tariffs have the potential to impact the price and volume of a number of agricultural products that are traded between the countries (for example, soybeans exported into China from the US) and also have the potential to impact the volume and price of certain chemical inputs imported by Nufarm.

The UK's exit from the European Union has the potential to impact the UK and Europe's agricultural sector as new agricultural and crop chemical policies may be implemented. These changes, among others, could adversely affect Nufarm's operations and earnings.

Nufarm continues to monitor these developments closely and assess the potential impacts through our ongoing business planning processes for both demand and supply.

Grower options and technology

Growers evaluate a number of options when determining how best

to address their crop protection needs. Products supplied by Nufarm might be assessed alongside products supplied by other crop protection companies and other forms of crop protection by alternative technologies such as biological controls and biotechnology. The introduction of genetically modified seeds has, in some instances, either reduced the need for crop protection products or resulted in a change in the crop protection products used.

The Nufarm portfolio team conducts regular assessments of advancements in application technology and product development. This is a key input to the product development pipeline and participation in potential partnerships with third parties with access to alternative technologies.



Debt financing risk

Nufarm has significant short term bilateral funding and supplier financing facilities to fund its working capital requirements. Continued access to these facilities is dependent upon compliance with relevant banking covenants and the successful renewal of these facilities as and when they fall due. Nufarm's ability to refinance its debt obligations, and the terms on which any such refinancing can be obtained, is uncertain. If Nufarm is unable to refinance its debt obligations, or to do so on reasonable terms, it may have an adverse effect on the financial position and performance of Nufarm. Board and executive oversight is in place to monitor ongoing compliance with key banking covenants and to ensure

any issues are identified early and actively managed. A clearly defined funding strategy is in place which includes a diversified funding structure with a range of debt maturity profiles.

IP rights and branded names

Nufarm regards its brand names, trademarks, domain names, trade secrets and similar intellectual property as important to its success. Nufarm's business has been developed with a strong emphasis on branding. Should any brand names be damaged in any way or lose market appeal, Nufarm's business could be adversely impacted. While Nufarm will use all reasonable endeavours to protect its intellectual property rights, unauthorised use or disclosure of its intellectual property may have an adverse effect on the operating, marketing and financial performance of Nufarm. Although most of Nufarm's products are post patent, there are certain products or developing technologies which may be entitled to patent protection. There is a risk that Nufarm might not be able to obtain or maintain such protection, or that Nufarm's activities may infringe the patent or other rights of others.

Policies and procedures are in place to assist with the identification and protection of patents and trademarks. The Nufarm product development process includes specific steps to identify potential patent or trademark risks. Where considered necessary, external expert advice is obtained.





Operational Risks

Third party supply

Nufarm relies on supply of various active ingredients, intermediates and other inputs from a number of third party suppliers, including suppliers based in China. The reliability of supply and the cost of these inputs can be impacted by a range of factors including, but not limited to, manufacturing closures or temporary disruptions, compliance with more stringent environmental and/or safety standards, and other changes in government policy or regulation. Any resulting disruption to supply or price impact may affect Nufarm's ability to meet its sales and/or margin forecasts.

Supply and demand factors play a role in the profitability of crop protection sales. The introduction of significant levels of new capacity relating to the supply of crop protection products can result in volatility in pricing and margins in key products supplied by Nufarm.

Nufarm's procurement and business planning processes include the ongoing assessment of supply availability as input to manufacturing and safety stock levels. Where possible, we have entered into specific supply arrangements to assist with availability and pricing of key active ingredients.

Our manufacturing facilities are geographically aligned with distribution to minimise disruption to supply.

Relationships with channel partners and commercial counterparties

Nufarm is exposed to competitor pressures in retaining and attracting customers. The loss of a key customer, the inability to renew contracts on similar terms or the inability of Nufarm to attract new customers may have a material impact on future profitability.

Nufarm also uses third parties to sell and/or distribute its products. These third parties may choose to prioritise other products or may elect not to renew distribution agreements when they expire. Should this occur, Nufarm may not be able to sell its products or may suffer delays in appointing new distributors.

Nufarm has important strategic alliances and a range of business relationships with other major companies in the sector, including licensing arrangements and distribution arrangements. These arrangements provide opportunities to maximise the value of Nufarm's distribution platforms as well as increasing Nufarm's customer base by providing access to additional products or new markets.

Nufarm's collaborative relationships with other major crop protection companies may change or be terminated, which could have a material adverse impact on Nufarm's financial performance. Nufarm's strategic alliances, partnerships and distribution agreements are reviewed on an ongoing basis and aligned to strategy. Customer marketing plans are managed regionally and aligned to specific customer needs. Our customer base is diversified to minimise the impact of the loss of any single customer.

Quality controls

Nufarm manufactures and supplies a range of crop protection products which must be manufactured, formulated and packaged to exact standards, with strict quality controls. The performance of those products would be negatively impacted if those quality standards are not met and this could, in turn, have an adverse impact on the reputation and success of Nufarm.

Quality guidelines and procedures are defined across the manufacturing process, including external tolling activities. These processes are subject to rigorous testing to ensure quality standards are met. An ongoing review program is in place with the aim of ensuring operations adhere to the quality standards and identify continuous improvement opportunities.



Loss of key personnel

There can be no assurance that Nufarm will be able to retain key personnel. The loss of key personnel or the inability to recruit and retain or motivate high calibre staff could have a material adverse effect on Nufarm. Nufarm operates globally and has facilities in multiple jurisdictions. Management of a complex business that operates globally has a higher employee risk/complexity than a business which operates in one jurisdiction. The addition of new employees and the departure of existing employees, particularly in key positions, can be disruptive and could have an adverse effect on

Nufarm and may impact Nufarm's financial performance and future prospects.

Critical roles across the organisation have been identified and appropriate succession and retention strategies developed. Guidelines for remuneration and reward have been developed to ensure Nufarm can attract and retain talent.

Information and cyber security

Nufarm's operations are supported by several key IT systems and applications. Complete or partial failure of the IT systems, applications or data centre infrastructure due to unauthorised access, cyberattacks or natural disasters could have a significant impact on Nufarm's ability to maintain operations and service customers. This could adversely impact Nufarm's financial position and/or reputation.

Nufarm has implemented disaster recovery strategies over its key IT systems, applications and data centres, which are reviewed and tested on a regular basis. Cyber threats are assessed on an ongoing basis to the best of our knowledge based on the continually evolving nature of these threats. Security controls are updated to mitigate these risks supported by a combination of external and internal vulnerability testing.

Compliance, Regulatory and Legal Risks

Regulatory and Legal

The crop protection industry is highly regulated with government controls and standards imposed on all aspects of the industry's operations. Crop protection products are subject to regulatory review and approval in all markets in which they are sold, with the requirements of regulatory authorities varying from country to country. Europe in particular, is highly regulated and there is increasing political influence on the regulatory system. The influence of politics in the regulatory process also makes outcomes increasingly unpredictable. Regulatory policies can have an impact on the availability and usage of crop protection products and, in some cases, can result in the restriction or removal of certain products from the market, which can have a material adverse effect on the financial performance of Nufarm.

On 3 June 2019 Nufarm provided a Glyphosate Update to the Australian Securities Exchange concerning the risk of glyphosate litigation relating to Bayer (Monsanto) in the United States. Glyphosate continues to be subject to intense legal and community pressure globally and sales around the world could be adversely impacted. There is also a risk of future litigation for suppliers of glyphosate-based products, including Nufarm. Introduction of new legislation or changes to legislation in any of the countries in which Nufarm operates could have an adverse impact on the financial or operational position of Nufarm, resulting in increased compliance costs and/or increased risk of regulatory action.

Nufarm monitors regulatory developments across its key regions of operations closely and participates in several industry bodies and task forces which provide input and analysis to regulatory bodies on the use of our key products. The Nufarm portfolio team considers the regulatory environment in the maintenance and ongoing development of our portfolio.

Nufarm also maintains a dedicated internal legal team across its key regional operations which is supported externally as required. Specific reporting protocols and guidelines are in place to manage ongoing legal input and facilitate escalation to executive management when required.

Environmental

Nufarm operates in a regulatory environment that establishes high standards in terms of environmental compliance. Any material failure by Nufarm to adequately control hazardous substances and manufacturing operations, including the discharge of waste material, or to meet its various statutory and regulatory environmental responsibilities, could result in significant liabilities as well as ongoing costs relating to operational inefficiencies which may arise. Group HSE has provided clear guidelines on the management of environmental risks, which includes ongoing assessment and review of regulatory requirements. Local management engage with local environmental authorities on key risks and compliance.

Workplace Safety

Operation of Nufarm's manufacturing sites across the globe require major hazard facility licences. Operating within these environments can lead to personal injury, loss of life or damage to property. Regulatory bodies undertake regular audits of Nufarm's sites to ensure that it is appropriate to renew the licences. These audits can result in suspension of operations, fines or penalties or remediation expenses.

A robust and comprehensive Health Safety and Environment (HSE) program is in place which provides clear guidance on culture, behaviours, process and reporting. This program includes the ongoing assessment of HSE risks and practices.



Corporate Governance

Nufarm's governance framework and board processes have been reviewed to ensure they represent and protect the interests of all stakeholders. This includes detailed consideration of the third edition of the Corporate Governance Principles and Recommendations, ('the ASX principles') published by the Australian Securities Exchange Limited's (ASX) Corporate Governance Council. The ASX Listing Rules require Nufarm to disclose the extent to which we have adopted the ASX principles. During this reporting period, Nufarm complied with all of the ASX principles (third edition).

Nufarm's 2019 corporate governance statement can be viewed in the corporate governance section of our website: http://www.nufarm.com/investorcentre/corporate-governance

Directors' Report

The directors present their report together with the financial report of Nufarm Limited ('the company') and of the group, being the company and its subsidiaries and the group's interests in associates and jointly controlled entities, for the financial year ended 31 July 2019 and the auditor's report thereon.

Directors

The directors of the company at any time during or since the end of the financial year are:

DG McGauchie AO (Chairman) GA Hunt (Managing Director) AB Brennan GR Davis FA Ford Dr WB Goodfellow (retired on 6 December 2018) ME McDonald PM Margin T Takasaki

Unless otherwise indicated, all directors held their position as a director throughout the entire period and up to the date of this report. Details of the qualifications, experience and responsibilities and other directorships of the directors will be set out in the Company's 2019 Annual Report.

Company secretary

Fiona Smith (BSc, LLB, GDipGov, FGIA) joined the company on 20 June 2019 and was appointed company secretary on 27 June 2019. She has experience in company secretarial roles arising from her time spent in such roles in listed companies.

Rodney Heath (LLB) joined the company in 1980 and was appointed company secretary in 1989 up until 27 June 2019 when he retired from the role.

Directors' interests in shares and step-up securities

Relevant interests of the directors in the shares and step-up securities issued by the company and related bodies corporate are, at the date of this report, as notified by the directors to the Australian Securities Exchange in accordance with S205G(1) of the *Corporations Act 2001*, as follows:

	Nufarm Ltd Ordinary shares	Nufarm Finance (NZ) Ltd Step–up securities
AB Brennan	14,156	_
GR Davis	71,609	
FA Ford	51,400	
GA Hunt	494,663	
DGMcGauchie	76,761	
MEMcDonald	22,327	
PM Margin	3,480	_
T Takasaki	_	_

Directors' Report (continued)

Directors' meetings

The number of directors' meetings (including meetings of board committees) and number of meetings attended by each of the directors of the company during the financial year are:

						Comm	nittees			
Director	Board		Audit & Risk Committee		Human Resources		Nomination & Governance		Health Safety & Environment	
	Meetings Held'	Meetings Attended	Meetings Held ¹	Meetings Attended		Meetings Attended	Meetings Held ¹	Meetings Attended	Meetings Held ¹	Meetings Attended
AB Brennan	8	8	4	4	5	5	_	_	-	_
GR Davis	8	8	4	4	5	5	_	_	3	3
FA Ford	8	8	4	4	_	_	3	3	-	_
Dr WB Goodfellow ²	1	1	_	_	_	_	1	1	-	_
GA Hunt	8	8	_	_	_	_	_	_	_	_
ME McDonald	8	8	4	4	_	_	_	_	3	3
DG McGauchie	8	8	_	_	5	5	3	3	-	_
PM Margin	8	8	4	4	5	5	_	_	_	_
T Takasaki	8	8	_	_	_	_	_	_	3	3

1 Number of meetings held during the period the director held office.

2 Dr WB Goodfellow retired on 6 December 2018.

Principal Activities and Changes

Nufarm's principal activities during the financial year were the manufacture and sale of crop protection products and its proprietary seed technologies business which are further described in the Information on the Company section of the Operating and Financial Review accompanying this Directors' Report.

Nufarm employs approximately 3,300 people at its various locations in Australasia, Africa, the Americas and Europe.

The company is listed on the Australian Securities Exchange (symbol NUF). Its head office is located at Laverton in Melbourne.

Results

The net profit/(loss) attributable to members of the Group for the 12 months to 31 July 2019 is \$38.3 million. The comparable figure for the 12 months to 31 July 2018 was \$(15.6 million).

Operating and Financial Review and Future Prospects

The operating and financial review and future prospects are set out in the Operating and Financial Review accompanying this Directors' Report.

Dividends

The following dividends have been paid, declared or recommended since the end of the preceding financial year.

	\$′000
The Final dividend for 2017-2018 of 6 cents paid 2 November 2018	19,662

Nufarm Step-up Securities distributions

The following Nufarm Step-up Securities distributions have been paid since the end of the preceding financial year:

	\$′000
Distribution for the period 15 April 2018 – 14 October 2018 at the rate of 6.08 per cent per annum paid 15 October 2018	7,651
Distribution for the period 15 October 2018 – 14 April 2019 at the rate of 6.00 per cent paid 15 April 2019	7,511

State of Affairs

The state of the group's affairs are set out in the Operating and Financial Review accompanying this Directors' Report.

Events subsequent to reporting date

On 30 September 2019, the company has entered into a sale and purchase agreement ('SPA') with Sumitomo Chemical Company and related group companies ('Sumitomo'), to divest its shares in certain entities, that together, comprise the majority of the Latin American crop protection business and the Latin American Seed treatment business for consideration of \$1,188 million.

The SPA remains subject to a number of conditions including regulatory and shareholder approval, and the review of an independent expert.

There will be a contractual obligation to repay the redeemable preference securities of \$97.5 million to Sumitomo should the transaction complete.

Environmental performance

Details of Nufarm's performance in relation to environmental regulations are set out in the Operating and Financial Review accompanying this Directors' Report. The group did not incur any prosecutions or fines in the financial period relating to environmental performance. The group publishes annually a sustainability report. This report can be viewed on the group's website or a copy will be made available upon request to the company secretary.

Non-audit services

During the year KPMG, the company's auditor, has performed certain other services in addition to their statutory duties. Details of the audit fee and non-audit services are set out in note 39 to the financial report.

The board has considered the non-audit services provided during the year by the auditor and, in accordance with written advice provided by resolution of the audit committee, is satisfied that the provision of those non-audit services during the year by the auditor is compatible with, and did not compromise, the auditor independence requirements of the *Corporations Act 2001* for the reason that all non-audit services were subject to the corporate governance procedures adopted by the company and have been reviewed by the audit committee to ensure they do not impact the integrity and objectivity of the auditor.

Directors' Report (continued)

Indemnities and insurance for directors and officers

The company has entered into insurance contracts, which indemnify directors and officers of the company, and its controlled entities against liabilities. In accordance with normal commercial practices, under the terms of the insurance contracts, the nature of the liabilities insured against and the amount of premiums paid are confidential.

An indemnity agreement has been entered into between the company and each of the directors named earlier in this report. Under the agreement, the company has agreed to indemnify the directors against any claim or for any expenses or costs, which may arise as a result of the performance of their duties as directors to the extent allowed by law. There are no monetary limits to the extent of this indemnity.

Lead auditor's independence declaration

The lead auditor's independence declaration is set out in the Company's 2019 Annual Report and forms part of the directors' report for the financial year ended 31 July 2019.

Rounding of amounts

The company is of a kind referred to in ASIC Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191 and, in accordance with that Instrument, all financial information presented in Australian dollars has been rounded to the nearest thousand unless otherwise stated.

This report has been made in accordance with a resolution of directors.

DG McGauchie AO Director

GA Hunt Director

Melbourne 30 September 2019

2019 Remuneration Report

A letter from the chairman of the human resources committee (HRC) (unaudited)

Dear shareholder,

On behalf of the Board, I present our remuneration report for the year ended 31 July 2019. Our aim in preparing this report is to enable you, our shareholders and interested stakeholders, to understand the links between remuneration, company strategy and Nufarm's performance, and the framework we have in place to provide effective governance over remuneration at Nufarm.

The role of the Human Resources Committee has evolved over the past few years with a broader remit which better reflects the breadth an effective HRC plays as we focus our efforts across the entire employee life cycle at Nufarm. The Committee takes an active view of the following:

- Remuneration Board and executive remuneration strategy and structure with a focus on strengthening the link between Company and individual performance.
- Performance establishing, monitoring and assessing executive KPIs that encourage strong and ethical performance and drive business outcomes while adding shareholder value.
- Talent and Succession ensure succession plans are in place for executives and a ready pool of talent is considered internally and externally.
- Inclusion & Diversity ensure all executive and board appointments are underpinned by our inclusion and diversity framework. Ensure all employee processes such as recruitment, remuneration, retention, promotion, recognition and termination are within the framework.
- Alignment with Strategy and Operating Model ensure the people strategy supports our business objectives and drives sustainable value creation.

Outcomes for FY19

Fiscal 2019 was a challenging year for our industry with the continuation of drought conditions in large parts of eastern Australia and extreme flooding in major cropping regions in the United States. Our European business also dealt with supply disruptions and cost pressures which resulted in lost sales and reduced margins.

Generating cash and reducing debt is an important focus for the coming year. The Board is confident the management team has taken the necessary steps to ensure a timely recovery from the issues that impacted performance in 2019 and our strategy of focussing on our chosen geographic markets and crops, rather than spreading our efforts more broadly, is working.

The company's performance has been reflected in the FY19 short term incentive outcomes which did not pay out for the CEO and most of the executive KMPs. The short term incentive metrics are made up of 40% uNPAT, 40% ANWC and 20% non financial. The FY17 LTI plan was tested on 31 July 2019 with no equity vesting since neither the Relative Total Shareholder Return (RTSR) nor the average ROFE targets were met. Our STI and LTI outcomes reflect that our senior executives are only rewarded when they deliver sustainable returns over both the short and long term.

The FY19 Fixed remuneration increases (conducted in August 2018) for executives were determined according to the nature and size of role and within Nufarm's usual benchmarking approach. Any increases are reflective of market pricing for roles that were undertaken.

Employee Engagement

We recognise the importance of employee engagement and its impact on customer satisfaction and business results. Several initiatives have been conducted over the year to help strengthen this further:

• A high performance mindset culture is being embedded across the company, in all we do and how we work. Systems and processes that touch the employee lifecycle have been modernised to improve the employee experience, leadership and overall performance;

Directors' Report (continued)

- A focus on inclusion and diversity throughout FY19 was evident through a global pay parity review exercise which confirmed our remuneration practices are equitable and consistent across genders. We conducted a series of unconscious bias awareness training workshops for leaders and will conduct more in FY20;
- We implemented a contemporary talent and succession planning methodology that reduces manager bias in the assessment and selection of new hires and succession planning;
- We adopted recruitment practices, metrics and objectives that aim to increase female representation at Nufarm;
- We conducted inclusive leadership training for all people managers as they are promoted or join Nufarm; and
- Board members visited several locations over the year in countries such as USA, France, UK and Brazil. They held
 one on one and group meetings with staff to engage more actively and better understand the issues our people
 face and how they are working to serve our customers with a specific focus on health, safety and environment.

Arrangements for FY20

Following a year of low growth and mixed financial results, the executive KMPs have elected to forfeit an increase to their fixed annual remuneration for FY20 as a demonstration of their commitment to turning the company's financial health around.

The Human Resources Committee continues to have a strong focus on the relationship between business performance and remuneration and in turn, each year the board reviews the financial metrics and individual objectives to ensure they remain appropriate as a basis of reward given the objectives of the business strategy and the interests of shareholders

A marketplace review of the current STI plan involving market intelligence and external stakeholder consultation was initiated in September 2018. This plan was last reviewed in 2016. The outcome was that from FY20 onwards:

- financial and non-financial components of the plan will be delinked, with the non-financial component shifting to team (rather than individual) performance to reflect how the executive team actually function; and
- an increased focus on cash flow and overheads measures have been included to drive better balance sheet, cash flow and expenses management.

After a review of all remuneration elements (base, STI and LTI) through external benchmarking, it's evident that our current arrangements are Australian centric whereas, most of our executives (and in fact our revenue) comes from outside Australia. Over the next year, the HRC will continue to review this finding to better understand how we shape our remuneration offering to attract and retain a global pool of executive talent.

In line with the executive KMP stance, non-executive directors elected not to increase their fees or the pool for FY20.

Further detail is provided within the remuneration report.

Peter Mayon

Peter Margin Chair – human resources committee

The remuneration report is designed to provide shareholders with an understanding of Nufarm's remuneration policies and the link between our remuneration strategy and performance. This report details Nufarm's remuneration framework and outcomes for Key Management Personnel (KMP) for the year ended 31 July 2019 (FY19). The report has been prepared in accordance with section 300A of the *Corporations Act 2001* (Corporations Act).

Section		What it covers			
1.	Remuneration snapshot1.1Key Management Personnel1.2Executive KMP remuneration outcomes1.3Actual total remuneration earned by executives in FY191.4Summary of FY19 non executive director (NED) fees1.5Changes for FY191.6Outlook for FY20	 Lists the names and roles of the Executive KMP whose remuneration details are disclosed in this report. Details the key remuneration outcomes in FY19. Additional voluntary disclosure of cash and benefits actually earned by KMPs in FY19. Details the NED fees changes in FY19. Outlines the changes to remuneration arrangements in FY19. Outlines the changes to remuneration in FY20. 			
2.	Setting Senior Executive remuneration 2.1 Remuneration governance 2.2 Remuneration strategy 2.3 Remuneration components	 Explains Nufarm's remuneration policy, and how the board and Human Resources committee (HRC) make decisions, including the use of external consultants. Explains Nufarm's remuneration strategy for FY19 and how its evolving for FY20. Shows how executive remuneration is structured to support business objectives and explains the executive remuneration mix. 			
3.	 Executive remuneration outcomes 3.1 Financial performance 3.2 Short Term Incentive outcomes 3.3 Long Term Incentive outcomes 3.4 Senior executive contract details 	 Provides a breakdown of Nufarm's performance over the past five years. Details the STI outcomes for FY19. Details the LTI outcomes for the plan with a performance test at 31 July 2019. Lists the key contract terms governing the employment of Executive KMP (including termination entitlements where relevant). 			
4.	Non-Executive Director remuneration	 Provides details of the fee structure for board and committee roles. 			
5.	Remuneration tables5.1Remuneration of directors and disclosed executives5.2Equity instruments held by disclosed executives5.3Shares held in Nufarm	 Provides the remuneration disclosures required by the Corporations Act and in accordance with relevant Australian Accounting Standards. 			

Directors' Report (continued)

1. Remuneration snapshot

1.1 Key Management Personnel

This Remuneration Report is focused on the KMP of Nufarm, being those persons with authority and responsibility for planning, directing and controlling the activities of Nufarm. KMP includes the non-executive directors and senior executives (referred to as executive KMPs throughout this report). Unless otherwise indicated, the KMP were classified as KMP for the entire financial year.

Current non-executive directors

Donald McGauchie	Chairman and independent, non-executive director
Anne Brennan	Independent, non-executive director
Gordon Davis	Independent, non-executive director
Frank Ford	Independent, non-executive director
Bruce Goodfellow	Independent, non-executive director until 6 December 2018
Peter Margin	Independent, non-executive director
Marie McDonald	Independent, non-executive director
Toshikazu Takasaki	Non-executive director

Current executive KMPs

Greg Hunt	Managing director and chief executive officer
Paul Binfield	Chief financial officer
Elbert Prado	Group executive supply chain operations
Brent Zacharias	Group executive Nuseed
Niels Poerksen	Group executive portfolio solutions

1.2 Executive KMP remuneration outcomes

The overall structure and philosophy of Nufarm's approach to remuneration remained consistent throughout FY19. The organisation's remuneration philosophy is based on linking financial rewards directly to employee contributions and company performance. As Nufarm continues its transformation journey to deliver growth and build a better Nufarm, the remuneration framework and incentive plans continue to connect the evolving business strategy to leadership behaviours.

Fixed annual remuneration (FAR)

All executive KMPs received an increase of 2.5% to their FAR in FY19. GE Nuseed received a 3% increase. Mr Prado received a further 11.3% increase to his total package due to the benefits offered under US employment conditions as part of his relocation to North America.

Short term incentive (STI)

The entry hurdle measures required for payment of STI for executive KMPs were not met. With the exception of Brent Zacharias (Group Executive Nuseed) and Elbert Prado (Group Executive Supply Chain Operations) all KMPs including the chief executive officer did not receive any payment related to the FY19 plan.

Consequently, the approval for grant of rights related to the FY19 STI payment will not apply for the CEO.

Long term incentive (LTI)

The FY17 LTI plan was tested on 31 July 2019. The average cumulative ROFE and the RTSR achievement were both below threshold. The plan did not meet the entry hurdle associated with the measures. The outcome was that all KMPs did not receive any equity related to the FY17 plan.

1.3 Actual total remuneration earned by executives in FY19 (unaudited)

The table below details actual pay and benefits for Executive KMPs who were employed as at 31 July 2019. This table aims to assist shareholders in understanding the cash and other benefits actually received by executive KMPs from the various components of their remuneration during FY19.

As a general principle, Australian Accounting Standards require the value of share-based payments to be calculated at the time of grant and accrued over the performance period and restriction period. The Corporations Act and Australian Accounting Standards also require that pay and benefits be disclosed for the period that a person is an executive KMPs. This may not reflect what executive KMPs actually received or became entitled to during FY19 (especially if they became KMP part way through the year). The figures in this table have not been prepared in accordance with Australian Accounting Standards. They provide additional voluntary disclosures to Table 5.1 (which provides a breakdown of executive KMPs remuneration in accordance with statutory requirements and Australian Accounting Standards). The treatment of the remuneration elements in this disclosure are as follows:

- Fixed remuneration earned between 1 August 2018 and 31 July 2019. This includes superannuation.
- STI payable as cash under the FY18 STI plan (which is paid in FY19 after audited results), as well as any restricted STI or LTI that has been earned as a result of performance in previous financial years but was subject to a restriction period that ended between 1 August 2018 and 31 July 2019.
- Benefits received between 1 August 2018 and 31 July 2019.

Directors' Report (continued)

In AUD				Fixed remuneration		
		Salary and Fees \$	Non-monetary benefits \$	Superannuation \$	Total \$	
Directors' Non-executive						
Sub total non-executive	2019	1,479,952		127,619	1,607,571	
directors remuneration –						
(realised)	2018	1,526,277		137,985	1,664,262	
Executive Director	2019	1,294,688	295	25,000	1,319,983	
GA Hunt	2018	1,265,479	2,944	25,000	1,293,423	
Total Directors'	2019	2,774,640	295	152,619	2,927,554	
remuneration (realised)	2018	2,791,756	2,944	162,985	2,957,685	
Group Executives						
	2019	822,223	295	25,000	847,518	
PA Binfield –	2018	804,635	295	25,000	829,930	
	2019	889,938	88,266	14,829	993,033	
E. Prado ¹ –	2018	735,420	23,504	_	758,924	
	2019	703,684	33,735	25,522	762,941	
N Poerksen –	2018	713,209	27,661	25,449	766,319	
D. Zeraharian	2019	495,003	53,417	92,729	641,149	
B Zacharias –	2018	461,044	46,261	50,601	557,906	
Sub total – total executive	2019	2,910,848	175,713	158,080	3,244,641	
remuneration (realised)	2018	2,714,308	97,721	101,050	2,913,079	
Total directors and executive	2019	5,685,488	176,008	310,699	6,172,195	
remuneration (realised)	2018	5,506,064	100,665	264,035	5,870,764	

1 Mr E Prado fixed remuneration and other long term remuneration includes fees and long service leave amounts paid with respect to the relocation of Mr Prado from Australia to the United States of America during 2019.

Note: Vested STI deferred shares and LTI rights are valued at the Nufarm share price prevailing upon the vesting or forfeiture date (\$4.88 at 31 July 2019 and \$7.15 at 31 July 2018).

Total	ition (Realised)			
Total remuneration \$	Other long term \$	LTI rights vested \$	STI deferred shares vested \$	STI cash \$
1 (07 57)	_			
1,607,571	-			
1,664,262	-	-	-	_
1,660,095	-	-	340,112	_
1,464,501	-	-	171,078	_
3,267,666	-	-	340,112	_
3,128,763	-	-	171,078	_
1,034,671	-	-	187,153	_
941,549	-	_	111,619	_
1,320,626	111,509	_	138,763	77,321
858,717	-	-	99,793	_
908,370	-	_	145,429	_
833,014	-	-	66,695	_
806,233	-	-	99,562	65,522
638,700	-	-	44,230	36,564
4,069,900	111,509	_	570,907	142,843
3,271,980	-	_	322,337	36,564
7,337,566	111,509	_	911,019	142,843
6,400,743	_	_	493,415	36,564

1.4 Summary of FY19 NED fees

NED fees are fixed and do not have any variable components. The chairman receives a fee for chairing the Nufarm board and is not paid any other fees. Other NEDs receive a base fee and additional fees for each additional Committee chairmanship and membership. NED fees increased by 3.75% effective August 2018, after no increases since August 2016. No additional retirement benefits were paid. Fees paid to NEDs are subject to a maximum annual non-executive director fee pool of \$2 million approved by shareholders at the 2017 AGM and this was not increased at the 2018 AGM.

1.5 Changes for FY19

Elbert Prado – Mr Prado relocated to USA effective 1 June 2019. In line with this move, his package was altered to reflect the US employment conditions and market (with the inclusion of 401k, car allowance and health insurance). Additionally, he held the dual role of Regional General Manager – Latin America for FY19 while the role has been vacant. During FY19, he oversaw the Latin America regional strategy and execution of that strategy. His FY19 STI was also prorated to reflect his dual role as detailed later in this report.

Brent Zacharias – It is evident that Nuseed's growth agenda and strategy are substantially different from the crop protection business. Therefore, to factor in the above and the start up like environment in which Nuseed operates, Mr Zacharias' package has been structured differently to other Group Executive roles. This difference will also be acknowledged in the STI plan with Mr Zacharias being placed on an STI plan with Nuseed specific metrics only from FY20 onwards.

Effective FY19, Nuseed Long Term Incentive Plan was offered to Mr Zacharias in lieu of the Nufarm LTIP in the form of 9,500 phantom rights with a performance period of 3 years. The rights will only vest if certain performance conditions are met. The Nuseed Phantom LTIP was created to foster stronger alignment between company strategy and those selected roles which are considered pivotal to delivering Nuseed's long term enterprise value.

The model is based on a proxy of economic value (EV) which generates a phantom share price. EV = (average Nuseed EBITDA of FY19 and FY20) X 20x multiple – (change in net debt x 1.5x multiple). Change in net debt multiple = (average 12 month net debt of 2020 – average 12 month net debt of 2017) X 1.5x multiple. The adjustment for 1.5 times any increase/decrease in cash/debt is designed to encourage the business to use funds wisely, including net working capital (NWC) management in a growing business, capex and appropriate R&D investment. It will also appropriately encourage a balance of monetising non-core assets, and assessing EPS accretive forward investments.

The plan is cash settled with the following pay out.

Performance level	Growth in EV over the Performance Period	Cash payment per Vested Award (AU\$)*	
Below threshold	<150%	\$0	
Threshold	150%	1.5 x allocation	
Target	210%	2 x allocation	
Maximum	aximum 350% (or above) 3.5 x c		

All other elements of the plan as it relates to items such as cessation of employment, divestment of business, change of control and clawback, lapse and forfeiture events will continue to be underpinned by the Nufarm LTIP terms and conditions as outlined in section 2.3c.

1.6 Outlook for FY20

Fixed annual remuneration (FAR)

Following a year of disappointing financial results driven largely by factors outside the control of management, the executive KMPs at Nufarm forfeited an increase to their FAR for FY20 as a demonstration of their commitment to turning the company's financial health around.

Short term incentive (STI)

A complete review of the current STI plan involving market intelligence and internal stakeholder consultation was conducted in FY19. The outcome was that from FY20 onwards, financial and non-financial components of the plan were delinked, with the non-financial component shifting to team (rather than individual) performance. An increased focus on cash flow measures was also included.

Long term incentive (LTI)

A comprehensive review of the LTI plan was undertaken with no changes proposed for FY20.

Non-executive director fees and pool

In line with the executive KMP stance, non-executive directors elected not to increase their fees or the pool for FY20.

2. Setting senior executive remuneration

2.1 Remuneration governance

The HRC is responsible for reviewing and making recommendations to the Nufarm board on remuneration policies and packages applicable to disclosed executives. The HRC is comprised of four independent non-executive directors and is tasked with ensuring that remuneration policies and packages retain and motivate high calibre executives and have a clear relationship between company performance and executive remuneration. The HRC charter can be found at www.nufarm.com.

Over the past few years, the HRC has progressively increased their remit to include a wider talent and succession agenda including a review of Nufarm's diversity and inclusion practices.

The HRC reviews Executive KMPs' remuneration annually to ensure there is a balance between fixed and at risk pay, and it reflects both short and long term objectives aligned to Nufarm's strategy. The board reviews the CEO's remuneration based on market practice, performance against agreed measures and other relevant factors, while the CEO undertakes a similar exercise in relation to senior executives. The results of the CEO's annual review of senior executives' performance and remuneration are subject to board review and approval.

The board measures financial performance under the STI and LTI plans using audited numbers. The relative total shareholder return (RTSR) is measured by an independent external advisor.

Within the remuneration framework the board has discretion to 'clawback' LTI plan and STI (cash and equity):

- where payment is contrary to the financial soundness of the company;
- in circumstances where the financial performance of Nufarm over the relevant period (including the initial STI performance period) has been mis-stated; and/or
- for individual gross misconduct.

Executive KMPs are not permitted to hedge any shares issued to them under the STI while those shares remain held in trust.

The board considered all information in light of company performance, changes during the year to the scope and scale of executive roles, individual performance and the motivation and retention of key individuals, in making its' remuneration decisions.

2.2 Remuneration Strategy

Up to FY19, Nufarm's remuneration strategy and reward frameworks have reflected the importance of improving the performance of the business and lifting returns on funds employed, as well as supporting a goal to attract, motivate and retain a high performing workforce.

The core elements of Nufarm's remuneration strategy and policy for the disclosed Executive KMPs up to FY19 have been:

- An overall framework that supports attraction, motivation and retention of talent, shareholder value creation and reward differentiation.
- An STI program that is biased to growth in profitability and a strong focus on balance sheet management.
- An LTI plan that is based on the principle of aligning Executive KMPs' interests and rewards with those of shareholders.

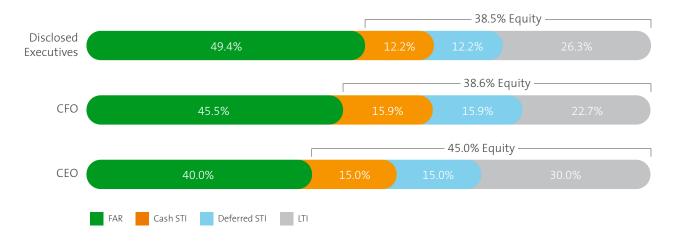
Throughout FY19, we reviewed the various elements of our reward offering. Consequently from FY20 onwards, the remuneration strategy is further refined to incorporate the following:

- A renewed focus on managing working capital and improving returns on funds employed which is fundamental to the way in which Nufarm operates and is therefore a key element of the way performance is measured and assessed at a group level.
- An overall framework underpinned by the core principles of simplicity, flexibility, line of sight, retention, driving business objectives and creation of value.
- An STI plan which rewards year on year growth, profitability, collaboration and stronger focus on balance sheet management through additional measures of cashflow and stock cover.
- An LTI plan which creates long term value for the organisation and shareholders.

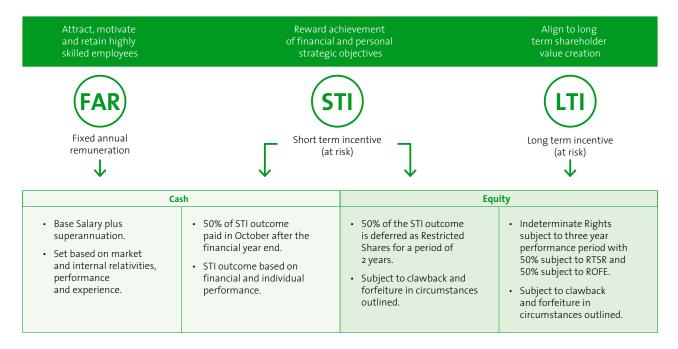
2.3 Remuneration components

The executive remuneration structure is based on Fixed Annual Remuneration (FAR) with additional short term and long term incentives (described as a percentage of FAR) available to be earned subject to performance. Australian based executive KMPs are employed on this basis. Those located overseas in Canada and US, also receive benefits as per local employment conditions.

The graph below outlines the target remuneration mix for executive KMPs. The variable components of STI (including potential restricted shares) and LTI are expressed at target.



a) Remuneration structure



Note: From FY20 onwards, the personal component of STI will change to team based performance.

b) FY19 STI plan

For FY19, all Executive KMPs participated in the same STI plan with the exception of:

- Group executive Nuseed who participated in a separate plan tailored to ensure the role was measured against and rewarded for Nuseed deliverables.
- Group executive supply chain operations who also participated in a plan aligned to his dual role of regional general manager Latin America.

All plan details are below, with the major differences between the plans outlined where applicable.

Who participates in the STI?	Plan participants include disclosed executives and senior managers globally.
What is the plan's aim?	The Plan rewards a combination of financial and non-financial performance measures that are aligned to the creation of shareholder value. Primary emphasis is placed on profitability and cash flow and the non-financial measures focus our Executives and employees on executing the most critical objectives aligned to the annual business plan.
When are awards made?	Awards under the plan are made at the end of the financial year.

What measures are used in the plan?	The board sets measures at the start of each year focused on profitability and balance sheet management. Noted below are the measures used in 2019.
	All Executive KMP roles (except GE Nuseed and GE supply chain operations) 80% of the potential was based on Nufarm group underlying Net Profit after Tax (uNPAT) and Average Net Working Capital (ANWC)/Sales.
	Group executive Nuseed
	20% of the potential was based on Nufarm group uNPAT and Nufarm group ANWC/Sales.
	60% of the potential was based on Nuseed uPBT and Nuseed ANWC/Sales.
	Group executive supply chain operations (pro-rata basis while acting as regional general manager – Latin America) 45% of the potential was based on Nufarm group uNPAT and Nufarm group
	ANWC/Sales.
	35% of the potential was based on Latin America's uPBT and Latin America NWC as at 31 July 2019.
	For all executives
	20% of the potential was based on individual strategic and business improvement objectives aligned to the role and contribution of the executive.
	This structure reflects Nufarm's strong focus on the use of capital and ensures alignment of reward to business outcomes and shareholder returns.
When and how are the STI payments determined?	Awards are assessed annually at the end of the financial year. Awards are based on the percentage achievement against the budget and strategic measures.
	Group uNPAT and Group ANWC/Sales – The threshold for these measures is the prior year's achievement or 85% of target, whichever is higher. At threshold achievement, 25% of the STI associated with the measure pays out. Target achievement results in 100% payment with stretch achievement (120% for uNPAT and 110% for ANWC/Sales) paying out at 150%.
	Nuseed uPBT and Nuseed ANWC/Sales – The threshold for these measures is the achievement of 85% of target where 25% of the STI associated with the measure pays out. Target achievement results in 100% payment with stretch achievement (120% for uPBT and 110% for ANWC/Sales) paying out at 150%.
	Regional NWC as at 31 July 2019 – This was a one off measure set for the region to incentivise a focus on strong capital management and cash flow. The threshold of this measure is the achievement of target where 100% of the STI associated with the measure pays out. At stretch (125% of target), 150% of STI is paid.
	Straight line vesting between threshold and budget and between budget (target) and stretch.
	Strategic and business improvement objectives are assessed on a merit basis against stated objectives.
Are payments in cash or shares?	50% of Executive KMPs' STI is paid in cash at the time of performance testing and 50% deferred into indeterminate rights with a time based restriction.
When do the shares vest?	Vesting will occur on the second anniversary of the grant date of the deferred equity, subject to continued employment or otherwise if the participant has left employment for a qualifying reason.
Is there a clawback provision in the plan?	The rules of the plan provide for clawback of the entire STI (cash and equity which maybe vested or unvested) with board discretion where payment is contrary to the financial soundness of the company; in circumstances where the financial performance of Nufarm over the relevant period (including the initial STI performance period) has been misstated; and/or for individual gross misconduct.
What happens if the Executive KMP leaves Nufarm?	If an Executive KMP leaves before the vesting anniversary under 'qualifying leaver' provisions the equity will remain in the plan until the vesting date. If the executive leaves under other than 'qualifying leaver' circumstances the equity will be forfeited. 'Qualifying leaver' provisions include participants who cease employment due to retirement, death, ill health/disability, redundancy, or contract severance without cause by Nufarm.
	The rules of the plan provides the flexibility, in special circumstances (e.g. health or severe personal hardship), to accelerate the vesting. This would result in the shares being released from the trust to the executive.

FY20 STI plan

In 2019, Nufarm undertook a comprehensive review of the STI plans across the organisation. The proposed changes reflect market data, feedback from the senior leaders and alignment to Nufarm's financial objectives over the next 12 months. Key changes include:

- Delinking financial and non-financial measures The underlying principle to this approach is the ability to reward both financial and non-financial outcomes. In an industry heavily impacted by weather conditions, employees have worked harder than ever to deliver on transformation projects which will yield long terms returns. Therefore, the focus on transformation must continue to be rewarded. If one of the financial gates is missed then the non-financial component can still pay out. If all financial gates are missed, then, the non-financial component is reduced by half to remain fiscally sound and affordable.
- Changing non-financial component from individual to team-based performance The STI plan aims to leverage the One Nufarm model of collaboration by rewarding behaviour that ultimately leads to collective success. The aim is to drive a growth mindset culture and a higher trust environment. For executive KMPs this means one single assessment for what they deliver as a collective team, driving the success of the business and leading the transformation of the organisation together. In line with this change, the non financial will also have a stretch to 150% in line with financial measures enabling the ability to reward exceptional performance.
- Financial measures Nufarm's focus over the next 12 months is to improve margins and strengthen the balance sheet with a focus on improving cash flow and working capital. Therefore, measures such as stock cover and sales and general administration expenses/gross profit are being introduced to align better with the immediate business imperatives.
- Brent Zacharias Mr Zacharias will move from an STI plan (currently 20% group Nufarm financials, 60% group Nuseed financials and 20% individual) to 80% group Nuseed financials and 20% team.

Why have an LTI plan?	This plan aims to align executive interests and earnings with the long term Nufarm strategy and the interests of shareholders.
Who participates in the LTI plan?	The current participants in the plan are disclosed executives and other selected senior managers (together, the LTI plan participants).
Are the awards cash or shares?	The plan rules provide the flexibility to use a number of different instruments provided they comply with local regulations and sound practice. At the time of vesting the board will determine if the rights convert to ordinary shares or cash or other instruments which may be in use at the time.
When are the awards made?	Under the plan, LTI plan participants receive an annual award of rights as soon as practical after the announcement of results for the preceding year.
How are the number of rights calculated?	The number of rights to be granted is calculated by dividing the individual's LTI grant opportunity for the performance year by the volume weighted average price of the company's shares over the five trading days immediately following the prior year's annual results announcement.
When do the awards vest?	The performance/vesting period for awards is 3 years. Awards will vest in two equal tranches as follows:
	 50% of the LTI plan grant will vest subject to the achievement of RTSR performance hurdle measured against a selected comparator group of companies; and
	 The remaining 50% of the LTI plan grant will vest subject to the 3 year average of an absolute ROFE target.
Why have ROFE and RTSR been chosen as the hurdles?	ROFE is used to track progress towards the goal to return long-term results back to acceptable levels for Nufarm. Strong RTSR performance ensures Nufarm is an attractive investment for shareholders.
What is the comparator group for the assessment of relative TSR?	Based on the results of research and modelling carried out by Ernst and Young, at the inception of the plan the board approved the adoption of the 'S&P ASX 200 excluding those companies in the Financial, Materials and Energy groups' as the RTSR comparator group.

c) FY19 LTI plan

How is RTSR measured?	RTSR will be measured over the performan measurement, each company's share priv over 60 days up to (but excluding) the first average closing price over 60 days up to performance period.	ce will be measured using the average price t day of the performance period, and the		
What is the RTSR performance required for vesting?	RTSR of Nufarm relative to the RTSR of comparator group companies	Proportion of RTSR grant vesting		
ior vosning.	Less than 50th percentile	0%		
	50th percentile	50%		
	Between 51st percentile and 75th percentile	Straight line vesting between 50% and 100%		
	75th percentile	100% vesting		
How is the ROFE target set?	ROFE objectives are set by the board at th `target' and a `stretch' hurdle. These numb the guidance given to the market. `Target' acceptable ROFE levels. Stretch recognise ensures that full vesting of the LTI plan is tru	ers are based on the budget and align with represents a sustainable return to a chievement well above budget. This		
How is ROFE measured?	Return is calculated on the group's earnings before interest and taxation and adjuste for any material items. Funds employed are represented by shareholder's funds plus total interest bearing debt. For the purposes of measuring ROFE performance in the L plan, ROFE will be averaged over the life of the plan.			
What ROFE result is required for vesting?	Percentage of ROFE target achieved	Proportion of ROFE grant vesting		
	Less than Target	0%		
	Target	50%		
	Between Target and Stretch	Straight line vesting between 50% and 100%		
	Stretch	100%		
What was the result for the FY19 year?	Nufarm's RTSR was at the 13th percentile o cumulative ROFE was below threshold. Co in FY19 did not vest into shares as both per	onsequently, the FY17 award, which matured		
What happens if the awards do not vest?	To the extent that the RTSR and ROFE performance hurdles are not met at the end of the 3-year performance period and full vesting is not achieved, performance will not be re-tested and the award will lapse. There is no partial vesting of the LTI plan before the 3rd anniversary.			
Is there a clawback provision in the plan?	The rules of the plan provide for clawback of both vested and unvested LTI plan rights where: payment is contrary to the financial soundness of the company; in circumstances where the financial performance of Nufarm over the relevant period has been misstated; and/or for individual gross misconduct.			
What happens if an Executive KMP leaves?				

FY20 LTI Plan

No changes are proposed for the FY20 LTI plan. Looking forward, we will continue to engage with the proxy advisors and key investors to ensure we have the LTI plan that adequately reflects the long term aspirations of the company.

3. Executive remuneration outcomes

3.1 Financial Performance

Details of Nufarm's performance, share price and dividends over the past five years are summarised in the table below:

Performance measures		FY19	FY18	FY17	FY16	FY15
Earnings						
Underlying EBIT*	\$m	248.6	265.1	302.3	286.7	236.9
Underlying EBITDA	\$m	420.3	385.7	390	372	317
ANWC/Sales***	%	46.8	40.3	36.8	39.9	41.9
Underlying NPAT**	\$m	89.1	98.4	135.8	108.9	117.1
ROFE achieved	%	7.1	9.4	13.6	13.2	11.0
Shareholder value						
Closing share price 31 July	\$	4.88	7.15	8.46	8.28	7.72
Enterprise value****	\$m	3,443.7	3,964.1	3,185.4	3,074.0	2,840.0
TSR	%	(31.0)	(13.9)	3.5	8.7	80.2
Dividends declared	Cents	0.0	11.0	13.0	11.0	10.0

* and **: Underlying EBIT is earnings before net finance costs, taxation and material items. Underlying NPAT is Net Profit after Tax before material items. Underlying NPAT and Underlying EBIT are used internally by management to assess performance of the business and make decisions on the allocation of our resources. NPAT, rather than EBIT, is used to assess management's STI to ensure rewarded business outcomes are aligned with shareholder returns.

***: Average Net Working Capital/Sales is used throughout the business and highlights the management of working capital over the full year.

****: Enterprise value is Nufarm ordinary shares on issue, multiplied by Nufarm's share price, plus net debt and Other securities as at 31 July.

3.2 Short Term Incentive outcomes

Based on an underlying NPAT result of \$89.08m, an ANWC/Sales result at 46.8% and performance against individual strategic and business improvement objectives, disclosed executives (except GE Nuseed and GE supply chain operations) employed for the performance period FY19 did not receive any payment under the incentive in accordance with the rules of the plan.

Individual objectives were driven by Nufarm's strategy and the goals to deliver on sustainable innovation and business discipline across the business. These objectives were specific to the role of each executive and included organisation restructuring, management of risk, efficiency improvements, partnership development, portfolio enhancement, business process and systems improvements and the implementation of initiatives to support growth in higher value segments. There was no payment associated with the individual objectives since the entry hurdle for the FY19 plan was not met for the CEO, CFO and GE portfolio solutions.

a) FY19 STI plan payment results

Outcomes against targets for disclosed executives are shown below:

Financial: Weighting and outcome*						
Disclosed executive	Group uNPAT	Group ANWC	Regional NWC @ 31 Jul 2019	Business Unit uPBT	Business unit ANWC	Personal Weighting & outcome
Greg Hunt	40% ●	40% 🔵	_	_	_	20% ●
Paul Binfield	40% 🔵	40% 🔵	_	-	_	20% 🔵
Elbert Prado	25% 🗨	20% ●	20% 🔵	15% 🔵	_	20% 🔵
Niels Poerksen	40% ●	40% ●	_	_	_	20% ●
Brent Zacharias	10% 🔵	10% 🔵	_	30% 🔵	30% 🔵	20% 🔵

Key:

- Between threshold and target
- Above target
- *: Nufarm's objective is to be as transparent as possible, without disclosing commercially sensitive information. Consequently, while STI measures, descriptions, weighting and performance in FY19 for executive KMPs have been provided above, the specific targets for measures such as uNPAT have not.

The table below displays FY19 STI payments as a percentage of FAR and also as a percentage of target opportunity.

Disclosed executive	2019	STI Potential					
	At target \$	At maximum \$	Total Award \$	FY19 STI Award as a % of target potential	FY19 STI as % of FAR	To be paid in cash in October 2019 \$	Retained in shares vesting 2nd anniversary 31.7.20* \$
Greg Hunt	989,766	1,484,649	-	0%	0%	-	_
Paul Binfield	593,056	889,584	-	0%	0%	-	_
Elbert Prado	384,800	577,199	154,642	40%	21%	77,321	77,321
Brent Zacharias	247,142	370,712	131,045	53%	27%	65,522	65,523
Niels Poerksen	376,903	565,355	-	0%	0%	-	_
Senior executive average	518,333	777,500	57,137	11%	7%	28,569	28,569

* The portion of FY19 STI payment retained in shares will vest on 31 July 2020, on the second anniversary from effective allocation date.

** As the CEO will not receive an STI payment for FY19, there will be no deferred equity granted and therefore, no requirement to raise a motion at the AGM for approval.

[•] Below threshold

b) Historical STI plan performance relative to Nufarm's uNPAT results

The following chart compares Nufarm's historical STI plan performance results against underlying NPAT for the same period. Nufarm's incentive plans measure performance against a range of financial and non-financial metrics with varied weightings. Accordingly, the pay for performance relationship is based on the performance against these metrics as a whole and may not always align with underlying NPAT growth.



Underlying NPAT growth vs STI outcomes

3.3 Long Term Incentive outcomes

The performance period for the FY17 LTI plan concluded on 31 July 2019.

The results of Nufarm's RTSR was calculated by an external provider. The board determined the ROFE outcome to ensure no windfall gains or losses and accordingly adjusted for the net impact of material items. The board approved the vesting outcomes in accordance with the LTI plan rules.

a) FY17 LTI plan testing as at 31 July 2019

The vesting table for the FY17 LTI plan is detailed below, reflecting performance up to 31 July 2019 against the two performance measures of RTSR and ROFE.

Performance Measure	Target	Outcome	% of total plan vested
RTSR	75th percentile	13th percentile (below threshold)	0%
ROFE	11.8%	84.7% of target (below threshold)	0%
Total			Nil

b) FY17 LTI award outcome

The table below details the individual outcome for the FY17 LTI plan.

Disclosed executive	Total number of rights available	Total number of rights awarded	Total Award as a % of potential	Average grant date fair value of awarded rights	Total grant date fair value of award \$	Total grant date fair value of lapsed awards \$
Greg Hunt	95,670	-	0.0%	n/a	-	685,476
Paul Binfield	35,096	_	0.0%	n/a	_	251,463
Elbert Prado	31,226	_	0.0%	n/a	_	223,734
Brent Zacharias	19,276	-	0.0%	n/a	-	138,113
Niels Poerksen	26,008	_	0.0%	n/a	-	186,347

c) Historical LTI plan performance relative to Nufarm's share price

The following chart compares Nufarm's LTI plan vesting results for the past four LTI plans (as a percentage of plan maximum) to the share price history during the same period. The FY16 and FY17 LTI plans did not meet hurdle and therefore are not depicted.



Nufarm historical share price vs LTI outcome

3.4 Senior Executive contract details

The company has employment contracts with the disclosed executive KMPs. These contracts formalise the terms and conditions of employment. The contracts are for an indefinite term. The contracts of the CEO and other disclosed executives have been structured to be compliant with the termination benefits cap under the Corporations Act.

The company may terminate the contract of the CEO and managing director by giving 6 months' notice, in which case the CEO would be entitled to a termination payment of 12 months FAR inclusive of any notice paid in lieu. The contract also provides for payment of applicable statutory entitlements.

The CEO may terminate the contract by giving the company 6 months' notice.

The company may terminate the contract of other executives by 6 months' notice in which case a termination payment equivalent to 12 months FAR will be paid including notice period paid in lieu.

The company may terminate the employment contracts immediately for serious misconduct.

4. Non-Executive directors (NED) remuneration

Nufarm's operations are managed under the direction of the board. The board oversees the performance of Nufarm management in seeking to deliver superior business and operational performance and long-term growth in shareholder value. The board recognises that providing strong leadership and strategic guidance to management is important to achieve our goals and objectives.

Fees for non-executive directors are set at a level to attract and retain Directors with the necessary skills and experience to allow the board to have a proper understanding of, and competence to deal with, current and emerging issues for Nufarm's business. The board seeks to attract directors with different skills, experience, expertise and diversity. Additionally, when setting non-executive director fees, the board takes into account factors such as external market data on fees and the size and complexity of Nufarm's operations. The non-executive directors' fees are fixed, and non-executive directors do not participate in any Nufarm incentive plan.

The board's policy with regard to NED remuneration is to position board remuneration at the market median with comparably sized listed entities. The board determines the fees payable to non-executive directors within the aggregate amount approved from time to time by shareholders. At the company's 2017 AGM, shareholders approved an aggregate of \$2,000,000 per year (including superannuation costs). The total fees for FY19 remained within the approved cap.

Board fees are generally reviewed every 18 months with the last increase of 3.75% effective August 2018. While the next review will be held in February 2020, the board have mirrored management sentiment to forfeit any increase for FY20.

Fees applicable from 1 August 2018 to 31 July 2019 (\$) per annum

Chairman*	392,567
General board	160,597
Audit committee Chair	32,370
Audit committee Member	16,185
HSE Risk committee Chair	18,883
HSE Risk committee Member	9,441
HR committee Chair	26,975
HR committee Member	13,488
Nominations committee Chair	12,462
Nominations committee Member	1,618 per meeting

* The Chairman receives no fees as a member of any committee.

5. Remuneration tables

5.1 Remuneration of directors and disclosed executives

Details follow of the nature and amount of each major element of remuneration in respect of the NED and disclosed Executive KMPs.

		Short Term					
In AUD		Salary and Fees \$	Cash Bonus (Vested) \$	Non-monetary Benefits \$	Total \$		
Directors' Non-executive							
AB Brennan	2019	172,973	-	-	172,973		
	2018	166,720	-	-	166,720		
GR Davis	2019	190,139	_	-	190,139		
	2018	183,265	-	-	183,265		
Dr WB Goodfellow ²	2019	52,492	-	-	52,492		
	2018	144,974	-	-	144,974		
DGMcGauchie	2019	356,879	_	-	356,879		
	2018	343,980	-	-	343,980		
P. Margin	2019	203,757	-	-	203,757		
C	2018	197,733	-	-	197,733		
F. Ford	2019	179,838	-	-	179,838		
	2018	173,338	-	-	173,338		
T. Takasaki	2019	154,580	-	-	154,580		
	2018	148,993	-	-	148,993		
M. McDonald	2019	169,294	-	-	169,294		
	2018	167,274	-	-	167,274		
Sub total non- executive	2019	1,479,952	-	-	1,479,952		
directors remuneration	2018	1,526,277	-	-	1,526,277		
Executive Director	2019	1,294,688	-	295	1,294,983		
GA Hunt	2018	1,265,479	-	2,944	1,268,423		
Total Directors' remuneration	2019	2,774,640	-	295	2,774,935		
	2018	2,791,756	-	2,944	2,794,700		
Group Executives							
PA Binfield	2019	822,223	-	295	822,518		
	2018	804,635	-	295	804,930		
E. Prado ⁴	2019	889,938	77,321	88,266	1,055,525		
	2018	735,420	-	23,504	758,924		
N Poerksen	2019	703,684	-	33,735	737,419		
	2018	713,209	-	27,661	740,870		
B Zacharias ³	2019	495,003	65,522	53,417	613,942		
	2018	461,044	36,564	46,261	543,869		
Sub total – total	2019	2,910,848	142,843	175,713	3,229,404		
executive remuneration	2018	2,714,308	36,564	97,721	2,848,593		
Total directors and	2019	5,685,488	142,843	176,008	6,004,339		
executive remuneration	2018	5,506,064	36,564	100,665	5,643,293		

1. Represents total remuneration paid in the financial year.

2. Dr WB Goodfellow ceased to be a Director on 6 December 2018.

3. Included in Other long term remuneration for B Zacharias is the fair value expense for the financial year relating to the Nuseed LTI plan (refer section 1.5).

4. Mr E Prado fixed remuneration and other long term remuneration includes fees and long service leave amounts paid with respect to the relocation of Mr Prado from Australia to the United States of America during 2019.

е	Post- mployment		Share Based Payments		Total		
	Super- annuation \$	Termination Benefits \$	Equity Settled \$	Other Long Term \$	Total Remuneration \$	Percentage of Remuneration performance based \$	Value of Options as a Proportion of Total Remuneration \$
	17,297				190,270		
	16,672	-	_	-	183,392		
	10,072						
	19,014				209,153 201,591		
	5,249	-	-	-	57,741		
	19,630				164,604		
	35,688	-	-	-	392,567		
	34,398	-	-	-	378,378		
	-	-	-	-	203,757		
	-	-	-	-	197,733		
	17,984	-	-	-	197,822		
	17,333	-	-	-	190,671		
	15,458	-	-	-	170,038		
	14,899	-	-	-	163,892		
	16,929	-	-	-	186,223		
	16,727	_	-	-	184,001		
	127,619	-	-	_	1,607,571		
	137,985	-	-	-	1,664,262		
	25,000	_	443,069	_	1,763,052	25%	14%
	25,000	_	557,691	_	1,851,114	30%	16%
	152,619	_	443,069	_	3,370,623		
	162,985	_	557,691	_	3,515,376		
			,		.,		
	25,000	_	219,410	_	1,066,928	21%	11%
	25,000	_	263,659	_	1,093,589	24%	10%
	14,829	_	178,702	111,509	1,360,565	19%	5%
	-	_	205,715		964,639	21%	9%
	25,522	_	162,098	_	925,039	18%	9%
	25,449	_	215,533	_	981,852	22%	13%
	92,729		94,641	108,504	909,816	30%	13%
	50,601	_	130,170		724,640	23%	7%
	158,080		654,851	220,013	4,262,348	2070	7.70
	101,050	_	815,077		3,764,720		
	310,699		1,097,920	220,013	7,632,971		
		_		220,013	7,280,096		
	264,035	-	1,372,768	-	7,200,090		

5.2 Equity instruments held by disclosed executives

The following tables show the number of:

- options/performance rights over ordinary shares in the company;
- right to deferred shares granted under the STI scheme; and
- shares in the company

that were held during the financial year by disclosed executives of the group, including their close family members and entities related to them.

All equity transactions with key management personnel other than those arising from the exercise of remuneration options have been entered into under terms and conditions no more favourable than those the entity would have adopted if dealing at arm's length.

Options/rights over ordinary shares in Nufarm

	Scheme	Balance at 1 August 2018	Granted as remun- eration ^(†)	Exercised	Forfeited or Lapsed ^(c)	Net Change Other ^(e)	Balance at 31 July 2019 ^(d)	Vested During 2019	Vested at 31 July 2019 ^(a)	Value at Date of for- feiture ^(c)
Directors										
G Hunt	LTI performance	211,082	162,933	_	(95,670)	_	278,345	-	_	466,870
	STI deferred ^(b)	69,695	-	(69,695)	-	_	-	69,695	-	-
Executives										
Current KMP										
P Binfield	LTI performance	84,494	69,734	_	(35,096)	_	119,132	_	_	171,268
	STI deferred ^(b)	38,351	_	(38,351)	_	_	_	38,351	_	_
E Prado	LTI performance	66,384	49,636	_	(31,226)	_	84,794	-	_	152,383
	STI deferred ^(b)	28,435	-	(28,435)	-	_	-	28,435	-	-
B Zacharias	LTI performance	41,400	-	_	(19,276)	_	22,124	-	_	94,067
	STI deferred ^(b)	17,724	5,583	(20,402)	_	_	2,905	20,402	_	-
N Poerksen	LTI performance	61,166	49,636	-	(26,008)	_	84,794	-	-	126,919
	STI deferred ^(b)	29,801	-	(29,801)	_	_	_	29,801	_	_
Total	LTI performance	464,526	331,939	_	(207,276)	_	589,189	_	_	1,011,507
	STI deferred ^(b)	184,006	5,583	(186,684)	_	_	2,905	186,684	_	_
Non-KMP Of	ficers									
F Smith	LTI performance	-	_	_	_	_	_	_	_	-
Former non	-KMP Officers									
R Heath	LTI performance	20,408	14,599	_	(9,808)	(25,199)	_		_	47,863
Total		668,940	352,121	(186,684)	(217,084)	(25,199)	592,094	186,684	-	1,059,370

(a) All options/rights that are vested are exercisable.

- (b) The grant date fair value of deferred shares granted as remuneration during the year ended 31 July 2019 was \$6.07. 100% of STI deferred shares available to vest during the year ended 31 July 2019 vested as the necessary service condition was satisfied. 100% of non-vested STI deferred shares are due to vest during the year ended 31 July 2020. Note those deferred shares granted as remuneration during the year ended 31 July 2019 relate to the year ended 31 July 2018 STI outcomes. Deferred shares granted as remuneration on the back of the current year STI outcomes will be determined and allocated in October 2019.
- (c) LTIP performance rights forfeited due to a failure to satisfy service or performance conditions during 2019 are disclosed in column "Forfeited or lapsed". 100% of rights due to vest in 2019 were forfeited. The value of LTIP performance rights forfeited is expressed in the table above using the share price of the company at 31 July 2019 of \$4.88.
- (d) 267,850 of total LTIP performance rights held by KMPs or non-KMP Officers are due to vest in the period ending 31 July 2020, with the remaining unvested balance due to vest in the period ending 31 July 2021.
- (e) "Net change other" reflects changes to KMPs and non-KMP Officers during the period.
- (f) The number of LTIP performance rights granted as remuneration during FY19 were determined by dividing the KMP's total LTI grant opportunity by \$6.07, being the fix-day VWAP commencing 1 October 2018.

5.3 Shares held in Nufarm Ltd

	Balance at 1 August 2018	Granted as Remuneration	On Exercise of Rights	Net Change Other	Balance at 31 July 2019
Directors					
DG McGauchie	66,293	-	-	10,468	76,761
G Hunt	319,727	-	69,695	105,241	494,663
AB Brennan	12,224	_	_	1,932	14,156
GR Davis	48,889	-	-	22,720	71,609
FA Ford	24,445	-	_	26,955	51,400
Dr WB Goodfellow ¹	1,339,887	-	_	(1,339,887)	_
PM Margin	3,005	-	-	475	3,480
MEMcDonald	8,584	-	-	13,743	22,327
T Takasaki	_	-	_		_
Executives					
Current KMP					
P Binfield	266,501	-	38,351	27,323	332,175
E Prado	71,471	-	28,435	(23,561)	76,345
B Zacharias	32,649	_	23,307	5,965	61,921
N Poersken	18,024	-	29,801	35,996	83,821
Total	2,211,699		189,589	(1,112,630)	1,288,658

1. Dr WB Goodfellow ceased to be a Director on 6 December 2018.

Shares issued as a result of the exercise of options

There were nil (2018: 333,078) shares issued as a result of the exercise of options during the year.

Unissued shares under option

There are nil (2018: nil) unissued shares under option. The unissued shares under option have been provided to Nufarm employees as performance rights and the exercise price of such options is nil.

Loans to key management personnel

There were no loans to key management personnel at 31 July 2019 (2018: Nil).

Other key management personnel transactions with the company or its controlled entities

Apart from the details disclosed in this note, no director has entered into a material contract with the company or entities in the group since the end of the previous financial year and there were no material contracts involving director's interest existing at year-end.

A number of key management persons, or their related parties, hold positions in other entities that result in them having control or significant influence over the financial or operating policies of those entities. A number of these entities transacted with the company or its subsidiaries in the reporting period. The terms and conditions of the transactions with management persons and their related parties were no more favourable than those available, or which might reasonably be expected to be available, on similar transactions to non-director related entities on an arms-length basis.

From time to time, key management personnel of the company or its controlled entities, or their related entities, may purchase goods from the group. These purchases are on the same terms and conditions as those entered into by other group employees or customers and are trivial or domestic in nature.

This report has been made in accordance with a resolution of directors.

DG McGauchie AO Director

GA Hunt Director

Melbourne 30 September 2019

Lead Auditor's Independence Declaration

Under section 307C of the Corporations Act 2001



Lead Auditor's Independence Declaration under Section 307C of the Corporations Act 2001

To the Directors of Nufarm Limited

I declare that, to the best of my knowledge and belief, in relation to the audit of Nufarm Limited for the financial year ended 31 July 2019 there have been:

- i. no contraventions of the auditor independence requirements as set out in the Corporations Act 2001 in relation to the audit; and
- ii. no contraventions of any applicable code of professional conduct in relation to the audit.



Gordon Sangster Partner Melbourne 30 September 2019

KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

Consolidated Income Statement

For the year ended 31 July 2019

		С	Consolidated	
	Note	2019 \$000	2018* \$000	
Continuing operations				
Revenue		3,757,590	3,307,847	
Cost of sales		(2,744,309)	(2,344,413)	
Gross profit		1,013,281	963,434	
Other income	7	10,461	7,256	
Sales, marketing and distribution expenses		(561,151)	(480,650)	
General and administrative expenses		(223,768)	(275,573)	
Research and development expenses		(41,132)	(39,046)	
Share of net profits/(losses) of equity accounted investees	19	124	78	
Operating profit		197,815	175,499	
	10	10,051	10,978	
Financial expenses excluding foreign exchange gains/(losses)	10	(117,293)	(118,638)	
Net foreign exchange gains/(losses)	10	(9,624)	(27,946)	
Net financial expenses		(126,917)	(146,584)	
Net financing costs		(116,866)	(135,606)	
Profit/(loss) before income tax		80,949	39,893	
Income tax benefit/(expense)	11	(42,639)	(55,900)	
Profit/(loss) for the period from continuing operations		38,310	(16,007)	
Attributable to:				
Equity holders of the company		38,310	(15,588)	
Non-controlling interests		-	(419)	
Profit/(loss) for the period		38,310	(16,007)	
Earnings per share				
Basic earnings/(loss) per share	30	7.4	(8.5)	
Diluted earnings/(loss) per share	30	7.4	(8.5)	

* The group has initially applied AASB 15 and AASB 9 at 1 August 2018. Under the transition method chosen comparative information is not restated.

The consolidated income statement is to be read in conjunction with the attached notes.

Consolidated Statement of Comprehensive Income

For the year ended 31 July 2019

		Co	nsolidated
	Note	2019 \$000	2018* \$000
Profit/(loss) for the period		38,310	(16,007)
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss:			
Foreign exchange translation differences for foreign operations		69,086	(24,231)
Foreign exchange translation differences for disposal groups		_	_
Effective portion of changes in fair value of cash flow hedges		54	2,028
Effective portion of changes in fair value of net investment hedges		(10,735)	8,882
Items that will not be reclassified to profit or loss:			
Actuarial gains/(losses) on defined benefit plans		(7,356)	4,980
Income tax on share based payment transactions		-	(587)
Other comprehensive profit/(loss) for the period, net of income tax	_	51,049	(8,928)
Total comprehensive profit/(loss) for the period	_	89,359	(24,935)
Attributable to:			
Equity holders of the company		89,359	(24,516)
Non-controlling interest		-	(419)
Total comprehensive profit/(loss) for the period	_	89,359	(24,935)

* The group has initially applied AASB 15 and AASB 9 at 1 August 2018. Under the transition method chosen comparative information is not restated.

The amounts recognised directly in equity are disclosed net of tax.

The consolidated statement of comprehensive income is to be read in conjunction with the attached notes.

Consolidated Balance Sheet

As at 31 July 2019

		Consolic			
	Note	2019 \$000	2018* \$000		
Current assets					
Cash and cash equivalents	15	505,687	301,700		
Trade and other receivables	16	1,378,751	1,199,617		
Inventories	17	1,228,241	1,179,696		
Current tax assets	18	36,320	31,609		
Other investments	20	_	_		
Preference securities receivable	13	97,500	-		
Total current assets		3,246,499	2,712,622		
Non-current assets					
Trade and other receivables	16	101,977	108,859		
Investments in equity accounted investees	19	2,010	411		
Other investments	20	421	442		
Deferred tax assets	18	212,997	201,962		
Property, plant and equipment	22	393,582	338,749		
Intangible assets	23	1,719,034	1,688,322		
Total non-current assets		2,430,021	2,338,745		
TOTAL ASSETS		5,676,520	5,051,367		
		-,	-/		
Current liabilities					
Bank overdraft	15	-	7,357		
Trade and other payables	24	1,221,261	1,131,270		
Loans and borrowings	25	494,986	519,698		
Employee benefits	26	19,275	19,347		
Current tax payable	18	18,971	20,930		
Provisions	28	17,216	12,398		
Total current liabilities		1,771,709	1,711,000		
Non-current liabilities					
Payables	24	11,058	10,800		
Loans and borrowings	25	1,257,830	1,148,715		
Deferred tax liabilities	18	125,883	113,552		
Employee benefits	26	105,096	95,676		
Total non-current liabilities		1,499,867	1,368,743		
TOTAL LIABILITIES		3,271,576	3,079,743		
NET ASSETS		2,404,944	1,971,624		
Equity					
Share capital		1,834,594	1,537,502		
Reserves		(249,508)	(309,126)		
Retained earnings		475,926	496,316		
Equity attributable to equity holders of the Company		2,061,012	1,724,692		
Other securities	29	343,932	246,932		
Non-controlling interest	۷ ــــــــــــــــــــــــــــــــــــ				
TOTAL EQUITY		2,404,944	1,971,624		

* The group has initially applied AASB 15 and AASB 9 at 1 August 2018. Under the transition method chosen comparative information is not restated.

The consolidated balance sheet is to be read in conjunction with the attached notes.

Consolidated Statement of Cash Flows

For the year ended 31 July 2019

		2019	onsolidated
	Note	\$000	2018* \$000
Cash flows from operating activities			
Profit/(loss) for the period – before tax		80,949	39,893
Adjustments for:			
Depreciation & amortisation	8	171,708	120,550
Asset impairment	8	_	70,559
Inventory write down	8	12,640	15,310
Share of (profits)/losses of associates net of tax	19	(124)	(78)
Net finance expense		107,241	107,660
Other		(648)	(102)
Movements in working capital items:			
(Increase)/decrease in receivables		(194,552)	(183,045)
(Increase)/decrease in inventories		(61,184)	(407,253)
Increase/(decrease) in payables		52,948	316,514
Exchange rate change on foreign controlled entities working capital items		73,756	(21,425)
Cash generated from operations		242,734	58,583
Interest received		10,051	10,978
Dividends received		65	12
Interest paid		(112,659)	(109,630)
Taxes paid		(42,060)	(48,112)
Net operating cash flows	6	98,131	(88,169)
Cash flows from investing activities			
Proceeds from sale of property, plant and equipment		2,098	6,084
Payments for plant and equipment		(66,966)	(69,539)
Purchase of businesses, net of cash acquired	14		(778,859)
Purchase of equity investment	19	(1,440)	
Proceeds from sale of business and investments			_
Payments for acquired intangibles and major product		(107 (70)	(100.0/0)
development expenditure		(107,672)	(123,260)
Net investing cash flows	6	(173,980)	(965,574)
Cash flows from financing activities			
Share issue proceeds (net of costs)		296,008	436,454
Debt establishment transaction costs	25	(2,288)	(16,911)
Proceeds from borrowings	25	1,350,589	2,201,871
Repayment of borrowings	25	(1,340,229)	(1,458,764)
Distribution to other securities holders	29	(15,162)	(14,640)
Dividends paid	29	(18,924)	(35,580)
Net financing cash flows	6	269,994	1,112,430
Net increase (/decrease) in each and each a sub-stants		10.4.1.4.5	F0 / 07
Net increase/(decrease) in cash and cash equivalents		194,145	58,687
Cash at the beginning of the year		294,343	223,761
Exchange rate fluctuations on foreign cash balances	15	17,199	11,895
Cash and cash equivalents at 31 July (a)	15	505,687	294,343

(a) Represented in 2019 by cash at bank of \$505.687 million.

* The group has initially applied AASB 15 and AASB 9 at 1 August 2018. Under the transition method chosen comparative information is not restated.

The consolidated statement of cash flows is to be read in conjunction with the attached notes.

Consolidated Statement of Changes in Equity

For the year ended 31 July 2019

Consolidated	Share capital \$000	Translation reserve \$000	
	1,090,197		
Balance at 1 August 2017	1,090,197	(316,406)	
Profit/(loss) for the period			
Other comprehensive income			
Actuarial gains/(losses) on defined benefit plans	_	_	
Foreign exchange translation differences	_	(24,231)	
Gains/(losses) on cash flow hedges taken to equity	_	_	
Gains/(losses) on net investment hedges taken to equity	_	_	
Income tax on share based payment transactions	_	_	
Total comprehensive income/(loss) for the period	-	(24,231)	
Transactions with owners, recorded directly in equity			
Accrued employee share award entitlement		-	
Issuance of shares under employee share plans	7,473	-	
Dividends paid to shareholders	-	-	
Dividend Reinvestment Plan	2,962	-	
Distributions to Nufarm Step-up Security holders		_	
Remeasurement of non-controlling interest option		-	
Acquisition of remaining interest in non-controlling interest Contributions of equity net of transaction costs	436,870	1,249	
	430,070		
Balance at 31 July 2018	1,537,502	(339,388)	
Balance at 1 August 2018	1,537,502	(339,388)	
Adjustment on initial application of AASB 15 (net of tax)		-	
Adjustment on initial application of AASB 9 (net of tax)	_	-	
*Adjusted balance at 1 August 2018	1,537,502	(339,388)	
Profit/(loss) for the period		-	
Other comprehensive income			
Actuarial gains/(losses) on defined benefit plans		-	
Foreign exchange translation differences		69,086	
Gains/(losses) on cash flow hedges taken to equity	-	_	
Gains/(losses) on net investment hedges taken to equity	-		
Income tax on share based payment transactions	-	69,086	
Total comprehensive income/(loss) for the period		09,080	
Transactions with owners, recorded directly in equity			
Accrued employee share award entitlement	_	-	
Issuance of shares under employee share plans	346	-	
Dividends paid to shareholders	_	-	
Dividend Reinvestment Plan	738	_	
Distributions to Nufarm Step-up Security holders	_	-	
Remeasurement of non-controlling interest option	_	_	
Acquisition of remaining interest in non-controlling interest	_	_	
Contributions of equity net of transaction costs	296,008	-	
Parlament of the colo		(070.000)	
Balance at 31 July 2019	1,834,594	(270,302)	

*The group has initially applied AASB 15 and AASB 9 at 1 August 2018. Under the transition method chosen comparative information is not restated.

The consolidated statement of changes in equity is to be read in conjunction with the attached notes.

Capital profit reserve	Other reserve	Retained earnings	Total	Other securities	Non-controlling interest	Total equity
\$000	\$000	\$000	\$000	\$000	\$000	\$000
33,627	(18,962)	563,140	1,351,596	246,932	4,395	1,602,923
		(15,588)	(15,588)		(419)	(16,007)
		(,	(,		()	(,
-	_	4,980	4,980	-	-	4,980
		_	(24,231)	_		(24,231)
-	2,028	-	2,028	_		2,028
-	8,882	_	8,882	_		8,882
-	(587)	_	(587)	-		(587)
	10,323	(10,608)	(24,516)		(419)	(24,935)
-	3,904	-	3,904	_		3,904
-	(7,889)	-	(416)	_		(416)
-	-	(37,795)	(37,795)	-	(747)	(38,542)
-	-	-	2,962	-		2,962
-	-	(10,763)	(10,763)	-	-	(10,763)
-	(379)	-	(379)	-	-	(379)
-	9,638	(7,658)	3,229		(3,229)	_
_	_		436,870	-	_	436,870
33,627	(3,365)	496,316	1,724,692	246,932		1,971,624
	(-))		1 1-1	- ,		1. 1-
33,627	(3,365)	496,316	1,724,692	246,932	-	1,971,624
-	-	(7,017)	(7,017)	-	-	(7,017)
	_	(13,708)	(13,708)			(13,708)
33,627	(3,365)	475,591	1,703,967	246,932		1,950,899
	(-//		.,	,		.,
_	_	38,310	38,310	-	_	38,310
		(7,356)	17254)			(7254)
-	-		(7,356)			(7,356)
-	54	-	<u>69,086</u> 54			69,086
	(10,735)	-	(10,735)			(10,735)
-	(10,733)	-	(10,733)		-	(10,733)
	(10,681)	30,954	89,359			89,359
	(10,081)	50,934	07,337			07,337
	1,559	-	1,559	_	-	1,559
-	(346)	-	-	-		-
	-	(19,662)	(19,662)			(19,662) 738
-			738			
-	-	(10,957)	(10,957)	-	-	(10,957)
-	-			_		_
-	-	-	-	07000	-	-
-			296,008	97,000		393,008
33,627	(12,833)	475,926	2,061,012	343,932	_	2,404,944

Notes to the Consolidated Financial Statements

1. Reporting entity

Nufarm Limited (the 'company') is a company limited by shares and domiciled in Australia that is listed on the Australian Securities Exchange. The address of the company's registered office is 103-105 Pipe Road, Laverton North, Victoria, 3026. The consolidated financial statements of the company as at and for the year ended 31 July 2019 comprise the company and its subsidiaries (together referred to as the 'group' and individually as 'group entities') and the group's interest in associates and jointly controlled entities. The group is a for-profit entity and is primarily involved in the manufacture and sale of crop protection products used by farmers to protect crops from damage caused by weeds, pests and disease, and seed treatment products.

2. Basis of preparation

(a) Statement of compliance

The consolidated financial statements are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards (AASBs) adopted by the Australian Accounting Standards Board (AASB) and the *Corporations Act 2001*. The consolidated financial statements comply with International Financial Reporting Standards (IFRSs) adopted by the International Accounting Standards Board (IASB).

This is the first set of the group's annual financial statements in which AASB 15 Revenue from Contracts with Customers and AASB 9 Financial Instruments have been applied. Changes to significant accounting policies are described in note 3.

The consolidated financial statements were authorised for issue by the Board of Directors on 30 September 2019.

(b) Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis except for derivative financial instruments which are measured at fair value, and defined benefit fund obligations that are measured as the present value of the defined benefit obligation at the reporting date less the fair value of the pension plan's assets. The methods used to measure fair values are discussed further in note 4.

(c) Functional and presentation currency

These consolidated financial statements are presented in Australian dollars, which is the company's functional currency. The company is of a kind referred to in ASIC Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191 and, in accordance with that Instrument, all financial information presented in Australian dollars has been rounded to the nearest thousand unless otherwise stated.

(d) Use of estimates and judgements

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have the most significant impact on the amount recognised in the financial statements are described below.

(i) Business combinations

Fair valuing assets and liabilities acquired in a business combination involves the group making assumptions about the timing of cash inflows and outflows, growth assumptions, discount rates and cost of debt.

(ii) Impairment testing

The group determines whether goodwill and intangibles with indefinite useful lives are impaired on an annual basis or at each reporting date if required, using a value in use (VIU) or a fair value less cost to dispose (FVLCD) methodology to estimate the recoverable amount of cash generating units. VIU is determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset in its present form and its eventual disposal.

2. Basis of preparation (continued)

(d) Use of estimates and judgements (continued)

(ii) Impairment testing (continued)

VIU is determined by applying assumptions specific to the group's continued use and cannot consider future development. The determination of recoverable value often requires the estimation and discounting of future cash flows which is based on information available at balance date such as expected revenues from products, the return on assets, future costs, growth rates, applicable discount rates and useful lives.

FVLCD is an estimate of the amount that a market participant would pay for an asset or Cash Generating Unit (CGU), less the cost to dispose. Fair value is generally determined using independent market assumptions to calculate the present value of the estimated future cash flows expected to arise from the continued use of the asset, and its eventual sale where a market participant may take a consistent view. Cash flows are discounted using an appropriate discount rate to arrive at a net present value of the asset which is compared against the asset's carrying value.

These estimates are subject to risk and uncertainty that may be beyond the control of the group; hence there is a possibility that changes in circumstances will materially alter projections, which may impact the recoverable amount of assets at each reporting date.

Other non-current assets are also assessed for impairment indicators. Refer to note 23 for key assumptions made in determining the recoverable amounts of the CGU's.

(iii) Income taxes

Uncertain tax matters:

The group is subject to income taxes in Australia and overseas jurisdictions. There are many transactions and calculations undertaken during the ordinary course of business for which the ultimate tax determination is uncertain. The group has exercised judgement in the application of tax legislation and its interaction with income tax accounting principles. Where the final tax outcome of these matters is different from the amounts initially recorded, such differences will impact the current and deferred tax provisions recognised on the balance sheet and the amount of other tax losses and temporary differences not yet recognised in the period in which the tax determination is made.

Deferred tax:

Deferred tax assets are recognised only to the extent that it is probable that future taxable profits will be available against which the assets can be utilised. Judgement is required by the group to determine the likely timing and the level of future taxable income. The group assesses the recoverability of recognised and unrecognised deferred taxes including losses in Australia and overseas using assumptions and projected cashflows.

Deferred tax liabilities arising from temporary differences in investments, caused principally by retained earnings held in foreign tax jurisdictions, are recognised unless repatriation of retained earnings can be controlled and are not expected to occur in the foreseeable future.

(iv) Defined benefit plans

A liability in respect of defined benefit pension plans is recognised in the balance sheet, and is measured as the present value of the defined benefit obligation at the reporting date less the fair value of the pension plan's assets. The present value of the defined benefit obligation is based on expected future payments which arise from membership of the fund at the reporting date, calculated annually by independent actuaries and requires the exercise of judgement in relation to assumptions for expected future salary levels, long term price inflation and bond rates, experience of employee departures and periods of service.

Refer to note 26 for details of the key assumptions used in determining the accounting for these plans.

Notes to the Consolidated Financial Statements (continued)

2. Basis of preparation (continued)

(d) Use of estimates and judgements (continued)

(v) Working capital

In the course of normal trading activities, the group uses judgement in establishing the carrying value of various elements of working capital, which is principally inventories and trade receivables. Judgement is required to estimate the provision for obsolete or slow moving inventories and bad and doubtful receivables. In estimating the provision for obsolete or slow moving inventories the group considers the net realisable value of inventory using estimated market price less cost to sell.

In estimating the provision for bad and doubtful receivables the group measures the expected credit losses (ECLs) using key assumptions to determine a probability weighted basis including the geographical location's specific circumstances.

Actual expenses in future periods may be different from the provisions established and any such differences would impact future earnings of the group.

(vi) Capitalised development costs

Development expenditure is recognised as an intangible asset when the group judges and can demonstrate:

- (a) the technical feasibility of completing the intangible asset so that it will be available for use;
- (b) intention to complete;
- (c) ability to use the asset; and
- (d) how the asset will generate future economic benefits and the ability to measure reliably the expenditure during development.

The criteria above are derived from independent valuations and predicated on estimates and judgments including future cash flows, revenue streams and value in use calculations. Estimates and assumptions may change as new information becomes available. If, after having commenced the development activity, a judgement is made that the intangible asset is impaired, the appropriate amount will be written off to the income statement.

(vii) Intellectual property

Intellectual property consists of product registrations, product access rights, trademarks, task force seats, product distribution rights and product licences acquired from third parties. The group assesses intellectual property to have a finite life or indefinite life. Changes to estimates related to the useful life of intellectual property are accounted for prospectively and may affect amortisation rates and intangible asset carrying values.

(e) Reclassification

Where applicable comparatives are adjusted to present them on the same basis as current period figures.

3. Significant accounting policies

Except as described immediately below, the group's accounting policies have been applied consistently to all periods presented in these consolidated financial statements, and have been applied consistently by group entities.

Changes in significant accounting policies

AASB 15 Revenue from Contracts with Customers

AASB 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaced AASB 118 Revenue and related interpretations. AASB 15 was effective for the group beginning on 1 August 2018.

Under AASB 15, revenue is recognised when a customer obtains control of the goods or services. Determining the timing of the transfer of control requires judgement.

Revenue with customers is allocated between performance obligations and recognised as each performance obligation is met. The group generates sales revenue primarily from the obligation to supply products to customers, and in some cases there is a secondary obligation for delivery and tolling services.

3. Significant accounting policies (continued)

Changes in significant accounting policies (continued)

AASB 15 Revenue from Contracts with Customers (continued)

Sales contracts include variable consideration such as rebates and sales incentives to customers. Variable consideration is only included in the transaction price if, and to the extent that, it is highly probable that its inclusion will not result in a significant revenue reversal in the future when the uncertainty has been resolved.

The seed technologies segment receives royalty revenue from growers for certain varieties of seed. Revenue is recognised at the later of when the sales or usage occurs and the performance obligation is satisfied, which would be when the harvest occurs and the royalty is paid. Under the previous accounting policy, royalty revenue was estimated and accrued at the point the seed was sold.

The adjustment to derecognise accrued revenue related to the royalties has resulted in a reduction to accrued receivables of \$7.202 million (in trade and other receivables) and a corresponding entry to retained earnings (\$7.017 million) and deferred tax asset (\$0.185 million).

AASB 15 did not have a significant impact on the group's accounting policies with respect to other revenue streams (refer to note 3 (I)).

The group has adopted AASB 15 using the cumulative transition approach where transitional adjustments are recognised in retained earnings at 1 August 2018, without adjustment of the 2018 comparatives. In addition, the disclosure requirements in AASB 15 have not generally been applied to comparative information.

AASB 9 Financial Instruments

AASB 9 sets out requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. It replaced AASB 139 Financial Instruments: Recognition and Measurement. AASB 9 was effective for the group beginning on 1 August 2018.

i) Impairment of financial assets

AASB 9 replaces the 'incurred loss' model in AASB 139 with a forward-looking 'expected credit loss' (ECL) model. The group measures loss allowances at an amount equal to lifetime ECLs.

The group applied judgement as to how changes in economic factors affect ECLs, and was determined on a probability-weighted basis. Reasonable and supportable information was considered, that was relevant and available without undue cost or effort and included both qualitative and quantitative information based on historical experiences, and also forward looking information.

The application of AASB 9's impairment requirements is an additional loss allowance required of \$17.401 million with a corresponding entry to retained earnings (\$13.708 million) and deferred tax assets (\$3.693 million). Refer to note 31.

The group has used the exemption to not restate comparative information for prior periods with respect to classification and measurement (including impairment) changes and accordingly there is no restatement required for 2018.

ii) Classification and measurement of financial assets and liabilities

AASB 9 contains three principal classification categories for financial assets: measured at amortised cost, fair value through other comprehensive income (FVOCI), and fair value through profit or loss (FVTPL). The classification of financial assets under AASB 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. AASB 9 eliminates the previous AASB 139 categories of held to maturity, loans and receivables and available for sale.

AASB 9 largely retains the existing requirements in AASB 139 for the classification and measurement of financial liabilities.

Notes to the Consolidated Financial Statements (continued)

3. Significant accounting policies (continued)

Changes in significant accounting policies (continued)

AASB 9 Financial Instruments (continued)

The adoption of AASB 9 has not had a significant effect on the group's accounting policies related to financial liabilities and derivative financial instruments (for derivatives that are used as hedging instruments).

For an explanation of how the group classifies and measures financial instruments and accounts for related gains and losses under AASB 9 see note 3 (c).

New standards and interpretations not yet adopted

A number of new standards and amendments to standards are effective for annual periods beginning on or after 1 August 2019. The group has not early adopted any amendments, standards or interpretations that have been issued but are not yet mandatory in preparing these consolidated financial statements. Of those standards that are not yet effective, AASB 16 Leases is expected to have a material impact on the group's consolidated financial statements in the period of initial application.

AASB 16 Leases

The standard is effective for the group beginning on 1 August 2019. The group has assessed the estimated impact that initial application of AASB 16 will have on its consolidated financial statements, as described below. The actual impacts of adopting the standard on 1 August 2019 may change because – the new accounting policies are subject to change until the group presents its first consolidated financial statements that include the date of initial application.

AASB 16 introduces a single, on-balance lease sheet accounting model for lessees. As lessee, the group will recognise a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are optional exemptions for short-term leases and leases of low value.

In addition, the nature of expenses related to those leases will change as AASB 16 replaces the straight-line operating lease expense with a depreciation charge for right-of-use assets and interest expense on lease liabilities. EBITDA, as defined in note 5 operating segments, will increase as the operating lease cost is charged against EBITDA under AASB 117 Leases while under the new standard will be included in depreciation and interest which are excluded from EBITDA.

Based on information currently available, the group estimates that as at 1 August 2019 it will recognise:

- additional lease liabilities of between \$140.0 million and \$154.0 million
- right of use assets of between \$113.0 million and \$127.0 million
- deferred tax of approximately \$5.0 million

No significant impact is expected for the group's finance leases.

The group plans to apply AASB 16 initially on 1 August 2019 using the modified retrospective approach. Therefore the cumulative effect of adopting AASB 16 will be recognised as an adjustment to the opening balance of retained earnings at 1 August 2019, with no restatement of comparative information.

AASB Interpretation 23 Uncertainty over Income Tax Treatment

The Interpretation provides a framework to consider, recognise and measure the impact of tax uncertainties. It specifically addresses how to determine the unit of account and provides recognition and measurement guidance to be applied such as:

- how taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates are determined; and
- consideration of changes in facts and circumstances.

The Interpretation is effective for the group on 1 August 2019, with certain transition relief available. Since the group operates in a complex multinational tax environment, applying the Interpretation may affect its consolidated financial statements.

3. Significant accounting policies (continued)

(a) Basis of consolidation

(i) Business combinations

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the group. The group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. In assessing control, the group takes into consideration potential voting rights that currently are exercisable.

The group measures goodwill at the acquisition date as:

- the fair value of the consideration transferred; plus
- the recognised amount of any non-controlling interests in the acquiree; plus if the business combination is achieved in stages, the fair value of the existing equity interest in the acquiree; less
- the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

When the excess is negative, a bargain purchase gain is recognised immediately in profit or loss.

The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognised in profit or loss.

Costs related to the acquisition, other than those associated with the issue of debt or equity securities, that the group incurs in connection with a business combination are expensed as incurred.

Any contingent consideration payable is recognised at fair value at the acquisition date. If the contingent consideration is classified as equity, it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes to the fair value of the contingent consideration are recognised in profit or loss.

(ii) Non-controlling interests (NCI)

NCI are measured at their proportionate share of the acquiree's identifiable net assets at the acquisition date.

When a written put option is established with non-controlling shareholders in an existing subsidiary, then the group will recognise a liability for the present value of the exercise price of the option. When the NCI still has present access to the returns associated with the underlying ownership interest, NCI continues to be recognised and accordingly the liability is considered a transaction with owners and recognised via a reserve. Any changes in the carrying value of the put liability over time is recognised directly in reserves.

(iii) Subsidiaries

Subsidiaries are entities controlled by the group. The group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

When the group loses control over a subsidiary it derecognises the assets and liabilities of the subsidiary and any related NCI and other components of equity. Any resulting gain or loss is recognised in profit and loss. Any interest retained is measured at fair value when control is lost.

Changes in the group's interest in a subsidiary that do not result in a loss of control are accounted for as an equity transaction.

The accounting policies of subsidiaries have been changed where necessary to align them with the policies adopted by the group. Losses applicable to the NCI in a subsidiary are allocated to the NCI even if doing so causes the NCI to have a deficit balance.

(iv) Investments in equity accounted investees

The group's interests in equity-accounted investees comprise interests in associates and joint ventures.

Notes to the Consolidated Financial Statements (continued)

3. Significant accounting policies (continued)

(a) Basis of consolidation (continued)

(iv) Investments in equity accounted investees (continued)

Associates are those entities in which the group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the group has joint control, whereby the group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Investments in associates and joint ventures are accounted for using the equity method and are initially recognised at cost, which includes transaction costs. The group's investment includes goodwill identified on acquisition, net of any accumulated impairment losses. Subsequent to initial recognition, the consolidated financial statements include the group's share of the income and expenses and equity movements of the investees after adjustments to align the accounting policies of the investees with those of the group, until the date on which significant influence or joint control ceases. On loss of significant influence the investment is no longer equity accounted and is revalued to fair value.

(v) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

(b) Foreign currency

(i) Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of group entities at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to the functional currency at the foreign exchange rate at that date. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currencies that are measured at fair value are retranslated to the functional currency at the fair value was determined. Foreign currency differences arising on retranslation are recognised in profit or loss. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Foreign currency gains and losses are included in net financing costs.

(ii) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to Australian dollars at exchange rates at the reporting date. The income and expenses of foreign operations are translated to Australian dollars at exchange rates at the dates of the transactions.

Foreign currency differences are recognised in other comprehensive income and accumulated in translation reserve except to the extent that the translation difference is allocated to NCI. When a foreign operation is disposed of, in part or in full, the relevant amount in the translation reserve is transferred to profit or loss as part of the profit or loss on disposal.

When the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely in the foreseeable future, foreign exchange gains and losses arising from such a monetary item are considered to form part of a net investment in a foreign operation and are recognised in other comprehensive income, and are presented within equity in the translation reserve.

(c) Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(i) Non-derivative financial assets

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (FVOCI), and fair value through profit or loss (FVTPL).

3. Significant accounting policies (continued)

(c) Financial instruments (continued)

(i) Non-derivative financial assets (continued)

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the group's business model for managing them. With the exception of trade receivables, the group initially measures a financial asset at its fair value plus transaction costs on trade date at which the group becomes a party to the contractual provisions of the instrument. Trade receivables that do not contain a significant financing component are measured at the transaction price determined under AASB 15. Refer to note 3 (I).

The group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risk and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the group is recognised as a separate asset or liability.

Financial assets and liabilities are offset and the net amount presented in the balance sheet when, and only when, the group has the legal right to offset the amounts and intends to settle on a net basis or to realise the asset and settle the liability simultaneously.

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in four categories:

- Amortised cost
- Fair value through OCI with recycling of cumulative gains and losses (debt instruments)
- Fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)
- Fair value through profit or loss

Financial assets at amortised cost

This category is the most relevant to the group. Financial assets are measured at amortised cost if both of the following conditions are met and is not designated as FVTPL:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

The group's financial assets at amortised cost includes trade receivables.

Financial assets at fair value through OCI (FVOCI) - debt instruments

The Group measures debt instruments at fair value through OCI if both of the following conditions are met and is not designated as FVTPL:

- The financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the statement of profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in OCI. Upon derecognition, the cumulative fair value change recognised in OCI is recycled to profit or loss.

The group does not currently have any financial assets classified as FVOCI.

Notes to the Consolidated Financial Statements (continued)

3. Significant accounting policies (continued)

(c) Financial instruments (continued)

(i) Non-derivative financial assets (continued)

Financial assets at fair value through OCI (FVOCI) - equity instruments

Upon initial recognition, the group can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under AASB 132 Financial Instruments: Presentation and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in the statement of profit or loss when the right of payment has been established, except when the group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, gains are recorded in OCI.

The Group has elected to classify irrevocably its non-listed equity investments under this category.

Financial assets at fair value through profit or loss (FVTPL)

A financial asset is classified as at fair value through profit or loss if it is classified as held for trading or is designated as such upon initial recognition. Financial assets are designated at fair value through profit or loss if the group manages such investments and makes purchase and sale decisions based on their fair value in accordance with the group's documented risk management or investment strategy. Financial assets with cash flows that are not 'solely payments of principal and interest' (SPPI) are classified and measured at fair value through profit or loss, irrespective of the business model.

In assessing whether the contractual cash flows are SPPI, the group considers the contractual terms of the instrument by considering events, terms and prepayment/extension features that could change the timing or amount of contractual cash flows such that it would not meet this condition.

Upon initial recognition attributable transaction costs are recognised in profit and loss when incurred. Financial assets at fair value through profit or loss are measured at fair value, and changes therein are recognised in profit or loss.

Financial assets designated at fair value through profit or loss comprise equity securities.

(ii) Non-derivative financial liabilities

At initial recognition, financial liabilities are classified at FVTPL, loans and borrowings, or payables, as appropriate. All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The group initially recognises debt securities and subordinated liabilities on the date they are originated. All other financial liabilities (including liabilities designated at fair value through profit or loss) are recognised initially on the trade date at which the group becomes a party to the contractual provisions of the instrument.

The group derecognises a financial liability when its contractual obligations are discharged or cancelled or expired. Financial assets and liabilities are offset and the net amount presented in the balance sheet when, and only when, the group has the legal right to offset the amounts and intends to settle on a net basis or to realise the asset and settle the liability simultaneously.

Subsequent to initial recognition these financial liabilities are measured at amortised cost using the effective interest rate method. This includes trade payables that represent liabilities for goods and services provided to the group prior to the end of the year which are unpaid.

The group has the following non-derivative financial liabilities: loans and borrowings, bank overdrafts and trade and other payables.

3. Significant accounting policies (continued)

(c) Financial instruments (continued)

(iii) Share capital

Ordinary shares

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of ordinary shares are recognised as a deduction from equity, net of any related income tax benefit. Dividends on ordinary shares are recognised as a liability in the period in which they are declared.

(iv) Other securities

Sumitomo preference securities

The Sumitomo Preference Securities (SPS) are classified as non-controlling equity instruments as no voting rights have been attached to the SPS. After 24 months the SPS may be exchanged for Nufarm ordinary shares. After-tax distributions thereon are recognised as distributions within equity. Further details can be found in note 29.

Nufarm step-up securities

The Nufarm Step-up Securities (NSS) are classified as non-controlling equity instruments as they are issued by a subsidiary. After-tax distributions thereon are recognised as distributions within equity. Further details can be found in note 29.

(v) Derivative financial instruments, including hedge accounting

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months; it is classified as a current asset or liability when the remaining maturity of the hedged item is less than 12 months. Trading derivatives are classified as a current asset or liability.

The group designates certain derivatives as either:

- hedges of the fair value of recognised assets or liabilities or a firm commitment (fair value hedges)
- hedges of a particular risk associated with the cash flows of recognised assets and liabilities and highly
 probable forecast transactions (cash flow hedges); or
- hedges of a net investment in a foreign operation (net investment hedges).

The group documents at the inception of the hedging transaction the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions.

Before 1 August 2018, the documentation includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the Group will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Beginning 1 August 2018, the documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- There is an economic relationship' between the hedged item and the hedging instrument.
- The effect of credit risk does not 'dominate the value changes' that result from that economic relationship.
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

Notes to the Consolidated Financial Statements (continued)

3. Significant accounting policies (continued)

(c) Financial instruments (continued)

(v) Derivative financial instruments, including hedge accounting (continued)

Hedges that meet all the qualifying criteria for hedge accounting are accounted for, as described below:

Fair value hedge

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in profit or loss, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The gain or loss relating to the effective portion of interest rate swaps hedging fixed rate borrowings is recognised in profit or loss within finance costs, together with changes in the fair value of the hedged fixed rate borrowings attributable to interest rate risk. The gain or loss relating to the gain or loss relating to the ineffective portion is recognised in profit or loss within finance costs. The gain or loss relating to the ineffective portion is recognised in profit or loss within other expenses.

If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest method is used is amortised to profit or loss over the period to maturity using a recalculated effective interest rate.

Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated in reserves in equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss within other income or other expense.

Amounts accumulated in equity are reclassified to profit or loss in the periods when the hedged item affects profit or loss (for instance when the forecast sale that is hedged takes place). The gain or loss relating to the effective portion of interest rate swaps hedging variable rate borrowings is recognised in profit or loss within 'finance costs'. The gain or loss relating to the effective portion of forward foreign exchange contracts hedging export sales is recognised in profit or loss within 'sales'. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset (for example, inventory or fixed assets) the gains and losses previously deferred in equity are reclassified from equity and included in the initial measurement of the cost of the asset. The deferred amounts are ultimately recognised in profit or loss as cost of goods sold in the case of inventory, or as depreciation or impairment in the case of fixed assets.

When a hedging instrument expires or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in profit or loss. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately reclassified to profit or loss.

Net investment hedge

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges.

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and accumulated in reserves in equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss within other income or other expenses.

Gains and losses accumulated in equity are reclassified to profit or loss when the foreign operation is partially disposed of or sold.

Derivatives that do not qualify for hedge accounting

Certain derivative instruments do not qualify for hedge accounting. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognised immediately in profit or loss.

(d) Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and impairment losses.

3. Significant accounting policies (continued)

(d) Property, plant and equipment (continued)

(i) Recognition and measurement (continued)

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to a working condition for its intended use, and the costs of dismantling and removing the items and restoring the site on which they are located, and capitalised borrowing costs. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment and are recognised net in profit or loss.

(ii) Subsequent costs

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the group and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

(iii) Depreciation

Depreciation is calculated over the depreciable amount, which is the cost of an asset, less its residual value. Depreciation is recognised in profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. Leased assets are depreciated over the shorter of the lease term and their useful lives, unless it is reasonably certain that the group will obtain ownership by the end of the lease term. Land is not depreciated.

The estimated useful lives for the current and comparative periods are as follows:

- buildings 15-50 years
- leasehold improvements 5 years
- plant and equipment
 10-15 years
- motor vehicles 5 years
- computer equipment 3 years

Depreciation methods, useful lives and residual values are reassessed at each reporting date.

(e) Intangible assets

(i) Goodwill

Goodwill that arises upon the acquisition of business combinations is included in intangible assets. Subsequent to initial recognition, goodwill is measured at cost less accumulated impairment losses. In respect of equity accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment, and an impairment loss on such an investment is not allocated to any asset, including goodwill, that forms part of the carrying amount of the equity accounted interving amount of the equity accounted investee.

(ii) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in profit or loss when incurred.

3. Significant accounting policies (continued)

(e) Intangible assets (continued)

(ii) Research and development (continued)

Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditure is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable and the group has sufficient resources to complete development and to use or sell the asset. The expenditure capitalised includes the cost of materials, direct labour and overhead costs that are directly attributable to preparing the asset for its intended use and capitalised borrowing costs. Development expenditure that does not meet the above criteria is recognised in profit or loss as incurred.

Capitalised development expenditure is measured at cost less accumulated amortisation and accumulated impairment losses.

(iii) Intellectual property

Intellectual property consists of product registrations, product access rights, trademarks, task force seats, product distribution rights and product licences acquired from third parties. Intellectual property is assessed as to whether it has a finite or indefinite life. Finite life intellectual property is amortised over its useful life but not longer than 30 years. Intellectual property intangibles acquired by the group are measured at cost less accumulated amortisation and impairment losses. Expenditure on internally generated goodwill and brands is expensed when incurred.

(iv) Other intangible assets

Other intangible assets that are acquired by the group, which have finite useful lives, are measured at cost less accumulated amortisation and accumulated impairment losses.

(v) Subsequent expenditure

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is recognised in profit or loss when incurred.

(vi) Amortisation

Amortisation is calculated over the cost of the asset, less its residual value. With the exception of goodwill, intangibles with a finite life are amortised on a straight-line basis in profit and loss over the estimated useful lives of the intangible assets from the date that they are available for use, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. The estimated useful life for intangible assets with a finite life, for the current and comparative periods, are as follows:

- capitalised development costs 5 to 30 years
- intellectual property finite life over the useful life and not more than 30 years
- computer software 3 to 7 years

Amortisation methods, useful lives and residual values are reassessed at each reporting date.

(f) Leases

Operating leases are not capitalised and payments made are recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognised as an integral part of the total lease expense, over the term of the lease.

Assets held under lease, which result in the group receiving substantially all the risks and rewards of ownership are capitalised as property, plant and equipment at the lower of the fair value of the asset or the estimated present value of the minimum lease payments, with a corresponding lease liability included within loans and borrowings.

Minimum lease payments made under finance leases are apportioned between the finance expense and the reduction of the outstanding liability. The finance expense is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability. Contingent lease payments are accounted for by revising the minimum lease payments over the remaining term of the lease when the lease adjustment is confirmed.

3. Significant accounting policies (continued)

(g) Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is based on the first-in first-out principle and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of overheads based on normal operating capacity.

Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

(h) Impairment

(i) Non-derivative financial assets

The group recognises an allowance for expected credit losses (ECLs) for all financial assets at amortised cost and debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

For trade receivables, the group applies a simplified approach in calculating ECLs. Therefore, the group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

The group considers a financial asset to be in default when contractual payments are 90 days past due. However, in certain cases, the group may also consider a financial asset to be in default when internal or external information indicates that the group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Objective evidence of impairment includes default or delinquency by a debtor, indications that a debtor will enter bankruptcy, and, in the case of an investment in an equity security, a significant or prolonged decline in its fair value.

Loss Allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets. For debt securities at FVOCI, the loss allowance is charged to profit or loss and is recorded in OCI.

(ii) Non-financial assets

The carrying amounts of the group's non-financial assets, other than inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. For goodwill and intangible assets that have indefinite lives or that are not yet available for use, the recoverable amount is estimated at each reporting date.

The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs of disposal. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit"). The goodwill acquired in a business combination, for the purpose of impairment testing, units that are expected to benefit from the synergies of the combination.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its estimated recoverable amount. Impairment losses are recognised in profit or loss. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the units and then to reduce the carrying amount of other assets in the unit on a pro-rata basis.

3. Significant accounting policies (continued)

(h) Impairment (continued)

(ii) Non-financial assets (continued)

An impairment loss in respect of goodwill is not reversed. In respect of other assets, impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Goodwill that forms part of the carrying amount of an investment in an associate or joint venture is not recognised separately, and therefore is not tested for impairment separately. Instead, the entire amount of the investment in an associate or joint venture is tested for impairment as a single asset when there is objective evidence that the investment in an associate or joint venture may be impaired.

Refer to use of estimates and judgements note 2 and intangibles note 23 for further information.

(i) Assets held for sale

Assets, or disposal groups comprising assets and liabilities, that are expected to be recovered primarily through sale rather than continuing use are classified as held for sale. Immediately before classification as held for sale, the assets, or components of a disposal group, are remeasured in accordance with the group's accounting policies. Thereafter generally the assets, or disposal group, are measured at the lower of their carrying amount and fair value less costs to sell. Any impairment loss on a disposal group is allocated first to goodwill, and then to the remaining assets and liabilities on a pro rata basis, except that no loss is allocated to inventories, financial assets, deferred tax assets and employee benefit assets, which continue to be measured in accordance with the group's accounting policies.

Impairment losses on initial classification as held for sale and subsequent gains or losses on remeasurement are recognised in profit or loss. Gains are not recognised in excess of any cumulative impairment loss.

Intangible assets and property, plant and equipment once classified as held for sale or distribution are not amortised or depreciated. In addition, equity accounting of equity accounted investees ceases once classified as held for sale or distribution.

(j) Employee benefits

(i) Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognised as an employee benefit expense in profit or loss in the periods during which services are rendered by employees. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in future payments is available.

(ii) Defined benefit plans

The group's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any assets.

The calculation of defined benefit obligation is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the group, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value economic benefits, consideration is given to any applicable minimum funding requirements.

3. Significant accounting policies (continued)

(j) Employee benefits (continued)

(ii) Defined benefit plans (continued)

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan asset (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognised immediately in other comprehensive income (OCI). The group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit and loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

(iii) Other long-term employee benefits

The group's net obligation in respect of long-term employee benefits, other than defined benefit plans, is the amount of future benefit that employees have earned in return for their service in the current and prior periods plus related on-costs; that benefit is discounted to determine its present value, and the fair value of any related assets is deducted. The discount rate is the yield at the reporting date on corporate bonds that have maturity dates approximating the terms of the group's obligations. The calculation is performed using the projected unit credit method. Any actuarial gains or losses are recognised in profit or loss in the period in which they arise.

(iv) Termination benefits

Termination benefits are recognised as an expense when the group is demonstrably committed, without a realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before the normal retirement date, or to provide termination benefits as a result of an offer made to encourage voluntary redundancy. Termination benefits for voluntary redundancies are recognised as an expense if the group has made an offer encouraging voluntary redundancy, it is probable that the offer will be accepted and the number of acceptances can be estimated reliably. If benefits are payable more than twelve months after the reporting period, then they are discounted to their present value.

(v) Short-term benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(vi) Share-based payment transactions

The group has a global share plan for employees whereby matching and loyalty shares are granted to employees. The fair value of matching and loyalty shares granted is recognised as an expense in the profit or loss over the respective service period, with a corresponding increase in equity, rather than as the matching and loyalty shares to note 27 for details of the global share plan.

The group has a short term incentive plan (STI) available to key executives, senior managers and other managers globally. A pre-determined percentage of the STI is paid in cash with the remainder deferred into shares which have either a one or two year vesting period. The cash portion is recognised immediately as an expense at the time of performance testing. The expense relating to deferred shares is expensed over the vesting period. Refer to note 27 for further details on this plan.

The group has a long term incentive plan (LTIP) which is available to key executives and certain selected senior managers. Performance rights have been granted to acquire ordinary shares in the company subject to the achievement of global performance hurdles. The expense in relation to the LTIP is recognised over the vesting period of 3 years. Refer to note 27 for further details on this plan.

3. Significant accounting policies (continued)

(k) **Provisions**

A provision is recognised if, as a result of a past event, the group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as a finance cost.

A provision for restructuring is recognised when the group has approved a detailed and formal restructuring plan, and the restructuring either has commenced or has been announced publicly. Future operating losses are not provided for.

(I) Revenue from contracts with customers

The group has initially applied AASB 15 from 1 August 2018. The effect of initial application is described in Note 3.

Revenue from contracts with customers is recognised when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. The Group has generally concluded that it is the principal in its revenue arrangements, because it typically controls the goods or services before transferring them to the customer.

The disclosures of significant accounting judgements, estimates and assumptions relating to revenue from contracts with customers are provided in Note 3.

(i) Goods sold

Prior to 1 August 2018

Revenue from the sale of goods is measured at the fair value of the consideration received or receivable, net of returns, trade discounts and volume rebates. Revenue is recognised when persuasive evidence of an arrangement exists, usually in the form of an executed sales agreement, that the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable, the associated costs and possible return of goods can be estimated reliably, there is no continuing management involvement with the goods and the amount of revenue can be measured reliably. If it is probable that discounts will be granted and the amount can be measured reliably, then the discount is recognised as a reduction of revenue as the sales are recognised.

After 1 August 2018

Revenue from sale of goods is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the goods. The Group considers whether there are other promises in the contract that are separate performance obligations to which a portion of the transaction price needs to be allocated. In determining the transaction price for the sale of goods, the group considers the effects of variable consideration, the existence of significant financing components, non-cash consideration, and consideration payable to the customer (if any).

ii) Variable consideration

If the consideration in a contract includes a variable amount, the group estimates the amount of consideration to which it will be entitled in exchange for transferring the goods to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved. Some contracts for the sale of certain products provide customers with a right of return and volume rebates. The rights of return and volume rebates give rise to variable consideration.

Rights of return

Certain contracts provide a customer with a right to return the goods within a specified period. The group uses the expected value method, including applying any constraints, to determine variable consideration to which the group will be entitled. For goods that are expected to be returned, instead of revenue, the group recognises a refund liability. A right of return asset (and corresponding adjustment to cost of sales) is also recognised for the right to recover products from a customer.

3. Significant accounting policies (continued)

(I) Revenue from contracts with customers (continued)

ii) Variable consideration (continued)

Rebates and sales incentives

The group provides rebates and sales incentives to certain customers once thresholds specified in the contract are met or exceeded. Rebates are offset against amounts payable by the customer. To estimate the variable consideration for the expected future rebates, the group applies the requirements on constraining estimates of variable consideration and recognises a refund liability for the expected future rebates.

iii) End point royalties

The group receives royalty revenue from growers for certain varieties of seed. Before 1 August 2018, royalty revenue was estimated and accrued at the point the seed was sold. After 1 August 2018, sales or usage based royalties are recognised as revenue at the later of when the sales or usage occurs and the performance obligation is satisfied, which would be when the harvest occurs and the royalty is paid.

iv) Significant financing components

The group may receive short-term advances from its customers. Using the practical expedient in AASB 15, the Group does not adjust the promised amount of consideration for the effects of a significant financing component as it is expected, at contract inception, that the period between the transfer of the good and when the customer pays for that good will be one year or less.

(m) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with original maturities of three months or less. Bank overdrafts that are repayable on demand and form an integral part of the group's cash management are included as a component of cash and cash equivalents for the purposes of the statement of cash flows.

(n) Finance income and finance costs

The group's finance income and finance costs include the following: interest income, interest expense, dividends on preference shares issued classified as financial liabilities, financial assets, the net gain or loss on financial assets at fair value through profit or loss, the foreign currency gain or loss on financial assets and financial liabilities, the gain on the remeasurement to fair value of any pre-existing interest in an acquiree in a business combination, the fair value loss on contingent consideration classified as a financial liability, impairment losses recognised on financial assets (other than trade receivables), the net gain or loss on hedging instruments that are recognised in profit or loss, and the reclassification of net gains previously recognised in other comprehensive income.

Interest income or expense is recognised using the effective interest method.

Finance costs are expensed as incurred except where they relate to the financing of construction or development of qualifying assets.

(o) Income tax

Income tax expense comprises current and deferred tax. Current and deferred taxes are recognised in profit or loss except to the extent that it relates to a business combination, or items recognised directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

3. Significant accounting policies (continued)

(o) Income tax (continued)

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss, and differences relating to investments in subsidiaries and jointly controlled entities to the extent that they will probably not reverse in the foreseeable future. In addition, deferred tax is not recognised for taxable temporary differences arising on the initial recognition of goodwill. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Additional income taxes that arise from the distribution of cash dividends are recognised at the same time as the liability to pay the related dividend is recognised. The group does not distribute non-cash assets as dividends to its shareholders.

(i) Tax consolidation

The company and its wholly-owned Australian resident entities are part of a tax-consolidated group. As a consequence, all members of the tax-consolidated group are taxed as a single entity. The head entity within the tax-consolidated group is Nufarm Limited.

Current tax expense/benefit, deferred tax liabilities and deferred tax assets arising from temporary differences of the members of the tax-consolidated group are recognised in the separate financial statements of the members of the tax-consolidated group using the 'separate taxpayer within group' approach by reference to the carrying amounts of assets and liabilities in the separate financial statements of each entity and the tax values applying under tax consolidation.

Any current tax liabilities (or assets) and deferred tax assets arising from unused tax losses of the subsidiaries are assumed by the head entity in the tax-consolidated group and are recognised by the company as amounts payable/(receivable) to/(from) other entities in the tax-consolidated group in conjunction with any tax funding arrangement (refer below). Any difference between these amounts is recognised by the company as an equity contribution amounts or distribution.

The company recognises deferred tax assets arising from unused tax losses of the tax-consolidated group to the extent that it is probable that future taxable profits of the tax-consolidated group will be available against which the asset can be utilised.

Any subsequent period adjustments to deferred tax assets arising from unused tax losses as a result of revised assessments of the probability of recoverability is recognised by the head entity only.

(ii) Nature of tax funding arrangements and tax sharing agreements

The head entity, in conjunction with other members of the tax-consolidated group, has entered into a tax funding arrangement which sets out the funding obligations of members of the tax-consolidated group in respect of tax amounts. The tax funding arrangements require payments to/from the head entity equal to the current tax liability/ (asset) assumed by the head entity and any tax-loss deferred tax asset assumed by the head entity, resulting in the head entity receivable/(payable) equal in amount to the tax liability/(asset) assumed. The inter-entity receivables/(payables) are at call.

3. Significant accounting policies (continued)

(o) Income tax (continued)

(ii) Nature of tax funding arrangements and tax sharing agreements (continued)

Contributions to fund the current tax liabilities are payable as per the tax funding arrangement and reflect the timing of the head entity's obligation to make payments for tax liabilities to the relevant tax authorities.

The head entity, in conjunction with other members of the tax-consolidated group, has also entered a tax sharing agreement. The tax sharing agreement provides for the determination of the allocation of the income tax liabilities between the entities should the head entity default on its tax payment obligations. No amounts have been recognised in the consolidated financial statements in respect of this agreement as payment of any amounts under the tax sharing agreement is considered remote.

(p) Goods and services tax

Revenue, expenses and assets are recognised net of the amount of goods and services tax (GST or equivalent), except where the GST incurred is not recoverable from the taxation authority. In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated with the amount of GST included. The net amount of GST recoverable from, or payable to, the tax authority is included as a current asset or liability in the balance sheet.

Cash flows are included in the statement of cash flows on a gross basis. The GST components of cash flows arising from investing and financing activities which are recoverable from, or payable to, the relevant tax authorities are classified as operating cash flows.

(q) Earnings per share

The group presents basic and diluted earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the company by the weighted average number of ordinary shares outstanding during the period. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding for the effects of all potential dilutive ordinary shares, which comprise convertible notes and share options granted to employees.

(r) Segment reporting

Determination and presentation of operating segments

An operating segment is a component of the group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the group's other components. All operating segments' results are reviewed regularly by the group's Chief Executive Officer (CEO) to make decisions about resources to be allocated to the segment and to assess its performance.

Segment results that are reported to the CEO include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly loans and borrowings and related expenses, corporate assets and head office expenses, and income tax assets and liabilities.

Segment capital expenditure is the total cost incurred during the period to acquire property, plant and equipment and intangible assets other than goodwill.

4. Determination of fair values

Fair values have been determined for measurement and/or disclosure purposes based on the following methods. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

(i) Property, plant and equipment

The fair value of property, plant and equipment recognised as a result of a business combination is based on market values. The market value of property is the estimated amount for which a property could be exchanged on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, and willingly. The market value of items of plant, equipment, fixtures and fittings is based on the market approach and cost approaches quoted market prices for similar items when available and replacement cost when appropriate.

(ii) Intangibles assets

The fair value of patents and trademarks acquired in a business combination is based on the discounted estimated royalty payments that have been avoided as a result of the patent or trademark being owned. The fair value of other intangible assets is based on the discounted cash flows expected to be derived from the use and eventual sale of the assets.

(iii) Inventories

The fair value of inventories acquired in a business combination is determined based on its estimated selling price in the ordinary course of business less the estimated costs of completion and sale, and a reasonable profit margin based on effort required to complete and sell the inventories.

(iv) Trade and other receivables

The fair value of trade and other receivables is estimated as the present value of future cash flows, discounted at the market rate of interest at the reporting date. This fair value is determined for disclosure purposes.

(v) Derivatives

The fair value of forward exchange contracts is based on their listed market price, if available. If a listed market price is not available, then fair value is estimated by discounting the difference between the contractual forward price and the current forward price for the residual maturity of the contract using a risk-free interest rate (based on Government bonds). The fair value of interest rate swaps is based on broker quotes. Those quotes are tested for reasonableness by future cash flows based on the terms and maturity of each contract and using market interest rates for a similar instrument at the measurement date.

(vi) Non-derivative financial liabilities

Fair value, which is determined for disclosure purposes, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the reporting date. For finance leases, the market rate of interest is determined by reference to similar lease agreements.

(vii) Share-based payment transactions

The fair value of the performance rights issued under the Nufarm Long Term Incentive Plan have been measured using Monte Carlo Simulation and the Binomial Tree. The fair value of the deferred shares granted to participants under the Nufarm Short Term Incentive will be measured using the volume weighted average price for the five day period subsequent to year end results announcement. Measurement inputs include the share price on the measurement date, the exercise price of the instrument, expected volatility, expected term of the instruments, dividends, and the risk-free rate (based on Government bonds).

5. Operating segments

Segment information is presented in respect of the group's key operating segments. The operating segments are based on the group's management and internal reporting structure.

Operating segments

The group operates predominantly along two business lines, being crop protection and seed technologies.

The crop protection business deals in the manufacture and sale of crop protection products used by farmers to protect crops from damage caused by weeds, pests and disease. It is managed by major geographic segments, being Australia and New Zealand, Asia, Europe, North America and South America. The North America region includes Canada and USA. The Latin America region (previously known as South America) includes Brazil, Argentina, Chile, Uruguay, Paraguay, Bolivia, Colombia, the Andean countries, Mexico and the Central American countries.

The seed technologies business deals in the sale of seeds and seed treatment products. The seed technologies business is managed on a worldwide basis.

Information regarding the results of each operating segment is included below. Performance is measured based on underlying EBIT, as defined on following page, as included in the internal management reports that are reviewed by the group's CEO. Underlying EBIT is used to measure performance as management believes that such information is the most relevant in evaluating the results of each segment. Segment revenue is based on the geographic location of customers. Segment results include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. The non-operating corporate segment comprises mainly corporate expenses, interest-bearing loans, borrowings and corporate assets.

5. Operating segments (continued)

		с	rop Protectic	on		Тес	Seed hnologies	Non- Operating Corporate	Group
2019 Operating Segments	Australia and New Zealand \$000	Asia \$000	Europe \$000	North America \$000	Latin America \$000	Total \$000	Global \$000	\$000	Total \$000
Revenue									
Total segment revenue	452,368	190,285	814,845	1,020,448	1,058,158	3,536,104	221,486	-	3,757,590
Results									
Underlying EBITDA(a)	20,685	26,979	167,608	107,762	97,276	420,310	50,736	(50,753)	420,293
Depreciation & amortisation excluding material items	(12,537)	(3,251)	(107,720)	(25,004)	(6,897)	(155,409)	(14,153)	(2,146)	(171,708)
Underlying EBIT ^(a)	8,148	23,728	59,888	82,758	90,379	264,901	36,583	(52,899)	248,585
Material items inclu	ded in ope	rating profi	t (refer note	6)					(50,770)
Material items inclu	ded in net f	inancing co	osts (refer no	ote 6)					_
Total material items	(refer note	6)							(50,770)
Net financing costs	excluding	material ite	ems)						(116,866)
Profit/(loss) befor	e tax								80,949
Assets									
Segment assets	455,942	105,280	1,873,952	912,105	997,737	4,345,016	488,719	840,775	5,674,510
Equity accounted investments	-	1,559	-	-	-	1,559	451	-	2,010
Total assets	455,942	106,839	1,873,952	912,105	997,737	4,346,575	489,170	840,775	5,676,520
Liabilities									
Segment liabilities	124,353	330,084	346,254	240,715	284,393	1,325,799	52,842	1,892,935	3,271,576
Total liabilities	124,353	330,084	346,254	240,715	284,393	1,325,799	52,842	1,892,935	3,271,576
Other segment in	formation								
Capital expenditure	18,601	1,582	60,499	57,134	7,729	145,545	44,864	_	190,409

(a) Underlying EBIT is earnings before net finance costs, taxation and material items. Underlying EBITDA is Underlying EBIT, before depreciation, amortisation and impairments.

5. Operating segments (continued)

		с	rop Protectio	n		Tec	Seed hnologies	Non- Operating Corporate	Group
2018 Operating Segments	Australia and New Zealand \$000	Asia \$000	Europe \$000	North America \$000	Latin America \$000	Total \$000	Global \$000	\$000	Total \$000
Revenue									
Total segment revenue	590,151	170,680	642,571	833,705	885,232	3,122,339	185,508	-	3,307,847
Results									
Underlying EBITDA(a)	23,736	25,229	149,873	99,487	97,377	395,702	43,580	(53,629)	385,653
Depreciation & amortisation excluding material items	(14,500)	(3,049)	(63,423)	(22,036)	(6,604)	(109,612)	(9,269)	(1,669)	(120,550)
Underlying EBIT ^(a)	9,236	22,180	86,450	77,451	90,773	286,090	34,311	(55,298)	265,103
Material items inclu	ded in oper	ating profit	(refer note 6)					(89,604)
Material items inclu	ded in net fir	nancing co	sts (refer not	e 6)					(17,272)
Total material items	(refer note 6	5)							(106,876)
Net financing costs	(excluding r	material ite	ms)						(118,334)
Profit/(loss) before	e tax								39,893
Assets									
Segment assets	703,337	106,143	1,757,588	666,249	866,038	4,099,355	427,712	523,889	5,050,956
Equity accounted investments	_	_	_	_	_	_	411	_	411
Total assets	703,337	106,143	1,757,588	666,249	866,038	4,099,355	428,123	523,889	5,051,367
Liabilities									
Segment liabilities	239,835	281,043	304,458	203,173	209,598	1,238,107	34,745	1,806,891	3,079,743
Total liabilities	239,835	281,043	304,458	203,173	209,598	1,238,107	34,745	1,806,891	3,079,743
Other segment in	formation								
Capital expenditure	55,906	1,296	814,587	12,574	13,128	897,491	43,662	_	941,153

(a) Underlying EBIT is earnings before net finance costs, taxation and material items. Underlying EBITDA is Underlying EBIT, before depreciation, amortisation and impairments.

5. Operating segments (continued)

		Revenue
Geographical information – revenue by location of customer	2019 \$000	2018 \$000
Brazil	960,923	799,094
United States of America	903,387	722,452
Australia	407,103	559,540
Rest of world ^(b)	1,486,177	1,226,761
Total	3,757,590	3,307,847

(b) Other than Australia, United States of America and Brazil, sales to other countries are individually less than 10% of the group's total revenues.

	Non-	current assets
Geographical information – non-current assets by location of asset	2019 \$000	2018 \$000
Germany	721,971	739,688
United States of America	413,362	353,767
United Kingdom	298,133	301,914
Brazil	280,589	275,002
Australia	277,243	256,585
Rest of world ^(c)	226,239	209,496
Unallocated ^(d)	212,484	202,293
Total	2,430,021	2,338,745

(c) Other than Germany, Australia, United States of America, Brazil and United Kingdom, non-current assets held in other countries are individually less than 10% of the group's total non-current assets.

(d) Unallocated non-current assets predominately include deferred tax assets.

6. Individually material income and expense items

Individually material items are those items where their nature, including the expected frequency of the events giving rise to them, and/or amount is considered material to the financial statements. Such items included within the group's profit for the year are detailed below.

	Consolidated		c	onsolidated
	2019 \$000	2019 \$000	2018 \$000	2018 \$000
	Pre-tax	After-tax	Pre-tax	After-tax
Material items by category:				
Legal costs	(10,517)	(10,517)	_	_
Idle plant capacity	(21,386)	(21,386)	_	-
Asset rationalisation and restructuring	(18,867)	(18,867)	1,491	1,201
ANZ impairment and tax asset write-down	_	_	(70,559)	(91,504)
Business acquisition costs – other	_	_	(24,124)	(22,228)
Business acquisition costs – refinance 2019 notes	_	_	(13,684)	(13,684)
Change in corporate tax rates	-	_	_	12,231
Total	(50,770)	(50,770)	(106,876)	(113,984)

6. Individually material income and expense items (continued)

2019 Material Items

Legal costs

During the year ended 31 July 2019, the group has incurred legal costs associated with the enforcement of Omega-3 canola trademark and patent matters.

Idle plant capacity

Drought conditions in Australia have continued through 2019 impacting the ANZ business and has resulted in a reduction to production activity and temporary closure of all formulation lines at the Laverton manufacturing plant giving rise to idle capacity charges.

Asset rationalisation and restructuring

A performance and improvement program has commenced in the ANZ and European businesses across all functions. This includes organisational restructuring and the assessment and closure of certain under-utilised facilities.

2018 Material Items

Asset rationalisation and restructuring

During the year ended 31 July 2018, the group undertook rationalisation and restructuring activities including the sale of a former manufacturing site located in NZ and the reorganisation of certain back office activities.

ANZ Impairment and tax asset write-down

Prolonged and severe drought conditions across Australia reduced current expectations of future earnings whereby a non-cash impairment of intangibles (refer note 22), property, plant and equipment (refer note 21), and tax assets amounting to \$91.504 million was incurred in the year ended 31 July 2018.

Business acquisition costs

During the year the group acquired two separate European businesses consisting of product portfolios based in Europe (refer to note 14 for further details). One-off transaction costs incurred to effect the acquisitions include, but are not limited to, advisor fees, integration costs, hedging costs, and other financing expenses.

Business acquisition costs – refinance of 2019 notes

In response to the 2018 business acquisitions, the group undertook an early refinance of the 2019 senior secured notes to strengthen its capital structure. As a result, break fees and the early recognition of interest costs in relation to interest rate swaps were incurred. The cash impact of the refinance of the 2019 Notes was a cash outflow of \$0.300 million due to favourable cashflow outcomes on cash flow hedges offsetting break fees and interest costs on interest rate swaps.

Change in corporate tax rates

Changes in corporate tax rates across the USA, France and Argentina led to the re-measurement of the group's deferred tax position resulting in net income tax credits of \$12.231 million.

6. Individually material income and expense items (continued)

Material items are classified by function as follows:

Year ended 31 July 2019 (\$'000s)	Cost of sales	Selling, marketing and distribution expense	General & admin- istrative expense	Net financing costs	Total pre-tax
Legal costs	-	-	(10,517)	-	(10,517)
Idle plant capacity	(21,386)	-	_	-	(21,386)
Asset rationalisation and restructuring	-	(2,517)	(16,350)	-	(18,867)
Total material items	(21,386)	(2,517)	(26,867)	_	(50,770)
Total material items included in operating profit	(21,386)	(2,517)	(26,867)	-	(50,770)

Year ended 31 July 2018 (\$'000s)	Cost of sales	Selling, marketing and distribution expense	General & admin- istrative expense	Net financing costs	Total pre-tax
Asset rationalisation and restructuring	_	(509)	2,000	_	1,491
ANZ impairment and tax asset write-down	_	_	(70,559)	_	(70,559)
Business acquisition costs	_	_	(20,536)	(3,588)	(24,124)
Business acquisition costs – refinance 2019 notes	_	-	_	(13,684)	(13,684)
Total material items	_	(509)	(89,095)	(17,272)	(106,876)
Total material items included in operating profit	_	(509)	(89,095)	_	(89,604)

Material items impacting cash flows is as follows:

	(Consolidated
	2019 \$000	2018 \$000
Net operating cash flows	98,131	(88,169)
Net operating cash (inflows)/outflows arising on material items	40,318	31,462
Net cash from operating activities excluding material items	138,449	(56,707)
Net investing cash flows	(173,980)	(965,574)
Individually material (inflows)/outflows from sale of property, plant and equipment	-	(5,351)
Individually material (inflows)/outflows form the sale/purchase of businesses and investments	-	778,859
Net cash from investing activities excluding material items	(173,980)	(192,066)

7. Other income

		Consolidated
	2019 \$000	2018 \$000
Dividend income	47	_
Rental income	287	271
Sundry income	10,127	6,985
Total other income	10,461	7,256

8. Other expenses

The following expenses were included in the period result:

		Consolidated
	2019 \$000	2018 \$000
Depreciation and amortisation	(171,708)	(120,550)
Impairment loss	_	(70,559)
Inventory write down	(12,640)	(15,310)
Minimum lease payments recognised as an operating lease expense	(6,987)	(4,671)

9. Personnel expenses

		Consolidated
	2019 \$000	2018 \$000
Wages and salaries	(301,848)	(303,004)
Other associated personnel expenses	(52,131)	(50,057)
Contributions to defined contribution superannuation funds	(22,689)	(24,045)
(Expense)/gain related to defined benefit superannuation funds	(4,505)	(2,113)
Short-term employee benefits	(9,616)	(10,582)
Other long-term employee benefits	(3,368)	(3,004)
Restructuring	(8,234)	(2,681)
Personnel expenses	(402,391)	(395,486)

The Restructuring expense relates to the group's asset rationalisation and organisational restructure program. These costs are included in material items in note 6.

10. Finance income and expense

		Consolidated
	2019 \$000	2018 \$000
Other financial income	10,051	10,978
Financial income	10,051	10,978
Interest expense – external	(110,608)	(109,933)
Interest expense – debt establishment transaction costs	(4,634)	(6,719)
Lease amortisation – finance charges	(2,051)	(1,986)
Net foreign exchange gains/(losses)	(9,624)	(27,946)
Financial expenses	(126,917)	(146,584)
Net financing costs	(116,866)	(135,606)

11. Income tax expense

	Consolidate	
	2019 \$000	2018 \$000
Recognised in the income statement		
Current tax expense		
Current period	32,528	15,191
Tax free income and non-recognition of tax assets on material items	15,262	30,583
Adjustments for prior periods	(3,399)	(538)
Current tax expense	44,391	45,236
Deferred tax expense		
Origination and reversal of temporary differences and tax losses	(11,905)	(3,326)
Effect of changes in tax rates – material items	-	(12,231)
Effect of changes in tax rates	83	-
(Recognition)/derecognition of tax assets	10,070	5,276
ANZ tax asset write-down – material items	_	20,945
Deferred tax expense/(benefit)	(1,752)	10,664
Total income tax expense/(benefit) in income statement	42,639	55,900
Attributable to:		
Continuing operations	42,639	55,900
Total income tax expense/(benefit) in income statement	42,639	55,900
Numerical reconciliation between tax expense and pre-tax net profit		
Profit/(Loss) before tax	80,949	39,893
Income tax using the Australian corporate tax rate of 30%	24,285	11,968
Increase/(decrease) in income tax expense due to:		
Non-deductible expenses	9,096	7,085
Other taxable income	3,497	2,428
Effect of changes in tax rates-material items	_	(12,231)
Effect of changes in tax rates	83	
Initial (recognition)/derecognition of tax assets	10,070	5,276
ANZ tax asset write-down-material items	_	20,945
Tax free income and non-recognition of tax assets on material items	15,262	30,583
Effect of tax rate in foreign jurisdictions	(6,167)	(4,109)
Tax exempt income	(3,441)	(242)
Tax incentives not recognised in the income statement	(6,647)	(5,265)
	46,038	56,438
Under/(over) provided in prior years	(3,399)	(538)
Income tax expense/(benefit)	42,639	55,900
Income tax recognised directly in equity		
Nufarm step-up securities distribution	(4,205)	(3,877)
Income tax recognised directly in equity	(4,205)	(3,877)
Income tax recognised in other comprehensive income		
Relating to actuarial gains/(losses) on defined benefit plans	(1,615)	917
Relating to equity based compensation	_	587
Income tax recognised in other comprehensive income	(1,615)	1,504
	(1,010)	1,00-

12. Discontinued operations

There were no discontinued operations in the current or prior period.

13. Preference securities receivable

	C	onsolidated
	2019 \$000	2018 \$000
Preference securities receivable	97,500	_
Total preference securities receivable	97,500	_

On 31 July 2019, the group undertook the placement of \$97.5 million of preference securities to existing shareholder and strategic business partner, Sumitomo Chemical Company Limited (Sumitomo), through a wholly owned subsidiary (Nufarm Investment Pty Ltd). The settlement of the cashflow in relation to the placement of the preference securities occurred on 2 August 2019.

14. Acquisition of businesses and acquisition of non-controlling interests

Business acquisitions – 2019

There were no acquisitions in the current period.

Business acquisitions – 2018

Century and FMC acquisition

On 24 October 2017, the group announced that it had entered into an agreement with Adama Agricultural Solutions Ltd ("Adama") and Syngenta Crop Protection AG and related group companies ("Syngenta") to purchase a European business comprising of a portfolio of crop protection products registered in European markets ("Century Acquisition"). Subsequently, the group announced an issuance of 59,551,672 ordinary shares which generated \$436.870 million of additional share capital (net of costs). The cash consideration paid was US\$490 million, plus inventory of \$21.843 million.

On 8 November 2017, the group announced that it had entered into an agreement with FMC Corporation ("FMC") to purchase a European business comprising of a portfolio of herbicide products registered in European markets ("FMC Acquisition"). The cash consideration paid was US\$85 million, plus inventory of \$2.871 million.

On 1 February 2018 the FMC Acquisition was closed with the successful transfer of registration data and cash consideration in accordance with the transaction agreements. Related derivative contracts were utilised or closed as part of the acquisition completion.

On 16 March 2018, European regulatory approval was obtained in relation to the Century Acquisition. On 16 March 2018 the Century Acquisition was effectively closed with the successful transfer of registration data and cash consideration in accordance with the transaction agreements. Derivative contracts related to the Century Acquisition were utilised or closed as part of the acquisition completion, this included the derivative not designated for hedge accounting, which resulted in a realised loss for the group of \$1.807 million in net financing costs.

One-off transaction costs incurred to effect the acquisitions include, but are not limited to, advisor fees, integration costs, hedging costs, and other financing expenses. These one-off costs totalled \$22.228 million net of tax (refer to note 6) for the year ended 31 July 2018.

The acquisition of the these businesses increases the group's product portfolio offering within the European region. The business expects to extract revenue synergies from the acquisitions via opening up the existing business to new customers and cross selling opportunities.

14. Acquisition of businesses and acquisition of non-controlling interests

(continued)

Business acquisitions - 2018 (continued)

Identifiable assets acquired and liabilities assumed

The following table summarises the assets acquired and liabilities assumed at the date of acquisition.

	FMC Acquisition fair value on acquisition \$000	Century Acquisition fair value on acquisition \$000	Total fair value on acquisitions \$000
Acquiree's net assets at acquisition date			
Inventory	2,871	21,843	24,714
Intangible assets	84,763	530,487	615,250
Net identifiable assets and liabilities	87,634	552,330	639,964
Goodwill on acquisition	26,308	105,283	131,591
Consideration to be transferred	113,942	657,613	771,555

Total goodwill of \$131.591 million from business acquisitions is attributable mainly to the synergies expected to be achieved from integrating the respective businesses into the group's existing business.

During the year ended 31 July 2018, the acquired businesses above generated additional revenues of \$68.943 million and operating profits of approximately \$10.969 million. Revenue and profit from the acquired businesses that would have been earned if the acquisitions had occurred at the commencement of the financial year has not been provided on the basis that the calculation of that information is impracticable. This is because the businesses were fully integrated into the vendor's operations and separate comparable financial information relating to the acquired businesses as stand-alone operations is not available.

Acquisition of non-controlling interest 2019

There was no acquisition of non-controlling interest in current period.

Acquisition of non-controlling interest 2018

On 29 December 2017 the group acquired an additional 49% of the equity interest in Atlantica Sementes SA ("Atlantica"), a business based in Brazil specialising in the sale and distribution of seed related products, via the exercising of a written put option. As a result, the group's equity interest in Atlantica increased from 51% to 100%. The group recognised a liability for the present value of the exercise price of the put option up to the date of acquisition and exercise of the put option. The carrying amount of Atlantica's net assets in the group's consolidated financial statements on the date of acquisition was \$6.590 million. Given the transaction is deemed as a common control transaction the impact has been recognised in equity resulting in a transfer of non-controlling interests to retained earnings.

15. Cash and cash equivalents

		Consolidated		
	2019 \$000	2018 \$000		
Bank balances	424,274	255,535		
Call deposits	81,413	46,165		
	505,687	301,700		
Bank overdraft	-	(7,357)		
Total cash and cash equivalents	505,687	294,343		

16. Trade and other receivables

io. Indue and offici recertables		
	C	onsolidated
	2019 \$000	2018 \$000
Current		
Trade receivables	1,297,372	1,130,846
Provision for impairment losses	(49,531)	(36,546)
	1,247,841	1,094,300
Derivative financial instruments	3,829	5,339
Prepayments	42,163	23,882
Other receivables	84,918	76,096
Current receivables	1,378,751	1,199,617
Non-current		
Derivative financial instruments	-	_
Trade receivables	73,024	76,452
Trade finance receivables	22,583	26,824
Other receivables	6,370	5,583
Non-current receivables	101,977	108,859
Total trade and other receivables	1,480,728	1,308,476

17. Inventories

		Consolidated		
	2019 \$000	2018 \$000		
Raw materials	414,005	313,103		
Work in progress	10,442	18,438		
Finished goods	816,105	862,360		
	1,240,552	1,193,901		
Provision for obsolescence of finished goods	(12,311)	(14,205)		
Total inventories	1,228,241	1,179,696		

18. Tax assets and liabilities

Current tax assets and liabilities

The current tax asset for the group of \$36.320 million (2018: \$31.609 million) represents the amount of income taxes recoverable in respect of prior periods and that which arose from the payment of tax in excess of the amounts due to the relevant tax authority. The current tax liability for the group of \$18.971 million (2018: \$20.930 million) represents the amount of income taxes payable in respect of current and prior financial periods.

Deferred tax assets and liabilities

Recognised deferred tax assets and liabilities

Deferred tax assets and liabilities are attributable to the following:

	Ass	ets	Liabi	Liabilities N		
Consolidated	2019 \$000	2018 \$000	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Property, plant and equipment	13,648	16,945	(8,295)	(8,311)	5,353	8,634
Intangible assets	9,158	8,928	(101,267)	(86,770)	(92,108)	(77,842)
Employee benefits	21,099	19,556	_	-	21,099	19,556
Provisions	24,770	20,993	(1,059)	(1,024)	23,710	19,969
Other items	12,450	16,231	(15,262)	(17,447)	(2,812)	(1,216)
Tax value of losses carried forward	131,872	119,309	-	-	131,872	119,309
Tax assets/(liabilities)	212,997	201,962	(125,883)	(113,552)	87,114	88,410
Set off of tax	-	-	_	_	_	_
Net tax assets/(liabilities)	212,997	201,962	(125,883)	(113,552)	87,114	88,410

Movement in temporary differences during the year

Consolidated 2019	Balance 2018 \$000	Recognised in income \$000	Recognised in equity \$000	Currency adjustment \$000	Other movement \$000	Balance 2019 \$000
Property, plant and equipment	8,634	(2,883)	-	(397)	-	5,353
Intangibles assets	(77,842)	(9,208)	-	(5,057)	-	(92,108)
Employee benefits	19,556	2,998	(1,615)	160	_	21,099
Provisions	19,969	2,798	_	942	-	23,710
Other items	(1,216)	(58)	_	(1,537)	_	(2,812)
Tax value of losses carried forward	119,309	8,105	-	4,457	-	131,872
	88,410	1,752	(1,615)	(1,432)	_	87,114

Consolidated 2018	Balance 2017 \$000	Recognised in income \$000	Recognised in equity \$000	Currency adjustment \$000	Other movement \$000	Balance 2018 \$000
Property, plant and equipment	(9,132)	18,262	_	(496)	-	8,634
Intangibles assets	(92,613)	18,573	_	(3,802)	_	(77,842)
Employee benefits	20,125	(657)	(917)	1,005	_	19,556
Provisions	19,540	1,032	_	(603)	_	19,969
Other items	8,540	(10,379)	(587)	1,210	_	(1,216)
Tax value of losses carried forward	156,144	(37,495)	_	660	_	119,309
	102,604	(10,664)	(1,504)	(2,026)	-	88,410

18. Tax assets and liabilities (continued)

Deferred tax assets and liabilities (continued)

The carrying value of deferred tax assets relating to tax losses and tax credits is largely dependent on the generation of sufficient future taxable income. The carrying value of this asset will continue to be assessed at each reporting date.

Unrecognised deferred tax liability

At 31 July 2019, a deferred tax liability of \$32.762 million (2018: \$26.368 million) relating to investments in subsidiaries has not been recognised because the company controls the repatriation of retained earnings and it is satisfied that it will not be incurred in the foreseeable future. This amount represents the theoretical withholding tax payable if all overseas retained earnings were paid as dividends.

Unrecognised deferred tax assets

At 31 July 2019, there are unrecognised deferred tax assets in respect of tax losses and timing differences of \$113.864 million (2018: \$90.197 million).

19. Investments accounted for using the equity method

The group accounts for investments in associates and joint ventures using the equity method. The group had the following individually immaterial associates and joint ventures during the year:

					hip and interest	Carrying	amount		hare of fit/(loss)
	Nature of relationship	Country	Balance date of associate	2019	2018	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Seedtech Pty Ltd	Associate ⁽¹⁾	Australia	31 December	25.00%	25.00%	451	411	40	78
Leshan Nong Fu Trading Co., Ltd	Joint Venture ⁽²⁾	China	31 December	35.00%	_	1,559	_	84	_
						2,010	411	124	78

(1) Seedtech is a company that offers services to the seed industry such as cleaning, packaging, distribution and storage of seeds.

(2) Leshan Nong Fu Trading is a joint venture in which the group has joint control and a 35 percent ownership interest. The joint venture is focused on sales and marketing of formulation crop protection products in the Chinese domestic market. It is structured as a separate vehicle. In accordance with the agreement under which Leshan Nong Fu Trading was established, the investors in the joint venture have agreed to make capital contributions in proportion to their ownership interests to make up any losses, if required, or at the latest within 5 years after incorporation, up to a maximum amount of RMB 100 million. This commitment has not been recognised in this consolidated financial report.

20. Other investments

		Consolidated		
	2019 \$000	2018 \$000		
Current investments				
Balance at the beginning of the year	-	-		
Additions	-	-		
Net change in fair value gains/(losses) transferred to equity	-	-		
Disposal	-	-		
Balance at the end of the year	-	-		
Non-current investments				
Other investments	421	442		
Total non-current investments	421	442		

21. Other non-current assets

There were no other non-current assets in the current or prior period.

22. Property, plant and equipment

Consolidated 2019	Land and buildings \$000	Plant and machinery \$000	Leased plant and machinery \$000	Capital work in progress \$000	Total \$000
Cost					
Balance at 1 August 2018	206,234	581,790	12,684	56,942	857,650
Additions	1,740	45,458	461	36,624	84,283
Additions through business combinations	-	-	-	-	-
Disposals and write-offs	(1,668)	(11,116)	(132)	(170)	(13,086)
Other transfers	2,794	12,399	288	(15,893)	(412)
Foreign exchange adjustment	7,152	14,700	148	1,572	23,572
Balance at 31 July 2019	216,252	643,231	13,449	79,075	952,007
Accumulated depreciation and impairment losses			·		
Balance at 1 August 2018	(114,067)	(402,077)	(2,757)	_	(518,901)
Depreciation charge for the year	(5,673)	(31,863)	(442)	_	(37,978)
Additions through business combinations	-	_	-	-	-
Disposals and write-offs	573	10,748	101	-	11,422
Other transfers	(14)	471	(45)	-	412
Foreign exchange adjustment	(3,848)	(9,486)	(46)	-	(13,380)
Balance at 31 July 2019	(123,029)	(432,207)	(3,189)	-	(558,425)
Net property, plant and equipment at 31 July 2019	93,223	211,024	10,260	79,075	393,582

22. Property, plant and equipment (continued)

Consolidated 2018	Land and buildings \$000	Plant and machinery \$000	Leased plant and machinery \$000	Capital work in progress \$000	Total \$000
Cost					
Balance at 1 August 2017	200,126	518,170	11,746	43,481	773,523
Additions	872	31,659	512	36,496	69,539
Additions through business combinations	_	_	_	-	_
Impairment loss	_	_	_	_	_
Disposals and write-offs	(2,265)	(7,340)	(81)	(3)	(9,689)
Other transfers	3,008	19,462	-	(23,985)	(1,515)
Foreign exchange adjustment	4,493	19,839	507	953	25,792
Balance at 31 July 2018	206,234	581,790	12,684	56,942	857,650
Accumulated depreciation and impairment losses					
Balance at 1 August 2017	(89,539)	(331,158)	(2,306)		(423,003)
Depreciation charge for the year	(6,690)	(31,049)	(453)		(38,192)
Additions through business combinations		(0.)0)		_	
Impairment loss	(15,513)	(33,729)		_	(49,242)
Disposals and write-offs	1,014	7,180	59	_	8,253
Other transfers	(1)	149	_	_	148
Foreign exchange adjustment	(3,338)	(13,470)	(57)	-	(16,865)
Balance at 31 July 2018	(114,067)	(402,077)	(2,757)	_	(518,901)
Net property, plant and equipment at 31 July 2018	92,167	179,713	9,927	56,942	338,749

Assets pledged as security for finance leases amount to \$10.260 million (2018: \$9.927 million).

23. Intangible assets

		Intellectual Property Capitalised						
Consolidated 2019	Goodwill \$000	indefinite life \$000	finite life \$000	development costs \$000	Computer software \$000	Total \$000		
Cost		·						
Balance at 1 August 2018	456,322	1,680	1,162,306	388,744	153,537	2,162,589		
Additions	-	_	701	86,075	19,350	106,126		
Additions through business combinations	-	_	-	_	-	-		
Disposals and write-offs	-	_	-	(214)	(1,987)	(2,201)		
Other transfers	(1,756)	_	(1,558)	1,559	(3)	(1,758)		
Foreign exchange adjustment	21,223	38	47,128	5,935	4,636	78,960		
Balance at 31 July 2019	475,789	1,718	1,208,577	482,099	175,533	2,343,716		
Accumulated amortisation and impairment losses								
Balance at 1 August 2018	(104,940)	(1,680)	(189,126)	(121,859)	(56,662)	(474,267)		
Amortisation charge for the year	-	_	(85,065)	(30,759)	(17,906)	(133,730)		
Additions through business combinations	-	_	-	_	-	-		
Impairment loss	_	_	-	_	_	_		
Disposals and write-offs	-	_	17	41	1,926	1,984		
Other transfers	1,757	_	546	(499)	(46)	1,758		
Foreign exchange adjustment	(6,092)	(38)	(10,426)	(1,928)	(1,943)	(20,427)		
Balance at 31 July 2019	(109,275)	(1,718)	(284,054)	(155,004)	(74,631)	(624,682)		
Intangibles carrying amount at 31 July 2019	366,514	_	924,523	327,095	100,902	1,719,034		

23. Intangible assets (continued)

		Intellect	ual Property	Capitalised		
Consolidated 2018	Goodwill \$000	indefinite life \$000	finite life \$000	development costs \$000	Computer software \$000	Total \$000
Cost						
Balance at 1 August 2017	322,497	1,576	526,026	308,619	102,655	1,261,373
Additions	-	-	4,136	69,394	51,243	124,773
Additions through business combinations	131,591	_	615,250	-	_	746,841
Disposals and write-offs	(237)	_	(91)	(6,886)	(5,197)	(12,411)
Other transfers	-	_	(2,518)	3,179	2,132	2,793
Foreign exchange adjustment	2,471	104	19,503	14,438	2,704	39,220
Balance at 31 July 2018	456,322	1,680	1,162,306	388,744	153,537	2,162,589
Accumulated amortisation and impairment losses						
Balance at 1 August 2017	(105,477)	(1,576)	(134,326)	(89,822)	(38,786)	(369,987)
Amortisation charge for the year	-	_	(44,371)	(27,058)	(10,928)	(82,357)
Additions through business combinations	-	_	-	-	-	-
Impairment loss	(3,109)	_	(5,612)	(5,500)	(7,096)	(21,317)
Disposals and write-offs	-	-	76	6,541	1,244	7,861
Other transfers	-	-	644	(644)	-	-
Foreign exchange adjustment	3,646	(104)	(5,537)	(5,376)	(1,096)	(8,467)
Balance at 31 July 2018	(104,940)	(1,680)	(189,126)	(121,859)	(56,662)	(474,267)
Intangibles carrying amount at 31 July 2018	351,382		973,180	266,885	96,875	1,688,322

For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit"/"CGU").

The group has determined that operating unit by country or region (i.e. Europe) is the appropriate method for determining the cash-generating units (CGU) of the business. This level of CGU aligns with the cash flows of the business and the management structure of the group. The goodwill and intellectual property with an indefinite life are CGU specific, as the acquisitions generating goodwill and the product registrations that are the major indefinite life life intangibles are country or region specific in nature. There is no allocation of goodwill between CGUs.

The major CGUs and their intangible assets are as follows: North America \$220 million (2018: \$208 million), Brazil \$157 million (2018: \$150 million), Seed Technologies \$343 million (2018: \$305 million), Europe \$953 million (2018: \$979 million) and Australia and New Zealand (ANZ) \$22 million (2018: \$25 million). The balance of intangibles is spread across multiple CGUs, with no individual CGU intangible balance being material relative to the total intangibles balance at balance date.

Impairment testing for cash-generating units containing goodwill

For the impairment testing of these assets, the carrying amount of the asset is compared to its recoverable amount at a CGU level. Two valuation methods are used by the group.

23. Intangible assets (continued)

Valuation method – Value in use

The group uses the value-in-use (VIU) method to estimate the recoverable amount. In assessing VIU, the estimated future cash flows are derived from the three year plan for each cash-generating unit with a growth factor applied to extrapolate a cash flow beyond year three. A perpetuity factor is then applied to the normalised cash flow beyond year five in order to include a terminal value in the VIU calculation. The terminal growth rate assumed for each CGU is generally a long term inflation estimate. The cash flow is then discounted to a present value using a discount rate which is the company's weighted average cost of capital, adjusted for country risk and asset-specific risk associated with each CGU.

Valuation method – Fair value less cost of disposal

Fair value less cost of disposal (FVLCD) is an estimate of the amount that a market participant would pay for an asset or a CGU, less the cost of disposal. The fair value is determined using discounted cash flows. This fair value is benchmarked against the sum of the parts method, comparable market transactions, and company trading multiples. The cash flows are derived from Board approved management expectations of future outcomes taking into account past experience, adjusted for anticipated revenue growth. Cash flows are discounted using an appropriate post-tax market discount rate to arrive at a net present value of the asset which is compared against the asset's carrying value. The fair value measurement was categorised as a Level 3 fair value based on inputs in the valuation technique used (see note 31).

Valuation assumptions

The valuation method, range of terminal growth rates and nominal post-tax discount rates applied for impairment testing purposes is as follows:

2019	Valuation method	Terminal growth rate	Discount rate	Total goodwill \$000
Material crop protection CGU's (North America, Brazil and Europe)	VIU	2.0% to 4.0%	7.8% to 11.6%	278,897
ANZ CGU	FVLCD	2.0%	11.0% to 12.5%	-
Seed Technology CGU	VIU	3.0%	11.4%	71,563

2018	Valuation method	Terminal growth rate	Discount rate	Total goodwill \$000
Material crop protection CGU's (North America, Brazil and Europe)	VIU	1.9% to 4.1%	8.0% to 13.1%	268,051
ANZ CGU ⁽¹⁾	FVLCD	2.5%	9.9%	_
Seed Technology CGU	VIU	3.1%	12.4%	68,431

(1) As at 31 July 2017, the total goodwill and indefinite life assets for the ANZ CGU was equal to \$3.109 million. The carrying amount of goodwill and indefinite life assets for the ANZ CGU was reduced to nil at 31 July 2018 as a result of impairment.

The terminal growth rate assumed is generally a long term inflation estimate. The discount rate assumed is the company's weighted average cost of capital, adjusted for country risk and asset-specific risk. The margin and volume assumptions generally reflect past experience for existing and enhanced portfolio products, while new products utilise external sources of information reflecting current market pricing in expected end use markets.

With the exception of the ANZ CGU (see below), management has determined that, given the excess of recoverable value over asset carrying value (headroom), there are no reasonably possible changes in assumptions which could occur to cause the carrying amount of the CGU's to exceed their recoverable amount.

23. Intangible assets (continued)

ANZ cash generating unit

Following the impairment loss recognised in the ANZ CGU during the year ended 31 July 2018, the recoverable amount was equal to the carrying amount. At 31 July 2019, management has determined that the recoverable amount remains equal to the carrying amount. If there was an adverse movement in a key assumption (noted above) or ANZ cash flows, in the absence of other factors, this may lead to further impairment.

At 31 July 2018 the group became aware of impairment indicators for the ANZ CGU and commenced using the FVLCD methodology for the CGU. The carrying amount of the ANZ CGU was determined to be higher than its recoverable amount and an impairment loss of \$70.559 million was recognised during the year ended 31 July 2018. The impairment loss was allocated against goodwill, intangibles assets, and property, plant and equipment, and is included in 'general and administrative expenses' (refer note 6).

. ,	2019 \$000	2018 \$000
Current payables – unsecured		
Trade creditors and accruals – unsecured	1,108,267	1,087,802
Deferred revenue	111,812	40,280
Derivative financial instruments	1,182	3,024
Payables – acquisitions	-	164
Current payables	1,221,261	1,131,270
Non-current payables – unsecured		
Creditors and accruals	11,058	10,800
Derivative financial instruments	-	_
Non-current payables	11,058	10,800

24. Trade and other payables

25. Interest-bearing loans and borrowings

g	Co	Consolidated	
	2019 \$000	2018 \$000	
Current liabilities			
Bank loans – secured	385,948	390,905	
Bank loans – unsecured	110,868	130,817	
Deferred debt establishment costs	(3,683)	(3,683)	
Other loans – unsecured	1,342	1,303	
Finance lease liabilities – secured	511	356	
Loans and borrowings – current	494,986	519,698	
Non-current liabilities			
Bank loans – secured	420,969	404,842	
Bank loans – unsecured	63,786	30,878	
Brazil unsecured notes	77,122	71,610	
Senior unsecured notes	689,605	638,613	
Deferred debt establishment costs	(9,374)	(11,721)	
Other loans – unsecured	3,381	2,256	
Finance lease liabilities – secured	12,341	12,237	
Loans and borrowings – non-current	1,257,830	1,148,715	
Net cash and cash equivalents	(505,687)	(294,343)	
Net debt	1,247,129	1,374,070	

25. Interest-bearing loans and borrowings (continued)

Financing facilities

Refer to the section entitled "Liquidity Risk" in note 31 for detail regarding the group's financing facilities.

	Accessible \$000	Utilised \$000
2019		
Bank loan facilities and senior unsecured notes	2,519,407	1,748,298
Other facilities	4,723	4,723
Total financing facilities	2,524,130	1,753,021
2018		
Bank loan facilities and senior unsecured notes	2,185,377	1,667,665
Other facilities	3,559	3,559
Total financing facilities	2,188,936	1,671,224

Reconciliation of liabilities arising from financing activities

	Loans and borrowings – current \$000	Loans and borrowings – non-current \$000	Debt related derivatives (included in assets/ liabilities) ⁽¹⁾ \$000	Total debt related financial instruments \$000
Balance at 31 July 2018	519,698	1,148,715	(3,553)	1,664,860
Cash changes				
Proceeds from borrowings (net of costs)	750,693	578,098	21,798	1,350,589
Repayment of borrowings	(810,493)	(529,736)		(1,340,229)
Debt establishment transaction costs		(2,288)		(2,288)
Total cash flows	(59,800)	46,074	21,798	8,072
Non-cash changes				
Foreign exchange movements	17,215	76,280	(22,703)	70,792
Transfer	13,239	(13,239)		_
Amortisation of debt establishment transaction costs	4,634			4,634
Total non-cash changes	35,088	63,041	(22,703)	75,426
Balance at 31 July 2019	494,986	1,257,830	(4,458)	1,748,358

(1) Total derivatives balance at 31 July 2019 is a net asset of \$2.647 million (31 July 2018: \$2.315 million net asset). The difference in carrying value to the table above relates to interest rate swap contracts, cross-currency interest rate swap contracts, and forward exchange contracts which are excluded from the balances above.

Financing arrangements

		Consolidated
Repayment of borrowings (excluding finance leases)	2019 \$000	2018 \$000
Period ending 31 July, 2019	-	523,025
Period ending 31 July, 2020	498,158	30,648
Period ending 31 July, 2021	185,847	1,117,551
Period ending 31 July, 2022 or later	1,069,016	-

25. Interest-bearing loans and borrowings (continued)

Finance lease liabilities

Finance leases are entered into to fund the acquisition of plant and equipment.

Lease commitments for capitalised finance leases are payable as follows:

	Co	onsolidated
	2019 \$000	2018 \$000
Not later than one year	1,628	1,640
Later than one year but not later than two years	1,906	1,664
Later than two years but not later than five years	5,756	5,551
Later than five years	84,348	85,629
	93,638	94,484
Less future finance charges	(80,786)	(81,890)
Finance lease liabilities	12,852	12,594

Finance lease liabilities are secured over the relevant leased plant.

	C	onsolidated
Average interest rates	2019 %	2018 %
Nufarm step-up securities	5.67	6.08
Syndicated bank facility	2.03	1.84
Group securitisation program facility	2.94	2.89
Other bank loans	4.43	5.70
Finance lease liabilities – secured	13.73	13.33
Brazil unsecured notes	9.20	9.69
Senior unsecured notes	5.75	5.75

Average interest rates are calculated using the weighted average of the interest rates for the drawn balances under each facility as at 31 July 2019.

26. Employee benefits

	Co	Consolidated	
	2019 \$000	2018 \$000	
Current			
Liability for short-term employee benefits	16,684	17,377	
Liability for current portion of other long-term employee benefits	2,591	1,970	
Current employee benefits	19,275	19,347	
Non-current			
Defined benefit fund obligations			
Present value of unfunded obligations	9,337	7,505	
Present value of funded obligations	188,948	173,171	
Fair value of fund assets – funded	(109,567)	(100,115)	
Recognised liability for defined benefit fund obligations	88,718	80,561	
Liability for non-current portion of other long-term employee benefits	16,378	15,115	
Non-current employee benefits	105,096	95,676	
Total employee benefits	124,371	115,023	

During the year ended 31 July 2019 the group made contributions to defined benefit pension funds in the United Kingdom, France and Indonesia that provide defined benefit amounts for employees upon retirement.

26. Employee benefits (continued)

	Consolidated	
	2019 \$000	2018 \$000
Changes in the present value of the defined benefit obligation are as follows:		
Opening defined benefit obligation	180,676	174,583
Service cost	695	607
Interest cost	5,100	4,908
Actuarial losses/(gains)	15,191	(3,604)
Past service cost	-	(908)
Losses/(gains) on curtailment	-	59
Plan amendments	1,523	-
Contributions	-	-
Benefits paid	(6,287)	(6,579)
Exchange adjustment	1,387	11,610
Closing defined benefit obligation	198,285	180,676
Changes in the fair value of fund assets are as follows:		
Opening fair value of fund assets	100,115	90,485
Interest income	2,813	2,553
Actuarial gains/(losses) – return on plan assets excluding interest income	6,346	2,293
Surplus taken to retained earnings	_	-
Assets distributed on settlement	-	-
Contributions by employer	5,286	4,933
Distributions	(5,730)	(6,376)
Exchange adjustment	737	6,227
Closing fair value of fund assets	109,567	100,115

The actual return on plan assets is the sum of the expected return and the actuarial gain/(loss).

	(Consolidated	
	2019 \$000	2018 \$000	
Expense/(gain) recognised in profit or loss			
Current service costs	695	607	
Interest on obligation	5,100	4,908	
Interest income	(2,813)	(2,553)	
Losses/(gains) on curtailment	_	59	
Plan amendments	1,523	_	
Past service cost/(gain)	_	(908)	
Expense recognised in profit or loss	4,505	2,113	
The expense is recognised in the following line items in the income statement:			
Cost of sales	1,769	1,287	
Sales, marketing and distribution expenses	1,972	546	
General and administrative expenses	180	231	
Research and development expenses	584	49	
Expense recognised in profit or loss	4,505	2,113	

26. Employee benefits (continued)

	Consolidated	
	2019 \$000	2018 \$000
Actuarial gains/(losses) recognised in other comprehensive income (net of tax)		
Cumulative amount at 1 August	(69,067)	(74,047)
Recognised during the period	(7,356)	4,980
Cumulative amount at 31 July	(76,423)	(69,067)

		Consolidated	
	2019 %	2018 %	
The major categories of fund assets as a percentage of total fund assets are as follows:		%	
Equities	71.8	62.2	
Bonds	25.2	31.7	
Property	1.6	1.3	
Cash	1.4	4.8	
Principal actuarial assumptions at the reporting date (expressed as weighted averages):			
Discount rate at 31 July	2.2	2.8	
Future salary increases	0.2	0.3	
Future pension increases	2.6	2.8	

The group expects to pay \$5.177 million in contributions to defined benefit plans in 2020. (2018: \$5.116 million).

27. Share-based payments

Nufarm Executive Share Plan (2000)

The Nufarm Executive Share Plan (2000) offered shares to executives. From 1 August 2011, it was decided that there will be no further awards under this share plan and that it would be replaced by the Nufarm Short Term Incentive plan (refer below). Any unvested equities held in the executive share plan will remain and be subject to the vesting conditions under the rules of the plan. The executives may select an alternative mix of shares (at no cost) and options at a cost determined under the Black Scholes' methodology. These benefits are only granted when a predetermined return on capital employed is achieved over the relevant period. The shares and options are subject to forfeiture and dealing restrictions. The executive cannot deal in the shares or options for a period of between three and ten years without board approval. An independent trustee holds the shares and options on behalf of the executives. At 31 July 2019 there were 13 participants (2018: 14 participants) in the scheme and 72,181 shares (2018: 77,916) were allocated and held by the trustee on behalf of the participants. The cost of issuing shares is expensed in the year of issue.

Nufarm Short Term Incentive Plan (STI)

The STI is available to key executives, senior managers and other managers globally. The first awards under the plan were issued in October 2012. The STI is measured on the following metrics, relevant to an individual:

- budget measures of profit before tax or net profit after tax and net working capital; and
- strategic and business improvement objectives

A pre-determined percentage of the STI is paid in cash at the time of performance testing and the balance is deferred into shares in the company for nil consideration. The number of shares granted is based on the volume weighted average price (VWAP) of Nufarm Limited shares in the 5 days subsequent to the results announcement. Vesting will occur after a two year period.

27. Share-based payments (continued)

Nufarm Executive Long Term Incentive Plan (LTIP)

On 1 August 2011, the LTIP commenced and is available to key executives and certain selected senior managers. Awards are granted to individuals in the form of performance rights, which comprise rights to acquire ordinary shares in the company for nil consideration, subject to the achievement of global performance hurdles. Under the plan, individuals will receive an annual award of performance rights as soon as practical after the announcement of results in the preceding year. The performance and vesting period for the awards will be three years. Awards vest in two equal tranches as follows:

- 50 per cent of the LTIP grant will vest subject to the achievement of a relative total shareholder return (TSR) performance hurdle measured against a selected comparator group of companies; and
- the remaining 50 per cent will vest subject to meeting an absolute return on funds employed (ROFE) target.

Global Share Plan (2001)

The Global Share Plan commenced in 2001, and is available to all permanent employees. Participants contribute a proportion of their salary to purchase shares. The company will contribute an amount equal to 10% of the number of ordinary shares acquired with a participant's contribution in the form of additional ordinary shares. Amounts over 10% of the participant's salary can be contributed but will not be matched. For each year the shares are held, up to a maximum of five years, the company contributes a further 10% of the value of the shares acquired with the participant's contribution. An independent trustee holds the shares on behalf of the participants. At 31 July 2019 there were 519 participants (2018: 512 participants) in the scheme and 1,833,858 shares (2018: 1,624,341) were allocated and held by the trustee on behalf of the participants.

The power of appointment and removal of the trustees for the share purchase schemes is vested in the company.

Employee expenses	2019 \$000	2018 \$000
Total expense arising from share-based payment transactions	1,559	3,904

Measurement of fair values

The fair value of performance rights granted through the LTIP and deferred shares granted through the STIP were measured as follows:

Plan	Nufarm STI 2019 Deferred shares	Nufarm LTI 2019 Performance rights	Nufarm STI 2018 Deferred shares	Nufarm LTI 2018 Performance rights Nov 2017
Weighted average fair value at grant date	\$6.07	\$4.94	\$8.37	\$6.60
Share price at grant date	\$6.07	\$7.25	\$8.37	\$8.99
Grant date	1 Oct 2018	1 Aug 2018	28 Sep 2017	1 Nov 2017
Earliest vesting date	31 Jul 2020	31 Jul 2021	31 Jul 2019	31 Jul 2020
Exercise price	-	-	-	_
Expected life	1 year	3.0 years	1 year	2.8 years
Volatility	n/a	28%	n/a	28%
Risk free interest rate	n/a	2.1%	n/a	2.0%
Dividend yield	n/a	2.0%	n/a	1.7%

The fair values of awards granted were estimated using a Monte-Carlo simulation methodology and a Binomial Tree methodology.

27. Share-based payments (continued)

Reconciliation of outstanding share awards	Nufarm LTI number of performance rights 2019	Nufarm STI number of deferred shares 2019	Nufarm LTI number of performance rights 2018	Nufarm STI number of deferred shares 2018
Outstanding at 1 August	672,683	529,572	887,364	269,506
Forfeited during the year	(302,091)	(11,751)	(276,863)	(14,272)
Exercised during the year	-	(517,821)	(333,078)	(268,840)
Expired during the year	-	-	-	_
Granted during the year	600,048	19,294	395,260	543,178
Outstanding at 31 July	970,640	19,294	672,683	529,572
Exercisable at 31 July	_	-	-	-

The performance rights outstanding at 31 July 2019 have a \$nil exercise price (2018: \$nil) and a weighted average contractual life of 3 years (2018: 3 years). All performance rights granted to date have a \$nil exercise price.

28. Provisions

		Consolidated	
	2019 \$000	2018 \$000	
Current			
Restructuring	15,857	11,161	
Other	1,359	1,237	
Current provisions	17,216	12,398	

Consolidated	Restructuring \$000	Other provisions \$000	Total \$000
Movement in provisions			
Balance at 1 August 2018	11,161	1,237	12,398
Provisions made during the year	14,690	125	14,815
Provisions reversed during the year	(1,256)	_	(1,256)
Provisions used during the year	(8,814)	_	(8,814)
Exchange adjustment	76	(3)	73
Balance at 31 July 2019	15,857	1,359	17,216

The provision for restructuring is mainly relating to the asset rationalisation and restructuring being undertaken by the group.

29. Capital and reserves

	Par	Parent Company	
Share capital	Number of ordinary shares 2019	Number of ordinary shares 2018	
Balance at 1 August	327,704,975	266,928,840	
Issue of shares	51,934,359	60,776,135	
Balance at 31 July	379,639,334	327,704,975	

The company does not have authorised capital or par value in respect of its issued shares. The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the company.

29. Capital and reserves (continued)

Share capital (continued)

On 26 September 2018, the company announced it was undertaking a pro-rata entitlement offer to raise \$303.000 million of share capital to repay existing debt facilities. On 8 October 2018, 40,272,313 shares at \$5.8500 were issued under the institutional offer and on 25 October 2018, 11,475,463 shares at \$5.8500 were issued under the retail offer.

On 2 November 2018, 126,056 shares at \$5.8565 were issued under the dividend reinvestment program.

On 8 January 2019, 60,527 shares at \$5.7269 were issued under the global share plan.

In October 2017, the directors of the group agreed to issue 59,551,672 new shares to fund the acquisition of two European businesses (note 14) pursuant to the terms of an underwritten accelerated renounceable entitlement offer. Following the announcement in October 2017, on 6 November 2017, 44,777,979 shares at \$7.5000 were issued under the institutional entitlement offer and on 24 November 2017, 14,773,693 shares at \$7.5000 were issued under the retail entitlement offer.

On 6 October 2017, 756,172 shares at \$8.3667 were issued under the Nufarm short term incentive plan and Nufarm executive long term incentive plan. On 10 November 2017, 228,101 shares at \$8.9479 were issued under the dividend reinvestment program. On 11 December 2017, 69,695 shares at \$8.3667 were issued under the Nufarm short term incentive plan. On 5 January 2018, 64,104 shares at \$8.7800 were issued under the global share plan. On 4 May 2018, 106,391 shares at \$8.6513 were issued under the dividend reinvestment program.

Other securities

Sumitomo preference securities

On 31 July 2019, the group undertook the placement of \$97.5 million of preference securities to existing shareholder and strategic business partner, Sumitomo Chemical Company Limited (Sumitomo), through a wholly owned subsidiary (Nufarm Investment Pty Ltd), known as the Sumitomo Preference Securities (SPS). The SPS may be exchanged for Nufarm ordinary shares at Sumitomo's election any time after 24 months, from the date of issue of the SPS, at an exchange price of \$5.8500 per Nufarm ordinary share. As at 31 July 2019 \$0.5 million of costs were incurred in relation to the placement.

Nufarm Investments Pty Ltd maintains the ability to purchase the SPS from Sumitomo at any quarter following the issue of the SPS for the full principal amount outstanding at that time plus the amount of any unpaid distributions.

Distributions on the SPS are at the discretion of the directors and are fixed rate, unfranked, cumulative and subordinated. In the event that Nufarm Investment Pty Ltd does not pay the distribution on the SPS, Nufarm may not declare a dividend payment in respect of its ordinary shares or declare a distribution on the Nufarm step-up securities until all undeclared SPS distributions are declared and paid. The SPS distributions are declared and paid to Sumitomo quarterly at a fixed rate of 6% per annum for the first 12 months and at a fixed rate of 10% per annum thereafter. The first distribution is expected to be declared and paid on 31 October 2019.

Nufarm step-up securities

In the year ended 31 July 2007 Nufarm Finance (NZ) Limited, a wholly owned subsidiary of Nufarm Limited, issued a new hybrid security called Nufarm Step-up Securities (NSS). The NSS are perpetual step up securities and on 24 November 2006, 2,510,000 NSS were allotted at an issue price of \$100 per security raising \$251 million. The NSS are listed on the ASX under the code 'NFNG' and on the NZDX under the code 'NFFHA'. The after-tax costs associated with the issue of the NSS, totalling \$4.1 million, were deducted from the proceeds.

Distributions on the NSS are at the discretion of the directors and are floating rate, unfranked, non-cumulative and subordinated. However, distributions of profits and capital by Nufarm Limited are curtailed if distributions to NSS holders are not made, until such time that Nufarm Finance (NZ) Limited makes up the arrears. The first distribution date for the NSS was 16 April 2007 and on a six-monthly basis after this date. The floating rate is the average mid-rate for bills with a term of six months plus a margin of 3.9% (2018: 3.9%). On 23 September 2011, Nufarm announced that it would 'step-up' the NSS. This resulted in the interest margin attached to the NSS being stepped up by 2.0 per cent, with the new interest margin being set at 3.9 per cent as at 24 November 2011. No other terms were adjusted and there are no further step-up dates. Nufarm retains the right to redeem or exchange the NSS on future distribution dates.

29. Capital and reserves (continued)

Translation reserve

The translation reserve comprises all foreign exchange differences arising from the translation of the financial statements of foreign operations where their functional currency is different from the presentation currency of the reporting entity.

Capital profit reserve

This reserve is used to accumulate realised capital profits.

Other reserve

This reserve represents the accrued employee entitlements to share awards that have been charged to the income statement and have not yet been exercised. Until December 2017, this reserve held the debit balance related to a written put option of a 49% interest held by the non-controlling shareholders of Altantica Sementes Ltda (Atlantica). As the non-controlling shareholders had the present access to the economic benefits with their underlying ownership interest, their non controlling interest was recognised. In December 2017, the written put option was exercised, and the debit reserve was utilised to complete the transaction. This reserve also holds the balances related to hedging.

Dividends

No interim dividend was declared for Jan 2019 (2018: 5 cents per share, totalling \$16,379,929). No final dividend was declared for Jul 2019 (2018: six cents per share, totalling \$19,662,299).

Distributions

Distributions recognised in the current year by Nufarm Finance (NZ) Ltd on the Nufarm Step-up Securities* are:

		c		
	Distribution rate	Total amount \$000	Payment date	
2019				
Distribution	6.00%	7,511	15 Apr 2019	
Distribution	6.08%	7,651	15 Oct 2018	
		15,162		
2018				
Distribution	5.80%	7,259	16 Apr 2018	
Distribution	5.87%	7,381	16 Oct 2017	
		14,640		

* Refer to discussion titled "Nufarm Step-up Securities" above.

The distribution on the Nufarm Step-up Securities reported on the equity movement schedule has been reduced by the tax benefit on the gross distribution, giving an after-tax amount of \$10.957 million (2018:\$10.763 million).

	2019 \$000	2018 \$000
Franking credit/(debit) balance		
The amount of franking credits available for the subsequent financial year are:		
Franking account balance as at the end of the year at 30% (2018: 30%)	-	-
Franking credits/(debits) that will arise from the payment of income tax payable/(refund) as at the end of the year	-	-
Credit/(debit) balance at 31 July	-	-

The ability to utilise the franking credits is dependent upon there being sufficient available profits to declare dividends. In accordance with the tax consolidation legislation, the company as the head entity in the tax-consolidated group has also assumed the benefit/(obligation of \$nil (2018: \$nil)) franking credits/(debits).

30. Earnings per share

	Co	onsolidated
	2019 \$000	2018 \$000
Net profit/(loss) for the year	38,310	(16,007)
Net profit/(loss) attributable to non-controlling interest	_	419
Net profit/(loss) attributable to equity holders of the parent	38,310	(15,588)
Nufarm Step-up Securities distribution	(10,957)	(10,763)
Earnings/(loss) used in the calculations of basic and diluted earnings per share	27,353	(26,351)
Earnings/(loss) from continuing operations	27,353	(26,351)
Subtract/(add back) items of material income/(expense) (refer note 6)	(50,770)	(113,984)
Earnings/(loss) excluding items of material income/(expense) used in the calculation of earnings per share excluding material items	78,123	87,633

For the purposes of determining basic and diluted earnings per share, the after-tax distributions on NSS are deducted from net profit.

	Num	ber of shares
	2019	2018
Weighted average number of ordinary shares used in calculation of basic earnings per share	369,231,803	310,650,760
Weighted average number of ordinary shares used in calculation of diluted earnings per share	370,502,520	311,631,734

There have been no conversions to, calls of, or subscriptions for ordinary shares or issues of ordinary shares since the reporting date and before the completion of this financial report.

	Cents per share	
Earnings per share for continuing and discontinued operations	2019	2018
Basic earnings per share		
From continuing operations	7.4	(8.5)
Diluted earnings per share		
From continuing operations	7.4	(8.5)
Earnings per share (excluding items of material income/expense – see note 6)		
Basic earnings per share	21.2	28.2
Diluted earnings per share	21.1	28.1

31. Financial risk management and financial instruments

The group has exposure to the following financial risks:

- credit risk;
- liquidity risk; and
- market risk.

This note presents information about the group's exposure to each of the above risks, the objectives, policies and processes for measuring and managing risk, and the management of capital.

The Board of Directors has responsibility to identify, assess, monitor and manage the material risks facing the group and to ensure that adequate identification, reporting and risk minimisation mechanisms are established and working effectively. To support and maintain this objective, the audit committee has established detailed policies on risk oversight and management by approving a global risk management charter that specifies the responsibilities of the general manager global risk management (which includes responsibility for the internal audit function). This charter also provides comprehensive global authority to conduct internal audits, risk reviews and system-based analyses of the internal controls in major business systems operating within all significant company entities worldwide.

The general manager global risk management reports to the chairman of the audit and risk committee and functionally to the chief financial officer. He provides a written report of his activities at each meeting of the audit and risk committee. In doing so he has direct and ongoing access to the chairman and members of the audit and risk committee.

Credit risk

Credit risk is the risk of financial loss to the group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the group's receivables from customers and other financial assets.

Exposure to credit risk

The group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. The demographics of the group's customer base, including the default risk of the industry and country in which the customers operate, has less of an influence on credit risk.

The group has credit policies in place and the exposure to credit risk is monitored on an ongoing basis. Credit evaluations are performed on all customers before the group's standard payment and delivery terms and conditions are offered. Purchase limits are established for each customer, which represents the maximum open amount without requiring further management approval.

The group's maximum exposure to credit risk at the reporting date was:

		Consolidated		
Carrying amount	2019 \$000	2018 \$000		
Trade and other receivables	1,476,899	1,303,137		
Preference securities receivable	97,500	_		
Cash and cash equivalent assets	505,687	301,700		
Derivative contracts: Assets	3,829	5,339		
	2,083,915	1,610,176		

31. Financial risk management and financial instruments (continued)

Credit risk (continued)

The group's maximum exposure to credit risk for trade and other receivables at the reporting date by geographic region was:

		Consolidated		
Carrying amount	2019 \$000	2018 \$000		
Australia/New Zealand	83,261	210,914		
Asia	57,121	30,557		
Europe	497,484	430,792		
North America	246,476	125,685		
South America	592,557	505,189		
Trade and other receivables	1,476,899	1,303,137		

The group's top five customers account for \$152.812 million of the trade receivables carrying amount at 31 July 2019 (2018: \$186.729 million). These top five customers represent 11 per cent (2018: 15 per cent) of the total receivables.

Impairment losses

The ageing of the group's customer trade receivables at the reporting date was:

		Consolidated	
Receivables ageing	2019 \$000	2018 \$000	
Current	1,146,435	1,017,819	
Past due – 0 to 90 days	119,606	109,279	
Past due – 90 to 180 days	31,846	10,987	
Past due – 180 to 360 days	15,610	9,884	
Past due – more than one year	56,899	59,329	
	1,370,396	1,207,298	
Provision for impairment	(49,531)	(36,546)	
Trade receivables	1,320,865	1,170,752	

Some receivables are secured by collateral from customers such as guarantees and charges on assets. In some countries credit insurance is undertaken to reduce credit risk. The past due receivables not impaired are considered recoverable.

In the crop protection industry, it is normal practice to vary the terms of sales depending on the climatic conditions experienced in each country.

The movement in the allowance for impairment in respect of trade receivables during the year was as follows. Comparative amounts for 2018 represent the allowance account for impairment losses under AASB 139.

31. Financial risk management and financial instruments (continued)

Credit risk (continued)

		Consolidated
	2019 \$000	2018 \$000
Balance at 1 August under AASB 139	36,546	26,439
Adjustment on initial application of AASB 9	16,414	_
Balance at 1 August under AASB 9	52,960	
Provisions made during the year	6,830	13,915
Provisions used during the year	(13,044)	(1,772)
Provisions acquired through business combinations	-	_
Exchange adjustment	2,785	(2,036)
Balance at 31 July	49,531	36,546

Expected credit loss assessment for individual customers

The group uses an allowance matrix to measure the ECLs of trade receivables from individual customers, which comprise of a large number of customers with small balances.

Loss rates are calculated using a 'roll rate' method based on the probability of a receivable progressing through successive stages of delinquency to write off. Roll rates are calculated separately for exposures in different segments and countries.

Liquidity risk

Liquidity risk is the risk that the group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the group's reputation.

Sales and operating profit are seasonal and are weighted towards the first half of the calendar year in Australia/ New Zealand, North America and Europe, reflecting the planting and growing cycle in these regions while in Latin America the sales and operating profit is weighted towards the second half of the calendar year. This seasonal operating activity results in seasonal working capital requirements.

Principally, the group sources liquidity from cash generated from operations, and where required, external bank facilities. Working capital fluctuations due to seasonality of the business are supported by the short-term funding available from the group's trade receivable securitisation facility.

Debt facilities

As at 31 July 2019, the key group facilities include a group trade receivables securitisation facility, a US\$475 million senior unsecured notes offering due in April 2026 (31 July 2018: US\$475 million), and a senior secured bank facility of \$665 million (31 July 2018: \$645 million).

On 26 April 2018 the group completed the refinancing of the US\$325m senior unsecured notes due in October 2019. The 2019 notes were redeemed from investors in May 2018 through the issuance of US\$475m senior unsecured notes due in April 2026 with a fixed coupon component of 5.75% ("2026 notes"). The 2026 notes were issued under a dual tranche structure by Nufarm Australia Ltd (US\$266 million) and Nufarm Americas Inc (US\$209 million).

On 27 July 2018 the group closed an unsecured and non-convertible BRL 200 million debenture. Issued by Nufarm Industria Quimica e Farma (Nufarm Brazil), the floating rate debenture matures in July 2021 and is governed by two group covenants that are measured and reported at 31 July each year. The proceeds have been used to repay existing bank debt and extend Brazil's weighted average debt maturity profile.

On 8 February 2019 the group upsized its senior secured bank facility (SFA) to \$665 million (31 July 2018: \$645 million) and renegotiated the tenor with lenders. As a result of these negotiations, \$50 million is due in August 2019, \$125 million is due in January 2021 and \$490 million is due in January 2022 (31 July 2018: \$645 million is due in January 2021). The SFA includes covenants of a type normally associated with facilities of this kind, and the group was in compliance with these covenants. The facility is drawn to \$459,904 million at 31 July 2019 (31 July 2018: \$404.843 million).

31. Financial risk management and financial instruments (continued)

Liquidity risk (continued)

Debt facilities (continued)

On 23 August 2011, Nufarm executed a group trade receivables securitisation facility. The facility provides funding that aligns with the working capital cycle of the company. The facility limit varies on a monthly basis to reflect the cyclical nature of the trade receivables being used to secure funding under the program. The monthly facility limit is set at \$500 million for three months of the financial year, \$400 million for one month of the financial year, \$350 million for four months of the financial year, \$300 million for two months of the financial year, \$300 million for five months of the financial year, \$300 million for one month of the financial year, \$300 million for two months of the financial year, \$300 million for five months of the financial year, \$300 million for one month of the financial year, \$300 million for three months of the financial year, \$275 million for one month of the financial year and \$175 million for three months of the financial year).

The majority of debt facilities that reside outside the notes, SFA and the group trade receivables securitisation facility are regional working capital facilities, primarily located in Latin America and Europe, which at 31 July 2019 totalled \$814.802 million (2018: \$601.765 million).

At 31 July 2019, the group had access to debt of \$2,519 million (2018: \$2,185 million) under the notes, SFA, group trade receivables securitisation facility and with other lenders.

A parent guarantee is provided to support working capital facilities in Europe, South America and the notes.

Trade finance

The liquidity of the group is influenced by the terms suppliers extend in respect of purchases of goods and services. The determination of terms provided by suppliers is influenced by a variety of factors including supplier's liquidity. Suppliers may engage financial institutions to facilitate the receipt of payments for goods and services from the group, which are often referred to as supplier financing arrangements. The group is aware that trade payables of \$293.810 million at 31 July 2019 (2018: \$327.123 million) are to be settled via such arrangements in future periods. In the event suppliers or financial institutions cease such arrangements the liquidity of the group's suppliers may be affected. If suppliers subsequently seek to reduce terms on group's purchases of goods and services in the future, the group's liquidity will be affected. Details of the group's trade and other payables are disclosed in note 24.

To support the liquidity of the group and reduce the credit risk relating to specific customers, trade receivables held by the group are sold to third parties. The sales (or factoring) of receivables to third parties is primarily done on a non-recourse basis, and the group incurs a financing expense at the time of the sale. The group derecognises trade receivables where the terms of the sale allows for derecognition. At 31 July 2019 the group estimates \$91.387 million (2018: \$74.644 million) of derecognised trade receivables were being held by third parties. For clarity, the group trade receivables securitisation facility, noted above, has terms which does not allow the group to derecognise these trade receivables.

31. Financial risk management and financial instruments (continued)

The following are the contractual maturities of the group's financial liabilities:

Consolidated 2019	Carrying amount \$000	Contractual cash flows \$000	Less than 1 year \$000	1-2 years \$000	More than 2 years \$000
Non-derivative financial liabilities	\$000	\$000	\$000	\$000	\$000
Bank overdrafts					
	1,231,137	1 0 01 1 0 7	1,220,079		
Trade and other payables	, ,	1,231,137			11,039
Bank loans - secured	806,917	836,090	405,081	7,185	423,824
Bank loans – unsecured	174,654	189,310	120,397	10,094	58,819
Brazil unsecured notes	77,122	91,234	7,095	84,139	-
Senior unsecured notes	689,605	967,170	39,652	39,652	887,866
Other loans – unsecured	4,723	4,723	1,342	3,381	-
Finance lease liabilities – secured	12,852	93,638	1,628	1,906	90,104
Derivative financial liabilities					
Derivatives used for hedging:					
Outflow	-	-			
Inflow	-	-	_	_	_
Other derivative contracts:					
Outflow	1,182	460,120	460,120	_	_
Inflow	_	(456,546)	(456,546)	_	_
Derivative financial assets					
Derivatives used for hedging:					
Outflow					
Inflow					
Other derivative contracts:					
Outflow		649,811	649,811		
Inflow	(3,829)	(657,546)	(657,546)		
1111000	2,994,363	3,409,141	1,791,113	146,376	1,471,652
Consolidated 2018	Carrying amount \$000	Contractual cash flows \$000	Less than 1 year \$000	1-2 years \$000	More than 2 years \$000
Non-derivative financial liabilities					
Bank overdrafts	7,357	7,357	7,357	_	_
Trade and other payables	1,139,046	1,139,046	1,128,246	14	10,786
Bank loans – secured	795,747	825,915	410,035	7,433	408,447
Bank loans – unsecured					
	161,695	174,911	142,212	29,933	2,766
Brazil unsecured notes	161,695 71,610	174,911 92,351	142,212 6,939	29,933 6,939	2,766 78,473
Brazil unsecured notes Senior unsecured notes	161,695 71,610 638,613	174,911 92,351 933,088	142,212 6,939 37,434	29,933 6,939 36,720	2,766 78,473
Brazil unsecured notes	161,695 71,610	174,911 92,351	142,212 6,939	29,933 6,939	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other loans – unsecured Finance lease liabilities – secured	161,695 71,610 638,613 3,559	174,911 92,351 933,088 3,559	142,212 6,939 37,434 1,303	29,933 6,939 36,720 2,256	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other loans – unsecured Finance lease liabilities – secured Derivative financial liabilities	161,695 71,610 638,613 3,559	174,911 92,351 933,088 3,559	142,212 6,939 37,434 1,303	29,933 6,939 36,720 2,256	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other loans – unsecured Finance lease liabilities – secured	161,695 71,610 638,613 3,559	174,911 92,351 933,088 3,559	142,212 6,939 37,434 1,303	29,933 6,939 36,720 2,256	2,766 78,473 858,934 –
Brazil unsecured notes Senior unsecured notes Other loans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow	161,695 71,610 638,613 3,559 12,593	174,911 92,351 933,088 3,559 94,484	142,212 6,939 37,434 1,303	29,933 6,939 36,720 2,256 1,664	2,766 78,473 858,934 –
Brazil unsecured notes Senior unsecured notes Other loans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow	161,695 71,610 638,613 3,559 12,593	174,911 92,351 933,088 3,559 94,484	142,212 6,939 37,434 1,303	29,933 6,939 36,720 2,256 1,664	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other loans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow Other derivative contracts:	161,695 71,610 638,613 3,559 12,593 -	174,911 92,351 933,088 3,559 94,484 - -	142,212 6,939 37,434 1,303 1,640	29,933 6,939 36,720 2,256 1,664	2,766 78,473 858,934 –
Brazil unsecured notes Senior unsecured notes Other loans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow	161,695 71,610 638,613 3,559 12,593	174,911 92,351 933,088 3,559 94,484	142,212 6,939 37,434 1,303	29,933 6,939 36,720 2,256 1,664	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other loans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow Other derivative contracts: Outflow	161,695 71,610 638,613 3,559 12,593 -	174,911 92,351 933,088 3,559 94,484 - - - 523,446	142,212 6,939 37,434 1,303 1,640 - - - 523,446	29,933 6,939 36,720 2,256 1,664 - - -	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other loans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow Other derivative contracts: Outflow Inflow Inflow	161,695 71,610 638,613 3,559 12,593 -	174,911 92,351 933,088 3,559 94,484 - - - 523,446	142,212 6,939 37,434 1,303 1,640 - - - 523,446	29,933 6,939 36,720 2,256 1,664 - - -	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other Ioans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow Other derivative contracts: Outflow Inflow Inflow Derivative financial assets Derivatives used for hedging:	161,695 71,610 638,613 3,559 12,593 - - - 3,024 -	174,911 92,351 933,088 3,559 94,484 - - 523,446 (517,878)	142,212 6,939 37,434 1,303 1,640 - - - 523,446 (517,878)	29,933 6,939 36,720 2,256 1,664 - - - -	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other Ioans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow Other derivative contracts: Outflow Inflow Inflow Derivative financial assets Derivatives used for hedging: Outflow	161,695 71,610 638,613 3,559 12,593 - - - - 3,024 -	174,911 92,351 933,088 3,559 94,484 - - - 523,446	142,212 6,939 37,434 1,303 1,640 - - - 523,446	29,933 6,939 36,720 2,256 1,664 - - - - -	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other Ioans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow Other derivative contracts: Outflow Inflow Derivative financial assets Derivatives used for hedging: Outflow Inflow	161,695 71,610 638,613 3,559 12,593 - - - 3,024 -	174,911 92,351 933,088 3,559 94,484 - - 523,446 (517,878)	142,212 6,939 37,434 1,303 1,640 - - - 523,446 (517,878)	29,933 6,939 36,720 2,256 1,664 - - - -	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other Ioans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow Other derivative contracts: Outflow Inflow Derivatives used for hedging: Outflow Inflow Derivatives used for hedging: Outflow Inflow Other derivative contracts:	161,695 71,610 638,613 3,559 12,593 - - - - - 3,024 - - - - -	174,911 92,351 933,088 3,559 94,484 - - - 523,446 (517,878) - - -	142,212 6,939 37,434 1,303 1,640 - - - 523,446 (517,878) - - -	29,933 6,939 36,720 2,256 1,664 - - - - - - -	2,766 78,473 858,934
Brazil unsecured notes Senior unsecured notes Other Ioans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow Other derivative contracts: Outflow Inflow Derivatives used for hedging: Outflow Inflow Other derivative contracts: Outflow Other derivative contracts: Outflow Other derivative contracts: Outflow	161,695 71,610 638,613 3,559 12,593 - - - - 3,024 - - - - - - - - - - - - - - - - - - -	174,911 92,351 933,088 3,559 94,484 - - - 523,446 (517,878) - - - - - 843,835	142,212 6,939 37,434 1,303 1,640 - - - 523,446 (517,878) - - - - 843,835	29,933 6,939 36,720 2,256 1,664 - - - - -	2,766 78,473 858,934 –
Brazil unsecured notes Senior unsecured notes Other Ioans – unsecured Finance lease liabilities – secured Derivative financial liabilities Derivatives used for hedging: Outflow Inflow Other derivative contracts: Outflow Inflow Derivatives used for hedging: Outflow Inflow Derivatives used for hedging: Outflow Inflow Other derivative contracts:	161,695 71,610 638,613 3,559 12,593 - - - - - 3,024 - - - - -	174,911 92,351 933,088 3,559 94,484 - - - 523,446 (517,878) - - -	142,212 6,939 37,434 1,303 1,640 - - - 523,446 (517,878) - - -	29,933 6,939 36,720 2,256 1,664 - - - - - - -	2,766 78,473 858,934 91,180

31. Financial risk management and financial instruments (continued)

Liquidity risk (continued)

Interest on borrowings is denominated in currencies that match the cash flows generated by the underlying operations of the group. This provides an economic hedge and no derivatives are used to manage the exposure.

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return.

Currency risk

The group uses financial instruments to manage specifically identified foreign currency risk on sales, purchases and borrowings that are denominated in a currency other than the functional currency of the individual group entity. The currencies giving rise to this risk include the US Dollar, the Euro, the British Pound, the Australian Dollar, the New Zealand Dollar and the Brazilian Real. Financial instruments used by the group to manage currency risks include derivative instruments such as foreign exchange contracts, cross currency interest rate swaps and options, and non-derivative instruments such as foreign currency debt instruments. The group designates select financial instruments for hedge accounting where it is deemed appropriate to do so.

On 26 April 2018 the group completed the refinancing of the US\$325m senior unsecured notes due in October 2019. The 2019 notes were redeemed through the issuance of US\$475m senior unsecured notes due in April 2026 as a dual tranche issuance by Nufarm Australia Ltd and Nufarm Americas Inc. Currency risk related to the notes is managed using foreign exchange contracts.

The group uses financial instruments to manage foreign currency translation risk arising from the group's net investments in foreign currency subsidiary entities. These financial instruments are designated as net investment hedges for hedge accounting purposes. No ineffectiveness was recognised from net investment hedges during the reporting periods.

For accounting purposes, the group has not designated any other derivative financial instruments in hedge relationships and all movements in fair value are recognised in profit or loss during the period. The net fair value of derivative financial instruments in the group, not designated as being in a hedge relationship, used as economic hedges of forecast transactions at 31 July 2019 was a \$2.647 million asset (2018: \$2.315 million liability) comprising assets of \$3.829 million (2018: \$5.339 million) and liabilities of \$1.182 million (2018: \$3.024 million).

Exposure to currency risk

The group's exposure to major foreign currency risks at balance date are as follows. The exposures are calculated based on locally reported net foreign currency exposures, and are presented net of open derivative financial instruments. The analysis is performed on the same basis as the previous financial year.

Consolidated 2019	Net by	Net financial assets/(liabilities) – by currency of denomination			
	AUD \$000	USD \$000	Euro \$000	GBP \$000	
Functional currency of group operation					
Australian dollars	_	12,235	9,006	(419)	
US dollars	2,467	_	(187)	(23)	
Euro	(1,358)	6,658	_	4,727	
British pound	(268)	7,905	7,754	-	
Brazilian real	_	(22,964)	_	-	
	841	3,834	16,573	4,285	

31. Financial risk management and financial instruments (continued)

Market risk (continued)

Consolidated 2018	Net financial assets/(liabilities) – by currency of denomination			
	AUD \$000	USD \$000	Euro \$000	GBP \$000
Functional currency of group operation				
Australian dollars	_	37,906	21,682	(1,392)
US dollars	2,447	_	(3)	-
Euro	97	25,836	_	4,625
British pound	(268)	10,533	(6,569)	-
Brazilian real	_	(7,056)	_	-
	2,276	67,219	15,110	3,233

Sensitivity analysis

Based on the aforementioned group's net financial assets/(liabilities) at 31 July 2019, a 1 percent strengthening or weakening of the following currencies at 31 July 2019 would have increased/(decreased) profit or loss by the amounts shown below. This analysis assumes all other variables, including interest rates, remain constant. The analysis is performed on the same basis for 31 July 2018.

	Strengthening Weakening Strengthening			Weakening	
Currency movement	Profit or (loss) after tax 2019 \$000	Profit or (loss) after tax 2019 \$000	Profit or (loss) after tax 2018 \$000	Profit or (loss) after tax 2018 \$000	
1% change in the Australian dollar exchange rate	(138)	140	(388)	391	
1% change in the US dollar exchange rate	172	(170)	503	(498)	
1% change in the Euro exchange rate	46	(45)	(108)	107	
1% change in the GBP exchange rate	(78)	77	(3)	3	
1% change in the BRL exchange rate	161	(159)	49	(49)	

The group's financial asset and liability profile may not remain constant, and therefore these sensitivities should be used with care.

The following significant exchange rates applied during the year:

		Average rate	Reporting date	
AUD	2019	2018	2019	2018
US Dollar	0.715	0.774	0.689	0.744
Euro	0.627	0.648	0.619	0.635
GBP	0.553	0.574	0.564	0.567
BRL	2.761	2.583	2.593	2.793

Interest rate risk

The group's exposure to the risk of changes in market interest rates primarily relates to the group's debt obligations that have floating interest rates. This risk is mitigated by maintaining a level of fixed and floating rate borrowings, as well as the the ability to use derivative financial instruments when deemed appropriate to do so.

The majority of the group's debt is raised under central borrowing programs. The A\$665 million syndicated bank facility and the group trade receivables securitisation facility are considered floating rate facilities. The group completed the refinancing of the existing US\$325m senior unsecured notes due in October 2019 during April 2018. The former notes were refinanced through the issuance of US\$475m senior unsecured notes due in April 2026 with a fixed coupon component.

31. Financial risk management and financial instruments (continued)

Market risk (continued)

Interest rate risk (continued)

Interest rate risk on Nufarm step-up securities

The distribution rate is the average mid-rate for bank bills with a term of six months plus a margin of 3.90% (2018: 3.90%).

Profile

At the reporting date the interest rate profile of the group's interest-bearing financial instruments were:

	C	onsolidated
Carrying amount	2019 \$000	2018 \$000
Variable rate instruments		
Financial assets	81,413	46,165
Financial liabilities	(1,065,803)	(969,870)
	(984,390)	(923,705)
Fixed rate instruments		
Financial assets	_	_
inancial liabilities	(700,070)	(642,337)
	(700,070)	(642,337)

Sensitivity analysis for variable rate instruments

A change of 100 basis points in interest rates at the reporting date would have increased/(decreased) profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant. The sensitivity is calculated on the debt at 31 July 2019. Due to the seasonality of the crop protection business, debt levels can vary during the year. The analysis is performed on the same basis for 31 July 2018.

		Profit or loss
	100bp increase \$000	100bp decrease \$000
2019		
Variable rate instruments	(9,844)	9,844
Total sensitivity	(9,844)	9,844
2018		
Variable rate instruments	(9,237)	9,237
Total sensitivity	(9,237)	9,237

Fair values

All financial assets and financial liabilities, other than derivatives, are initially recognised at the fair value of consideration paid or received, net of transaction costs as appropriate, and subsequently carried at fair value or amortised cost, as indicated in the tables below. Derivatives are initially recognised at fair value on the date the contract is entered into and are subsequently remeasured at their fair value.

The financial assets and liabilities are presented by class in the tables below at their carrying values, which generally approximate to the fair values. In the case of the centrally managed fixed rate debt not swapped to floating rate totalling \$700.070 million (2018: \$642.337 million), the fair value at 31 July 2019 is \$663.238 million (2018: \$618.389 million).

31. Financial risk management and financial instruments (continued)

Consolidated 2019	Note	Carried at fair value through profit or loss \$000	Derivatives used for hedging \$000	Financial assets/ liabilities at amortised cost \$000	Total \$000
Cash and cash equivalents	15	_	_	505,687	505,687
Trade and other receivables excluding derivatives	16	-	_	1,476,899	1,476,899
Forward exchange contracts:					
Assets	16	3,493	-	-	3,493
Liabilities	24	(1,182)	-	-	(1,182)
Interest Rate Swaps:					
Assets	16	336	-	-	336
Liabilities	24	-	-	-	-
Trade and other payables excluding derivatives	24	-	-	(1,231,137)	(1,231,137)
Bank overdraft	15	-	-	-	-
Secured bank loans	25	-	_	(806,917)	(806,917)
Unsecured bank loans	25	-	_	(174,654)	(174,654)
Brazil unsecured notes	25	-	-	(77,122)	(77,122)
Senior unsecured notes	25	-	-	(689,605)	(689,605)
Other loans	25	-	-	(4,723)	(4,723)
Finance leases	25	-	_	(12,852)	(12,852)
		2,647	-	(1,014,424)	(1,011,777)

Consolidated 2018	Note	Carried at fair value through profit or loss \$000	Derivatives used for hedging \$000	Financial assets/ liabilities at amortised cost \$000	Total \$000
Cash and cash equivalents	15	_	_	301,700	301,700
Trade and other receivables excluding derivatives	16	_	_	1,303,137	1,303,137
Forward exchange contracts:					
Assets	16	2,500	_	-	2,500
Liabilities	24	(3,024)	_	_	(3,024)
Interest Rate Swaps:					
Assets	16	2,839	_	_	2,839
Liabilities	24	_	-	-	_
Trade and other payables excluding derivatives	24	_	_	(1,139,046)	(1,139,046)
Bank overdraft	15	_	_	(7,357)	(7,357)
Secured bank loans	25	_	_	(795,747)	(795,747)
Unsecured bank loans	25	_	_	(161,695)	(161,695)
Brazil unsecured notes	25	_	_	(71,610)	(71,610)
Senior unsecured notes	25	_	_	(638,613)	(638,613)
Other loans	25	_	_	(3,559)	(3,559)
Finance leases	25	_	_	(12,593)	(12,593)
		2,315	_	(1,225,383)	(1,223,068)

31. Financial risk management and financial instruments (continued)

Fair values (continued)

Fair value hierarchy

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices); and
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Consolidated 2019	Level 1 \$000	Level 2 \$000	Level 3 \$000	Total \$000
Derivative financial assets	-	3,829	_	3,829
	-	3,829	-	3,829
Derivative financial liabilities	-	(1,182)	-	(1,182)
	_	(1,182)	_	(1,182)

Consolidated 2018	Level 1 \$000	Level 2 \$000	Level 3 \$000	Total \$000
Derivative financial assets	_	5,339	_	5,339
	-	5,339	-	5,339
Derivative financial liabilities	_	(3,024)	_	(3,024)
	_	(3,024)	_	(3,024)

There have been no transfers between levels in either 2019 or 2018.

Valuation techniques used to derive fair values

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Specific valuation techniques used to value financial instruments include:

- The use of quoted market prices or dealer quotes for similar instruments.
- The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves.
- The fair value of forward foreign exchange contracts is determined using forward exchange rates at the balance sheet date.
- Other techniques, such as discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

31. Financial risk management and financial instruments (continued)

Capital management

The Board's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board of Directors monitors the group's return on funds employed (ROFE). Return is calculated on the group's earnings before interest and tax and adjusted for any material items. Funds employed is defined as shareholder's funds plus total interest bearing debt. The Board of Directors determines the level of dividends to ordinary shareholders and reviews the group's total shareholder return with similar groups.

The Board believes ROFE is an appropriate performance condition as it ensures management is focused on the efficient use of capital and the measure remains effective regardless of the mix of equity and debt, which may change from time to time. ROFE objectives are set by the Board at the beginning of each year. There is a target and a stretch hurdle. These numbers will based on the budget and growth strategy. The ROFE return for the year ended 31 July 2019 was 7.1 per cent (2018: 9.4 per cent).

There were no changes in the group's approach to capital management during the year.

32. Operating leases

Non-cancellable operating lease rentals are payable as follows:

		Consolidated
	2019 \$000	2018 \$000
Not later than one year	27,218	13,036
Later than one year but not later than two years	22,269	10,583
Later than two years but not later than five years	33,875	19,000
Later than five years	158,129	139,440
	241,491	182,059

Operating leases are generally entered to access the use of shorter term assets such as motor vehicles, mobile plant and office equipment. Rentals are fixed for the duration of these leases. There is a small number of leases for office properties. These rentals have regular reviews based on market rentals at the time of review.

33. Capital commitments

The group had contractual obligations to purchase plant and equipment for \$22.064 million at 31 July 2019 (2018: \$5.394 million).

The group has agreed to make capital contributions in proportion to its interest in the Leshan Nong Fu Trading Co., Ltd joint venture to make up any losses if required or at the latest within five years after incorporation, up to a maximum of RMB 100 million. Also refer to note 19.

34. Contingencies

The directors are of the opinion that provisions are not required in respect of the following matters, as it is not probable that a future sacrifice of economic benefits will be required or the amount is not capable of reliable measurement.

	Co	onsolidated
	2019 \$000	2018 \$000
Environmental guarantee given to the purchaser of land and buildings at Genneviliers for EUR 8.5 million.	13,732	13,386
Insurance bond for EUR 2.789 million established to make certain capital expenditures at Gaillon plant in France.	4,506	4,393
Brazilian taxation proceedings	20,546	31,554
Brazilian taxation proceedings – hedge costs deductibility	8,537	8,874
Brazilian taxation proceedings – goodwill deductibility	29,615	29,739
Other bank guarantees	221	219
Contingent liabilities	77,157	88,165

Obligations may arise in the future due to currently unknown lawsuits and claims including those pertaining to product liability, safety and health, environmental and tax matters which may be instituted or asserted against the group. While the amounts claimed may be substantial, the ultimate liability cannot now be determined because of the considerable uncertainties that existed at balance date. Nonetheless, it is possible that results of Nufarm's operations or liquidity in a particular period could be materially affected by such claims.

Brazilian taxation proceedings

As at 31 July 2019, the total contingent liability relating to future potential tax liabilities (excluding the goodwill and hedge cases) in Brazil is \$20.546 million (2018: \$31.554 million). The group considers that it is not probable that a liability will arise in respect of these cases and it continues to defend the cases.

Brazilian taxation proceedings - goodwill deductibility

The Brazilian tax authorities are challenging the validity of goodwill deductions, in respect of certain years, arising from Nufarm's acquisition of Agripec (now known as Nufarm Brazil).

There are six levels of Brazilian courts (3 levels of administrative court and 3 levels of judicial court), and Brazilian tax disputes can take 10-15 years to be settled. This dispute has been ongoing since 2013, during which period the following events have occurred:

- 2014 unfavourable decision at first level of administrative court
- 2017 favourable decision at second level of administrative court
- 2018 unfavourable decision at third level of administrative court

The contingent liability has been estimated based on assessments received. Nufarm considers that it is not probable that a liability will arise in respect of these assessments. It is possible that further assessments could be received in future periods.

34. Contingencies (continued)

Brazilian taxation proceedings - hedge costs deductibility

The Brazilian tax authorities are challenging the deductibility of hedge costs incurred in 2008. Nufarm received unfavourable decisions at the first and second levels of administrative court, but considers that it is not probable that a liability will arise in respect of this matter. The contingent liability has been estimated based on an assessment received.

In the event any of the contingent Brazilian tax obligations crystallise, it will result in a tax asset write-off and the tax liability will be settled using a combination of remaining recognised and unrecognised tax assets (refer note 18) and/or cash.

Contingent asset

The group holds a contingent asset in respect of potential pre-acquisition tax credits of its Brazilian business acquired in 2007. Whilst the credits are deemed to be valid, the Brazilian courts are currently deliberating the value of the credits and therefore the full amount of this contingent asset is yet to be established. Such credits can be used to offset future federal tax payable.

35. Group entities

		Place of	Percentage of sh	ares held
	Notes	incorporation	2019	2018
Parent entity				
Nufarm Limited – ultimate controlling entity				
Subsidiaries				
Access Genetics Pty Ltd	(a)	Australia	100	100
Agcare Biotech Pty Ltd	(a)	Australia	100	100
Agchem Receivables Corporation		USA	100	100
Agryl Holdings Limited	(a)	Australia	100	100
Agtrol International SE DE CV		Mexico	100	100
Ag-seed Research Pty Ltd	(a)	Australia	100	100
Ag-turf SA DE CV		Mexico	100	100
AH Marks (New Zealand) Limited		New Zealand	100	100
AH Marks Australia Pty Ltd	(a)	Australia	100	100
AH Marks Holdings Limited		United Kingdom	100	100
AH Marks Pensions Scottish Limited Partnership		United Kingdom	100	100
Artfern Pty Ltd	(a)	Australia	100	100
Atlantica Sementes SA		Brazil	100	100
Australis Services Pty Ltd	(a)	Australia	100	100
Bestbeech Pty Ltd	(a)	Australia	100	100
Chemicca Limited	(a)	Australia	100	100
CNG Holdings BV		Netherlands	100	100
Crop Care Australasia Pty Ltd	(a)	Australia	100	100
Crop Care Holdings Limited		New Zealand	100	100
Croplands Equipment Limited		New Zealand	100	100
Croplands Equipment Pty Ltd	(a)	Australia	100	100
Danestoke Pty Ltd	(a)	Australia	100	100
Edgehill Investments Pty Ltd	(a)	Australia	100	100
Fchem (Aust) Limited	(a)	Australia	100	100
Fernz Canada Limited		Canada	100	100
Fidene Limited		New Zealand	100	100

35. Group entities (continued)

	Notes	Place of	Percentage of sh	ares held
		incorporation	2019	2018
First Classic Pty Ltd	(a)	Australia	100	100
Frost Technology Corporation		USA	100	100
Greenfarm Hellas Trade of Chemical Products SA		Greece	100	100
Growell Limited		United Kingdom	100	100
Grupo Corporativo Nufarm SA		Guatemala	100	100
Laboratoire European de Biotechnologie s.a.s		France	100	100
Le Moulin des Ecluses s.a		France	100	100
Lefroy Seeds Pty Ltd	(a)	Australia	100	100
Manaus Holdings Sdn Bhd		Malaysia	100	100
Marman (Nufarm) Inc		USA	100	100
Marman de Guatemala Sociedad Anomima		Guatemala	100	100
Marman de Mexico Sociedad Anomima De Capital Variable		Mexico	100	100
Marman Holdings LLC		USA	100	100
Masmart Pty Ltd	(a)	Australia	100	100
Mastra Corporation Pty Ltd	(a)	Australia	100	100
Mastra Corporation Sdn Bhd		Malaysia	100	100
Mastra Corporation USA Pty Ltd	(a)	Australia	100	100
Mastra Holdings Sdn Bhd		Malaysia	100	100
Mastra Industries Sdn Bhd		Malaysia	100	100
Medisup Securities Limited	(a)	Australia	100	100
NF Agriculture Inc		USA	100	100
Nufarm Africa SARL AU		Morocco	100	100
Nufarm Agriculture (Pty) Ltd		South Africa	100	100
Nufarm Agriculture Inc		Canada	100	100
Nufarm Agriculture Zimbabwe (Pvt) Ltd		Zimbabwe	100	100
Nufarm Americas Holding Company		USA	100	100
Nufarm Americas Inc		USA	100	100
Nufarm Asia Sdn Bhd		Malaysia	100	100
Nufarm Australia Limited	(a)	Australia	100	100
Nufarm Bulgaria		Bulgaria	100	100
Nufarm BV		Netherlands	100	100
Nufarm Canada Receivables Partnership		Canada	100	100
Nufarm Chemical (Shanghai) Co Ltd		China	100	100
Nufarm Chile Limitada		Chile	100	100
Nufarm Colombia S.A.		Colombia	100	100
Nufarm Crop Products UK Limited		United Kingdom	100	100
Nufarm Cropcare Private Limited		India	100	100
Nufarm Costa Rica Inc. SA		Costa Rica	100	100
Nufarm de Guatemala SA		Guatemala	100	100
Nufarm de Mexico Sa de CV		Mexico	100	100
Nufarm de Panama SA		Panama	100	100
Nufarm de Venezuela SA		Venezuela	100	100
Nufarm del Ecuador SA		Ecuador	100	100
Nufarm Deutschland GmbH		Germany	100	100
Nufarm do Brazil Ltda		Brazil	100	100

Notes Incorportion 2019 2018 Nutarm Europe GmbH Germany 100 100 Nutarm Europe GmbH Germany 100 100 Nutarm Europe GmbH Quart Australia 100			,	Place of	Percentage of sh	ares held
Nufarm Europe GmbH Germany 100 100 Nufarm Finance inc USA 100 – Nufarm Finance inc USA 100 – Nufarm Finance inc USA 100 – Nufarm Finance inc USA 100 100 Nufarm GmbH Austria 100 100 Nufarm GmbH Austria 100 100 Nufarm Mobing N2L Limited New Zeolond 100 100 Nufarm Holdings N2L France 100 100 Nufarm Holdings S J. France 100 100 Nufarm Holdings S J. France 100 100 Nufarm Hungaria KII Hungary 100 100 Nufarm Inc USA 100 100 Nufarm Insurance Pt Id Singapore 100 100 Nufarm Investments Cooperate WA Netherlands 100 100 Nufarm Investments Pty Lid Austraia 100 100 100 Nufarm Investments Pty Lid Austraia		Notes		2019	2018	
Nufarm Finance BV Netherlands - Nufarm Finance Inc USA 100 - Nufarm Finance PN [Lid Australa 100 100 Nufarm Finance PN [Limited New Zealand 100 100 Nufarm GmbH & Ca KG Austral 100 100 Nufarm GmbH & Ca KG Austral 100 100 Nufarm Kabings IV2 Mexico 100 100 Nufarm Holdings CAS France 100 100 Nufarm Holdings SA France 100 100 Nufarm Holdings Cas A France 100 100 Nufarm Inclustings BV Netherlands 100 100 Nufarm Inclusting Culmica e Farmaceutica SA Brazil 100 100 Nufarm Investments Pt Ud Australia 100 100 100 Nufarm Investments Pt Ud Australia 100 100 100 Nufarm Investments Pt Ud Australia 100 100 100 100 100 100 100 100	Nufarm Espana SA		Spain	100	100	
Nufarm Finance Inc USA 100	Nufarm Europe GmbH		Germany	100	100	
Nufarm Finance Pty Ltd Australia 100	Nufarm Finance BV		Netherlands	_	-	
Nufarm Finance (NZ) Limited New Zealand 100 100 Nufarm GmbH Austria 100 100 Nufarm GmbH & Co KG Austria 100 100 Nufarm GmbH & Co KG Austria 100 100 Nufarm Grupo Mexico S DE RL DE CV Mexico 100 100 Nufarm Holdings RJ New Zealand 100 100 Nufarm Holdings RJ Netherlands 100 100 Nufarm Holdings RJ New Zealand 100 100 Nufarm Holdings RJ Hungary 100 100 Nufarm Inc King Kin Hungary 100 100 Nufarm Inc Kinica F farmaceutica SA Brazil 100 100 Nufarm Investments Cooperatie WA Netherlands 100 100 Nufarm Investments Pty Itd Australia 100 100 Nufarm Intela sri Italy 100 100 Nufarm Investments Pty Itd Australia 100 100 Nufarm Intela sri Italy 100 100 N	Nufarm Finance Inc		USA	100	-	
Nufarm GmbH Austria 100 100 Nufarm GmbH & Co KG Austria 100 100 Nufarm GmbH & Co KG Mexico 100 100 Nufarm Holdings IN21 Limited New Zeoland 100 100 Nufarm Holdings S.a.s France 100 100 Nufarm Inc USA 100 100 Nufarm Incustria Quimica e Farmaceutica SA Brazil 100 100 Nufarm Insurance Pie Ltd Singapore 100 100 Nufarm Investments Pty Ltd Australia 100 100 Nufarm Intersements Pty Ltd Australia 100 100 Nufarm Intersements Pty Ltd Australia 100 100 Nufarm Intersements Pty Ltd Malaysia 100 100 Nufarm Intersements Pty Ltd Malaysia 100 100 <	Nufarm Finance Pty Ltd		Australia	100	_	
Nufarm Grupo Mexico S DE RL DE CV Mexico 100 100 Nufarm Holdings (NZ) Limited New Zealand 100 100 Nufarm Holdings BV Netherlands 100 100 Nufarm Holdings S.a.s France 100 100 Nufarm Holdings S.a.s France 100 100 Nufarm Hong Kong Investments Ltd Hong Kong 100 100 Nufarm Inc USA 100 100 Nufarm Industria Quimica e Farmaceulica SA Brazil 100 100 Nufarm Investments Cooperatie WA Netherlands 100 100 Nufarm Moleysia San Bhd Korea 100 100 Nufarm Moleysia San Bhd Malaysia 100 100 Nufarm Moleysia San Bhd New Zealand 100 100 Nufarm Moleysia San Bhd <td< td=""><td>Nufarm Finance (NZ) Limited</td><td></td><td>New Zealand</td><td>100</td><td>100</td></td<>	Nufarm Finance (NZ) Limited		New Zealand	100	100	
Nutarm Grupo Mexico S DE RL DE CV Mexico 100 100 Nutarm Holdings N21 Limited New Zealand 100 100 Nutarm Holdings S a.s France 100 100 Nutarm Holdings S a.s France 100 100 Nutarm Hong Kong Investments Ud Hong Kong 100 100 Nutarm Hungaria KI Hungary 100 100 Nutarm Industria Quimica e Farmaceutica SA Brazil 100 100 Nutarm Industria Quimica e Farmaceutica SA Brazil 100 100 Nutarm Investments Coperatie WA Netherlands 100 100 Nutarm Investments Pt Ud Australia 100 - Nutarm Italia sri Italy 100 100 Nutarm KK Japan 100 100 Nutarm Imited United Kingdom 100 100 Nutarm Materials Limited (a) Australia 100 100 Nutarm KK Japan 100 100 100 100 Nutarm KKa Ja	Nufarm GmbH		Austria	100	100	
Nutarm Holdings IN2) Limited New Zealand 100 100 Nutarm Holdings & V Netherlands 100 100 Nutarm Holdings & a.s France 100 100 Nutarm Holdings & a.s France 100 100 Nutarm Holdings & Gong Investments Ltd Hong Kong 100 100 Nutarm Houdings & Gong Investments Ltd Hungary 100 100 Nutarm Inc USA 100 100 Nutarm Industria Quimica e Farmaceutica SA Brazili 100 100 Nutarm Investments Cooperatie WA Netherlands 100 100 Nutarm Investments Cooperatie WA Netherlands 100 100 Nutarm Killia sri Italy 100 100 100	Nufarm GmbH & Co KG		Austria	100	100	
Nufarm Holdings BV Netherlands 100 100 Nufarm Holgings a.g. France 100 100 Nufarm Hong Kong Investments IId Hong Kong 100 100 Nufarm Hong Kong Investments IId Hungary 100 100 Nufarm Industria Quimica e Farmaceutica SA Brazil 100 100 Nufarm Investments Cooperatie WA Netherlands 100 100 Nufarm Investments Properatie WA Netherlands 100 100 Nufarm Investments Properatie WA Netherlands 100 100 Nufarm Investments Properatie WA Netherlands 100 100 Nufarm KK Japan 100 100 Nufarm KK Japan 100 100 Nufarm Matoysia San Bhd Malaysia 100 100 Nufarm Middle East Operations Egypt 100 100 Nufarm Middle East Operations Egypt 100 100 Nufarm Parsons General Partmer Ltd United Kingdom 100 100 Nufarm Parsons General Partmer Ltd <td>Nufarm Grupo Mexico S DE RL DE CV</td> <td></td> <td>Mexico</td> <td>100</td> <td>100</td>	Nufarm Grupo Mexico S DE RL DE CV		Mexico	100	100	
Nufarm Holig S.g.a.s France 100 100 Nufarm Hong Kong Investments Ltd Hong Kong 100 100 Nufarm Hungaria Kft Hungary 100 100 Nufarm Inc USA 100 100 Nufarm Investments Cooperatie WA Netherlands 100 100 Nufarm Investments Pty Ltd Australia 100 100 Nufarm Korea ttd Korea 100 100 Nufarm Morea ttd Malaysia 100 100 Nufarm Materials Limited (a) Australia 100 100 <	Nufarm Holdings (NZ) Limited		New Zealand	100	100	
Nufarm Hong Kong 100 100 Nufarm Hungaria Kft Hungary 100 100 Nufarm Inc USA 100 100 Nufarm Inclustria Quimica e Farmaceutica SA Brazil 100 100 Nufarm Industria Quimica e Farmaceutica SA Brazil 100 100 Nufarm Investments Cooperatile WA Netherlands 100 100 Nufarm Investments Pty Ltd Australia 100 100 Nufarm Krea Japan 100 100 Nufarm Maloxyla Sdn Btd Maloxyla 100 100 Nufarm Malokyla Sdn Btd Maloxyla 100	Nufarm Holdings BV		Netherlands	100	100	
Nufarm Hungaria Kff Hungary 100 100 Nufarm Inc USA 100 100 Nufarm Industria Quinlea e Farmaceutica SA Brazil 100 100 Nufarm Insurance Ple Itd Singapore 100 100 Nufarm Investments Cooperatie WA Netherlands 100 100 Nufarm Investments Pty Itd Australia 100 - Nufarm KK Japan 100 100 Nufarm Malaysia Sah Bhd Malaysia 100 100 Nufarm Malaysia Sah Bhd Malaysia 100 100 Nufarm Midule East Operations Egypt 100 100 Nufarm Malaysia Sah Bhd New Zealand 100 100 Nufarm Malaysia Sah Bhd New Zealand 100 100 Nufarm Paresions Sceneral Partner Ltd <td>Nufarm Holdings s.a.s</td> <td></td> <td>France</td> <td>100</td> <td>100</td>	Nufarm Holdings s.a.s		France	100	100	
Nufarm Inc USA 100 100 Nufarm Industria Quimica e Farmaceutica SA Brazil 100 100 Nufarm Insurance Pte Ltd Singapore 100 100 Nufarm Investments Cooperatie WA Netherlands 100 100 Nufarm Investments Cooperatie WA Netherlands 100 Nufarm Investments Pty Ltd Australia 100 Nufarm Itelia sri Italy 100 100 Nufarm Korea Ltd Korea 100 100 Nufarm Libuan Pte Ltd Malaysia 100 100 Nufarm Materials Limiled (a) Australia 100 100 Nufarm Materials Limiled (a) Australia 100 100 Nufarm Middle East Operations Egypt 100 100 100 Nufarm Pensions General Partner Ltd United Kingdom 100 100 Nufarm Pensions Scottish Limited Partnership United Kingdom 100 100 Nufarm Resions Scottish Limited Partnership United Kingdom 100	Nufarm Hong Kong Investments Ltd		Hong Kong	100	100	
Nufarm Inc USA 100 100 Nufarm Industria Quimica e Farmaceutica SA Brazil 100 100 Nufarm Insurance Pte Ltd Singapore 100 100 Nufarm Investments Cooperatie WA Netherlands 100 100 Nufarm Investments Cooperatie WA Netherlands 100 Nufarm Investments Pty Ltd Australia 100 Nufarm Itelia sri Italy 100 100 Nufarm Korea Ltd Korea 100 100 Nufarm Libuan Pte Ltd Malaysia 100 100 Nufarm Materials Limiled (a) Australia 100 100 Nufarm Materials Limiled (a) Australia 100 100 Nufarm Middle East Operations Egypt 100 100 100 Nufarm Pensions General Partner Ltd United Kingdom 100 100 Nufarm Pensions Scottish Limited Partnership United Kingdom 100 100 Nufarm Resions Scottish Limited Partnership United Kingdom 100	Nufarm Hungaria Kft		Hungary	100	100	
Nufarm Insurance Ple Ltd Singapore 100 100 Nufarm Investments Cooperatie WA Netherlands 100 100 Nufarm Investments Pty Ltd Australia 100 - Nufarm Italia srl Italy 100 100 Nufarm KK Japan 100 100 Nufarm KK Japan 100 100 Nufarm Labuan Pte Ltd Malaysia 100 100 Nufarm Malaysia Sdn Bhd Malaysia 100 100 Nufarm Malaysia Sdn Bhd Malaysia 100 100 Nufarm Materials Limited (a) Australia 100 100 Nufarm Materials Limited New Zealand 100 100 100 Nufarm Paraguay SA Paraguay 100 100 100 100 100 Nufarm Pensions General Partner Ltd United Kingdom 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100	Nufarm Inc			100	100	
Nufarm Investments Cooperatie WANetherlands100100Nufarm Investments Pty LtdAustralia100-Nufarm Investments Pty LtdAustralia100100Nufarm KJapan100100Nufarm Korea LtdKorea100100Nufarm Labuan Pte LtdMalaysia100100Nufarm Malaysia San BhdMalaysia100100Nufarm Malaysia San BhdMalaysia100100Nufarm Malaysia San BhdMalaysia100100Nufarm Middle East OperationsEgypt100100Nufarm NZ Limited(a)Australia100100Nufarm Paraguay SAParaguay100100Nufarm Persions General Partner LtdUnited Kingdom100100Nufarm Poiska SP.2.O.Peru100100Nufarm Poiska SP.2.O.Portugal100100Nufarm Roish S.C.O.Portugal100100Nufarm Sa.sFrance100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Services Sardi BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Services Sardi BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USANew Zealand	Nufarm Industria Quimica e Farmaceutica SA		Brazil	100	100	
Nufarm Investments Pty Ltd Australia 100 - Nufarm Italia sri Italy 100 100 Nufarm KK Japan 100 100 Nufarm Korea Ltd Korea 100 100 Nufarm Labuan Pte Ltd Malaysia 100 100 Nufarm Labuan Pte Ltd Malaysia 100 100 Nufarm Malaysia Sdn Bhd Malaysia 100 100 Nufarm Malaysia Sdn Bhd Malaysia 100 100 Nufarm Midle East Operations Egypt 100 100 Nufarm NZ Limited New Zealand 100 100 Nufarm Paraguay SA Paraguay 100 100 Nufarm Pensions General Partner Ltd United Kingdom 100 100 Nufarm Pensions Scottish Limited Partnership United Kingdom 100 100 Nufarm Polska SPZ O.O Poland 100 100 100 Nufarm Polska SPZ O.O Poland 100 100 100 100 100 100 100 100	Nufarm Insurance Pte Ltd		Singapore	100	100	
Nufarm Investments Pty LtdAustralia100-Nufarm Italia sriItaly100100Nufarm Italia sriItaly100100Nufarm KKJapan100100Nufarm Korea LtdMalaysia100100Nufarm Labuan Pte LtdMalaysia100100Nufarm LimitedUnited Kingdom100100Nufarm Malaysia Sdn BhdMalaysia100100Nufarm Materials Limited(a)Australia100100Nufarm Middle East OperationsEgypt100100Nufarm Paraguay SAParaguay100100Nufarm Pensions General Partner LtdUnited Kingdom100100Nufarm Pensions Scottish Limited PartnershipUnited Kingdom100100Nufarm Polska SPZ O.OPoland100100Nufarm Romania SRLRomania100100Nufarm Sa sFrance100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Services San BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USANew Zealand	Nufarm Investments Cooperatie WA		Netherlands	100	100	
Nufarm Italia srl Italy 100 100 Nufarm KK Japan 100 100 Nufarm Korea Ltd Korea 100 100 Nufarm Labuan Ple Ltd Malaysia 100 100 Nufarm Malaysia Sah Bhd Malaysia 100 100 Nufarm Malaysia Sah Bhd Malaysia 100 100 Nufarm Malerials Limited (a) Australia 100 100 Nufarm Malerials Limited (a) Australia 100 100 Nufarm Malerials Limited (a) Australia 100 100 Nufarm Malerials Limited New Zealand 100 100 Nufarm Paraguay SA Paraguay 100 100 Nufarm Pensions General Partner Ltd United Kingdom 100 100 Nufarm Peru SAC Per 100 100 100 Nufarm Portugal LDA Portugal 100 100 100 Nufarm Romania SRL Romania 100 100 100 Nufarm SA			Australia	100	_	
Nufarm Korea LtdKorea100100Nufarm Labuan Pte LtdMalaysia100100Nufarm LimitedUnited Kingdom100100Nufarm Malaysia Sdn BhdMalaysia100100Nufarm Malaysia Sdn BhdMalaysia100100Nufarm Materials Limited(a)Australia100100Nufarm Midale East OperationsEgypt100100Nufarm Midale East OperationsEgypt100100Nufarm Paraguay SAParaguay100100Nufarm Pensions General Partner LtdUnited Kingdom100100Nufarm Pensions Scottish Limited PartnershipUnited Kingdom100100Nufarm Portugal LDAPeru100100100Nufarm Portugal LDAPortugal100100100Nufarm Sa SaFrance100100100Nufarm Sa SaFrance100100100Nufarm Sa Sa SaFrance100100100Nufarm Sa SaArgentina100100100Nufarm Sa Sa SaFrance100100100Nufarm Sa SaArgentina100100100Nufarm Sa Sa MbdMalaysia100100100Nufarm Sa Sa MbdMalaysia100100100Nufarm Sarus Sa SaFrance100100100Nufarm Sarus Sa MbdMalaysia100100100Nufarm Services (Singapore) Pte LtdSingapore			Italy	100	100	
Nufarm Korea LtdKorea100100Nufarm Labuan Pte LtdMalaysia100100Nufarm LimitedUnited Kingdom100100Nufarm Malaysia San BhdMalaysia100100Nufarm Materials Limited(a)Australia100100Nufarm Materials Limited(a)Australia100100Nufarm Middle East OperationsEgypt100100Nufarm Paraguay SAParaguay100100Nufarm Pensions General Partner LtdUnited Kingdom100100Nufarm Pensions Scottish Limited PartnershipUnited Kingdom100100Nufarm Polska SP.Z O.OPortugal100100Nufarm Polska SP.Z O.OPortugal100100Nufarm SasaFrance100100Nufarm SasaFrance100100Nufarm SasaFrance100100Nufarm SasaSingapore100100Nufarm SasaSwitzerland100100Nufarm SasaSwitzerland100100Nufarm SasaSwitzerland100100Nufarm SasaNew Zealand100100Nufarm SasaSwitzerland100100Nufarm SasaNew Zealand100100Nufarm Fachologies USA Pty Ltd(a)Australia100Nufarm Technologies USA Pty Ltd(a)Australia100Nufarm Technologies USA Pty Ltd(a)Australia100Nufarm	Nufarm KK		Japan	100	100	
Nufarm Limited United Kingdom 100 100 Nufarm Malaysia Sdn Bhd Malaysia 100 100 Nufarm Materials Limited (a) Australia 100 100 Nufarm Materials Limited (a) Australia 100 100 Nufarm Materials Limited (a) Australia 100 100 Nufarm Materials Limited Egypt 100 100 100 Nufarm Paraguay SA Paraguay 100 100 100 Nufarm Pensions General Partner Ltd United Kingdom 100 100 100 Nufarm Peru SAC Peru 100 <td>Nufarm Korea Ltd</td> <td></td> <td>•</td> <td>100</td> <td>100</td>	Nufarm Korea Ltd		•	100	100	
Nufarm Limited United Kingdom 100 100 Nufarm Malaysia Sdn Bhd Malaysia 100 100 Nufarm Materials Limited (a) Australia 100 100 Nufarm Materials Limited (a) Australia 100 100 Nufarm Materials Limited (a) Australia 100 100 Nufarm Materials Limited Egypt 100 100 100 Nufarm Paraguay SA Paraguay 100 100 100 Nufarm Pensions General Partner Ltd United Kingdom 100 100 100 Nufarm Peru SAC Peru 100 <td>Nufarm Labuan Pte Ltd</td> <td></td> <td>Malaysia</td> <td>100</td> <td>100</td>	Nufarm Labuan Pte Ltd		Malaysia	100	100	
Nufarm Malaysia Sdn Bhd Malaysia 100 100 Nufarm Materials Limited (a) Australia 100 100 Nufarm Materials Limited (a) Australia 100 100 Nufarm Middle East Operations Egypt 100 100 Nufarm Nz Limited New Zealand 100 100 Nufarm Paraguay SA Paraguay 100 100 Nufarm Pensions General Partner Ltd United Kingdom 100 100 Nufarm Pensions Scottish Limited Partnership United Kingdom 100 100 Nufarm Ports SAC Peru 100 100 Nufarm Polska SPZ O.O Poland 100 100 Nufarm Romania SRL Romania 100 100 Nufarm Sa.s France 100 100 Nufarm Services (Singapore) Pte Ltd Singapore 100 100 Nufarm Services Sch Bhd Malaysia 100 100 Nufarm Services Sch Bhd Malaysia 100 100 Nufarm Technologies (M) Sch Bhd	Nufarm Limited			100	100	
Nufarm Materials Limited(a)Australia100100Nufarm Middle East OperationsEgypt100100Nufarm NZ LimitedNew Zealand100100Nufarm Paraguay SAParaguay100100Nufarm Pensions General Partner LtdUnited Kingdom100100Nufarm Pensions Scottish Limited PartnershipUnited Kingdom100100Nufarm Peru SACPeru100100Nufarm Polska SPZ O.OPoland100100Nufarm Romania SRLRomania100100Nufarm Sa.sFrance100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Suise SarlSwitzerland100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Technologies USA Pty Ltd(a)Australia100100N	Nufarm Malaysia Sdn Bhd			100	100	
Nufarm NZ LimitedNew Zealand100100Nufarm Paraguay SAParaguay100100Nufarm Pensions General Partner LtdUnited Kingdom100100Nufarm Pensions Scottish Limited PartnershipUnited Kingdom100100Nufarm Peru SACPeru100100Nufarm Polska SP.Z O.OPoland100100Nufarm Polska SP.Z O.OPoland100100Nufarm Portugal LDAPortugal100100Nufarm SARomania100100Nufarm SAArgentina100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Suisse SarlSwitzerland100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100	· · · · · · · · · · · · · · · · · · ·	(a)		100	100	
Nufarm NZ LimitedNew Zealand100100Nufarm Paraguay SAParaguay100100Nufarm Pensions General Partner LtdUnited Kingdom100100Nufarm Pensions Scottish Limited PartnershipUnited Kingdom100100Nufarm Peru SACPeru100100Nufarm Polska SP.Z O.OPoland100100Nufarm Polska SP.Z O.OPoland100100Nufarm Romania SRLRomania100100Nufarm SAArgentina100100Nufarm SaFrance100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100	Nufarm Middle East Operations		Egypt	100	100	
Nufarm Pensions General Partner LtdUnited Kingdom100100Nufarm Pensions Scottish Limited PartnershipUnited Kingdom100100Nufarm Peru SACPeru100100Nufarm Peru SACPeru100100Nufarm Polska SP.Z O.OPoland100100Nufarm Portugal LDAPortugal100100Nufarm Romania SRLRomania100100Nufarm Sa.sFrance100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Suisse SarlSwitzerland100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100				100	100	
Nufarm Pensions Scottish Limited PartnershipUnited Kingdom100100Nufarm Peru SACPeru100100Nufarm Platte Pty Ltd(a)Australia100100Nufarm Polska SP.Z O.OPoland100100100Nufarm Portugal LDAPortugal100100100Nufarm Romania SRLRomania100100100Nufarm S.a.sFrance100100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Suisse SarlSwitzerland100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USA(a)Australia100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100	Nufarm Paraguay SA		Paraguay	100	100	
Nufarm Pensions Scottish Limited PartnershipUnited Kingdom100100Nufarm Peru SACPeru100100Nufarm Peru SACPeru100100Nufarm Platte Pty Ltd(a)Australia100100Nufarm Polska SP.Z O.OPoland100100Nufarm Portugal LDAPortugal100100Nufarm Romania SRLRomania100100Nufarm S.a.sFrance100100Nufarm SAArgentina100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Suisse SarlSwitzerland100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100	Nufarm Pensions General Partner Ltd		United Kingdom	100	100	
Nufarm Peru SAC Peru 100 100 Nufarm Platte Pty Ltd (a) Australia 100 100 Nufarm Polska SP.Z O.O Poland 100 100 100 Nufarm Polska SP.Z O.O Poland 100 100 100 Nufarm Portugal LDA Portugal 100 100 100 Nufarm Romania SRL Romania 100 100 100 Nufarm S.a.s France 100 100 100 Nufarm Services (Singapore) Pte Ltd Singapore 100 100 Nufarm Services Sdn Bhd Malaysia 100 100 Nufarm Services Sdn Bhd Malaysia 100 100 Nufarm Services Sdn Bhd Malaysia 100 100 Nufarm Technologies (M) Sdn Bhd Malaysia 100 100 Nufarm Technologies USA New Zealand 100 100 Nufarm Technologies USA Pty Ltd (a) Australia 100 100 Nufarm Treasury Pty Ltd (a) Australia 100<	Nufarm Pensions Scottish Limited Partnership		¥	100	100	
Nufarm Platte Pty Ltd (a) Australia 100 100 Nufarm Polska SP.Z O.O Poland 100 100 100 Nufarm Polska SP.Z O.O Poland 100 100 100 Nufarm Polska SP.Z O.O Portugal 100 100 100 Nufarm Portugal LDA Portugal 100 100 100 Nufarm Romania SRL Romania 100 100 100 Nufarm s.a.s France 100 100 100 Nufarm SA Argentina 100 100 100 Nufarm Services (Singapore) Pte Ltd Singapore 100 100 Nufarm Services Sdn Bhd Malaysia 100 100 Nufarm Technologies (M) Sdn Bhd Malaysia 100 100 Nufarm Technologies USA New Zealand 100 100 Nufarm Technologies USA Pty Ltd (a) Australia 100 100 Nufarm Treasury Pty Ltd (a) Australia 100 100 Nufarm Turkey Import & Trade of				100	100	
Nufarm Polska SP.Z O.OPoland100100Nufarm Portugal LDAPortugal100100Nufarm Romania SRLRomania100100Nufarm s.a.sFrance100100Nufarm SAArgentina100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Services Sdn BhdMalaysia100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100Nufarm Turkey100100100	Nufarm Platte Pty Ltd	(a)	Australia		100	
Nufarm Romania SRLRomania100100Nufarm S.a.sFrance100100Nufarm SAArgentina100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Services Sdn BhdMalaysia100100Nufarm Suisse SarlSwitzerland100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100			Poland	100	100	
Nufarm Romania SRLRomania100100Nufarm S.a.sFrance100100Nufarm SAArgentina100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Services Sdn BhdMalaysia100100Nufarm Suisse SarlSwitzerland100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100	Nufarm Portugal LDA		Portugal	100	100	
Nufarm SAArgentina100100Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Services Sdn BhdMalaysia100100Nufarm Suisse SarlSwitzerland100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100			-	100	100	
Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Services Sdn BhdMalaysia100100Nufarm Suisse SarlSwitzerland100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100	Nufarm s.a.s		France	100	100	
Nufarm Services (Singapore) Pte LtdSingapore100100Nufarm Services Sdn BhdMalaysia100100Nufarm Suisse SarlSwitzerland100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100	Nufarm SA		Argentina	100	100	
Nufarm Services Sdn BhdMalaysia100100Nufarm Suisse SarlSwitzerland100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100	Nufarm Services (Singapore) Pte Ltd		-	100	100	
Nufarm Suisse SarlSwitzerland100100Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100				100	100	
Nufarm Technologies (M) Sdn BhdMalaysia100100Nufarm Technologies USANew Zealand100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100	Nufarm Suisse Sarl			100		
Nufarm Technologies USANew Zealand100100Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100			Malaysia	100	100	
Nufarm Technologies USA Pty Ltd(a)Australia100100Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100						
Nufarm Treasury Pty Ltd(a)Australia100100Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100		(a)				
Nufarm Turkey Import & Trade of Chemical Products LLPTurkey100100						
		. ,				
	Nufarm UK Limited		United Kingdom	100	100	

35. Group entities (continued)

		Place of	Percentage of shares held	
	Notes	incorporation	2019	2018
Nufarm Ukraine LLC		Ukraine	100	100
Nufarm Uruguay SA		Uruguay	100	100
Nufarm USA Inc		USA	100	100
Nugrain Pty Ltd	(a)	Australia	100	100
Nuseed Americas Inc		USA	100	100
Nuseed Canada Inc		Canada	100	100
Nuseed Europe Holding Company Ltd		United Kingdom	100	100
Nuseed Europe Ltd		United Kingdom	100	100
Nuseed Global Holdings Pty Ltd	(a)	Australia	100	100
Nuseed Global Innovation		United Kingdom	100	100
Nuseed Holding Company		USA	100	100
Nuseed International Holdings Pty Ltd	(a)	Australia	100	100
Nuseed Mexico SA De CV		Mexico	100	100
Nuseed Omega Holdings Pty Ltd	(a)	Australia	100	100
Nuseed Pty Ltd	(a)	Australia	100	100
Nuseed Russia LLC		Russia	100	100
Nuseed SA		Argentina	100	100
Nuseed Serbia d.o.o.		Serbia	100	100
Nuseed South America Sementes Ltda		Brazil	100	100
Nuseed Ukraine LLC		Ukraine	100	100
Nuseed Uruguay		Uruguay	100	100
Nutrihealth Grains Pty Ltd	(a)	Australia	100	100
Nutrihealth Pty Ltd	(a)	Australia	100	100
Opti-Crop Systems Pty Ltd		Australia	75	75
Pharma Pacific Pty Ltd	(a)	Australia	100	100
PT Agrow		Indonesia	100	100
PT Crop Care		Indonesia	100	100
PT Nufamindo Agro Mukmur		Indonesia	100	100
PT Nufarm Indonesia		Indonesia	100	100
Richardson Seeds Ltd		USA	100	100
Seeds 2000 Argentina SRL		Argentina	100	100
Selchem Pty Ltd	(a)	Australia	100	100
Societe Des Ecluses la Garenne s.a.s		France	100	100

(a) These entities have entered into a deed of cross guarantee dated 21 June 2006, varied by an Assumption Deed dated 13 February 2013, 29 May 2013 and 26 July 2019 with Nufarm Limited which provides that all parties to the deed will guarantee to each creditor payment in full of any debt of each company participating in the deed on winding-up of that company. As a result of a class order issued by the Australian Securities and Investment Commission, these companies are relieved from the requirement to prepare financial statements.

36. Parent entity disclosures

		Company	
	2019 \$000	2018 \$000	
Result of the parent entity			
Profit/(loss) for the period	(20,135)	84,758	
Other comprehensive income	518	468	
Total comprehensive profit/(loss) for the period	(19,617)	85,226	
Financial position of the parent entity at year end			
Current assets	1,799,327	1,529,926	
Total assets	2,135,552	1,880,129	
Current liabilities	168,384	171,985	
Total liabilities	167,701	171,301	
Total equity of the parent entity comprising of:			
Share capital	1,834,594	1,537,502	
Reserves	38,342	36,611	
Accumulated losses	(51,671)	(31,536)	
Retained Earnings ^(a)	146,586	166,251	
Total equity	1,967,851	1,219,014	

(a) Retained earnings comprises the transfer of net profit for the year and are characterised as profits available for distribution as dividends in future years. Dividends amounting to \$19.662 million (2018: \$37.795 million) were distributed from the retained earnings during the year.

Parent entity contingencies

The parent entity is one of the guarantors of the senior secured bank facility (SFA) and would be obliged, along with the other guarantors, to make payment on the SFA in the unlikely event of a default by one of the borrowers. The parent entity also provides guarantees to support several of the regional working capital facilities located in Latin America and Europe, and the senior unsecured notes.

Parent entity capital commitments for acquisition of property, plant and equipment

There are no capital commitments for the parent entity in 2019 or 2018.

37. Deed of cross guarantee

Under ASIC Corporations (Wholly owned Companies) Instrument 2016/785, the Australian wholly-owned subsidiaries referred to in note 35 are relieved from the *Corporations Act 2001* requirements for preparation, audit and lodgement of financial reports and director's reports.

It is a condition of the class order that the company and each of the subsidiaries enter into a deed of cross guarantee. The parent entity and all the Australian controlled entities have entered into a deed of cross guarantee dated 21 June 2006 which provides that all parties to the deed will guarantee to each creditor payment in full of any debt of each company participating in the deed on winding-up of that company.

A consolidated income statement and consolidated balance sheet, comprising the company and controlled entities which are a party to the deed, after eliminating all transactions between parties to the deed of cross guarantee, at 31 July 2019 is set out on the following page.

37. Deed of cross guarantee (continued)

S7. Deed of cross goardinee (commund)	Cons	
Summarised income statement and retained profits	2019 \$000	2018 \$000
Profit/(loss) before income tax expense	(64,623)	(111,228)
Income tax expense	831	(15,580)
Net profit attributable to members of the closed group	(63,792)	(126,808)
Retained profits at the beginning of the period	(60,076)	104,527
Adjustment on initial application of AASB 15 (net of tax)	(6,379)	
Adjustment on initial application of AASB 9 (net of tax)	(2,402)	
Dividends paid	(19,662)	(37,795)
Retained profits at the end of the period	(152,311)	(60,076)
Balance sheet		
Current assets		
Cash and cash equivalents	47,387	58,242
Trade and other receivables	1,083,750	1,054,010
Inventories	244,299	362,117
Current tax assets	8,242	5,272
Other Investments		
Total current assets	1,383,678	1,479,641
Non-current assets		
Trade and other receivables		
Investments in equity accounted investees	451	411
Other investments	1,548,458	1,520,249
Deferred tax assets	44,454	43,359
Property, plant and equipment	114,441	108,367
Intangible assets	163,919	149,575
Total non-current assets	1,871,723	1,821,961
TOTAL ASSETS	3,255,401	3,301,602
Current liabilities		
Trade and other payables	658,832	982,143
Loans and borrowings	36,065	(3,182)
Employee benefits	7,505	7,689
Current tax payable	1,172	1,861
Provision	9,360	6,542
Total current liabilities	712,934	995,053
Non-current liabilities		
Payables	-	
Loans and borrowings	674,372	662,266
Deferred tax liabilities	13,173	12,066
Employee benefits	10,212	9,489
Total non-current liabilities	697,757	683,821
TOTAL LIABILITIES NET ASSETS	1,410,691 1,844,710	1,678,874 1,622,728
	.,,	
Equity		
Share capital	1,901,084	1,603,992
Reserves	95,937	78,812
Retained earnings	(152,311)	(60,076)
TOTAL EQUITY	1,844,710	1,622,728

38. Related parties

(a) Transactions with related parties in the wholly-owned group

The parent entity entered into the following transactions during the year with subsidiaries of the group:

- loans were advanced and repayments received on short term intercompany accounts; and
- management fees were received from several wholly-owned controlled entities.

These transactions were undertaken on commercial terms and conditions.

(b) Transactions with associated parties

			Consolidated	
		2019 \$000	2018 \$000	
Sumitomo Chemical Company Ltd	sales to	57,262	44,176	
	purchases from	175,605	177,841	
	trade receivable	34,319	27,574	
	trade payable	62,382	68,926	
	preference securities receivable	97,500	-	

These transactions were undertaken on commercial terms and conditions.

(c) Key management personnel compensation

The key management personnel compensation included in personnel expenses (see note 9) are as follows:

	Consolidated	
	2019 \$	2018 \$
Short term employee benefits	6,004,339	5,643,293
Post employment benefits	310,699	264,035
Equity compensation benefits	1,097,920	1,372,768
Termination benefits	-	_
Other long term benefits	220,013	_
	7,632,971	7,280,096

Individual directors and executives compensation disclosures

Information regarding individual directors and executives compensation is provided in the remuneration report section of the director's report.

d) Other key management personnel transactions with the company or its controlled entities

Apart from the details disclosed in this note, no director has entered into a material contract with the company or entities in the group since the end of the previous financial year and there were no material contracts involving director's interest existing at year-end.

A number of key management persons, or their related parties, hold positions in other entities that result in them having control or significant influence over the financial or operating policies of those entities. A number of these entities transacted with the company or its subsidiaries in the reporting period. The terms and conditions of the transactions with management persons and their related parties were no more favourable than those available, or which might reasonably be expected to be available, on similar transactions to non-director related entities on an arms-length basis.

From time to time, key management personnel of the company or its controlled entities, or their related entities, may purchase goods from the group. These purchases are on the same terms and conditions as those entered into by other group employees or customers and are trivial or domestic in nature.

e) Loans to key management personnel and their related parties

There were no loans to key management personnel at 31 July 2019 (2018: nil).

39. Auditors' remuneration

	C	Consolidated	
	2019 \$	2018 \$	
Audit services			
KPMG Australia			
Audit and review of group financial report	571,000	564,000	
Overseas KPMG firms			
Audit and review of group and local financial reports	2,045,211	1,608,548	
	2,616,211	2,172,548	
Other auditors			
Audit and review of financial reports	379,586	177,834	
Audit services remuneration	2,995,797	2,350,382	
Other services			
KPMG Australia			
Other assurance services	105,709	591,650	
Other advisory services	75,656	834,477	
Overseas KPMG firms			
Other assurance services	1,221	278,533	
Other advisory services	98,866	180,869	
Other firms			
Other assurance services	_	-	
Other advisory services	389,981	99,030	
Other services remuneration	671,433	1,984,559	

40. Subsequent events

On 30 September 2019, the company has entered into a sale and purchase agreement ('SPA') with Sumitomo Chemical Company and related group companies ('Sumitomo'), to divest its shares in certain entities, that together, comprise the majority of the Latin American crop protection business and the Latin American seed treatment business for consideration of \$1,188 million.

The SPA remains subject to a number of conditions including regulatory and shareholder approval, and the review of an independent expert.

There will be a contractual obligation to repay the redeemable preference securities of \$97.5 million to Sumitomo should the transaction complete.

Other

Other than the matters outlined above, or elsewhere in the financial information, no matters or circumstances have arisen since the end of the financial year, that have or may significantly affect the operations, results or state of affairs of the group in subsequent accounting periods.

Directors' Declaration

- 1. In the opinion of the directors of Nufarm Limited (the company):
 - (a) the consolidated financial statements and notes are in accordance with the Corporations Act 2001 including:
 - (i) giving a true and fair view of the group's financial position as at 31 July 2019 and of its performance for the financial year ended on that date; and
 - (ii) complying with Australian Accounting Standards (including the Australian Accounting Interpretations) and the *Corporations Regulations 2001*; and
 - (b) there are reasonable grounds to believe that the company will be able to pay its debts as and when they become due and payable.
- 2. There are reasonable grounds to believe that the company and the group entities identified in note 35 will be able to meet any obligations or liabilities to which they are or may become subject to by virtue of the deed of cross guarantee between the company and those group entities pursuant to ASIC Corporations (Wholly owned Companies) Instrument 2016/785.
- 3. The directors have been given the declarations required by Section 295A of the *Corporations Act 2001* from the chief executive officer and chief financial officer for the financial year ended 31 July 2019.
- 4. The directors draw attention to note 2 to the consolidated financial statements, which includes a statement of compliance with International Financial Reporting Standards.

Signed in accordance with a resolution of the directors:

Dated at Melbourne this 30th day of September 2019

DG McGauchie AO Director

GA Hunt Director

Independent Auditor's Report



KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

Liability limited by a scheme approved under Profession Standards Legislation.

KPMG

Key Audit Matters

The Key Audit Matters we identified are:

- Recoverability of non-current assets, including property, plant and equipment and intangible assets
- Recoverability of deferred tax assets recognised in relation to prior period losses

Key Audit Matters are those matters that, in our professional judgement, were of most significance in our audit of the Financial Report of the current period.

These matters were addressed in the context of our audit of the Financial Report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Recoverability of non-current assets, including property, plant and equipment (\$393.6m) and intangible assets (\$1,719.0m)

Refer to the following notes to the financial report: Note 2 (d) (ii) Basis of preparation – Use of estimates and judgements – impairment testing, Note 3 (h) Significant accounting policies – Impairment, and Note 23 Intangible assets.

The key audit matter	How the matter was addressed in our audit
 Recoverability of non-current assets including property, plant and equipment, and intangible assets is a key audit matter due to the following: inherent complexity in determination of the Group's cash generating units ('CGU's); the diverse nature of regional agricultural 	 Our procedures included: testing the key controls over the cash flow models, including Board review and approval of key assumptions and business unit budgets which form the basis of the cash flow forecasts using our understanding of the nature of the
 the diverse nature of regional agricultural markets in which the Group operates. This includes different economic, regulatory and climatic conditions of a large number of geographies. The Group prepares individual discounted cash flow models incorporating these variations for each CGU. This volume and variety of data necessitates additional audit effort, and we involve KPMG audit teams located in significant jurisdictions who have knowledge of the local conditions. 	 using our understanding of the nature of the Group's business, we analysed: the internal reporting of the Group to assess how results are monitored and reported; and the implications to CGU identification in accordance with accounting standards. assessing the Group's discounted cash flow models and key assumptions by:
 each geographic and product market segment experiences the following, which are subject to inherent uncertainty leading to a range of possible forecast outcomes: fluctuating demand depending on economic and climatic conditions; 	 comparing cash flows to historical trends and performance, by CGU, to inform our evaluation of current forecasts incorporated into the models; comparing the relevant cash flow forecasts to the Board approved budgets and FY20- FY21 business plans;
 significant regulatory activity and oversight, which can lead to approval and cessation of new and existing products; and technology advancements by the Group and competitors, which can lead to 	 involving our valuation specialists to assess the discount rates against comparable market information and the economic assumptions relating to cost of debt and cost of equity; and using our industry knowledge, information

Independent Auditor's Report (continued)

KPMG

shifts in market demand for products.

Given the unique, non-homogenous, nature of these factors, specific auditor attention is applied to each element, increasing the audit effort. We focus on the authority and knowledge of the sources of judgements to the models, evidence of bias, and consistency of application of judgements.

The above factors increase the complexity in auditing the intangible asset useful lives and the forward-looking assumptions contained in the Group's discounted cash flow models for each CGU. Additional key assumptions we focused on included short term and terminal value growth rates and discount rates.

These same conditions impact our audit effort applied for the value associated with new products in development phases.

Products in early stages of development, compared to those closer to product launch, are prone to wider ranging forecasting outcomes and highly judgemental assumptions. The Group engaged an external valuation expert to assist them. We focused on the authority and knowledge of the sources of judgements to the valuation, common market practices, and consistency of judgements. published by regulatory and other bodies, and through inquiries with the Group, to assess the assumptions. These included intangible asset useful lives and the impact of technology, market and regulatory changes on those assumptions. We looked for evidence of sensitivity and bias within and across models, and consistency of application, investigating significant differences.

evaluating the Group's sensitivity analysis in respect of the key assumptions in the models, including the identification of areas of estimation uncertainty and reasonably possible changes in key assumptions. We assessed the related disclosures against accounting standard requirements;

 comparing carrying values of CGUs to available market data, such as implied earnings multiples of comparable entities;

- assessing the Group's valuation of the ANZ Crop Protection CGU and products in development phase by additionally:
 - assessing the competency, scope of work and objectivity of experts engaged by the Group; and
 - involving our valuation specialists to assess the valuation methodology against industry practice and the requirements of the accounting standards.

Recoverability of deferred tax assets recognised in relation to prior period tax losses (\$131.9m)

Refer to the following notes to the financial report: Note 2 (d) (iii) Basis of preparation - Use of estimates and judgements - income tax, Note 3(o) Significant accounting policies – Income tax, Note 11 Income tax expense and Note 18 Tax assets and liabilities.

The key audit matter	How the matter was addressed in our audit
 Recoverability of deferred tax assets in relation to prior period tax losses is a key audit matter due to the: complexity in auditing the forward-looking assumptions applied to the Group's tax loss utilisation models for each tax jurisdiction given the significant forward-looking assumptions involved. Further details on the 	 Our procedures included: testing key controls over the taxable profit forecasts underpinning the tax loss utilisation models, including Board review and approval of key assumptions and business unit budgets which form the basis of these forecasts.

KPMG

significant forward-looking assumptions and implications for the audit are contained in the recoverability of non-current assets, including property, plant and equipment and intangible assets key audit matter. Additional auditor attention is focused on the reconciliation of forecast cash flows to taxable profits.

- age of the tax losses, and the relevance of recent taxable profits to forecasts.
- large number of jurisdictions and our need to consider their varying and complex rules on tax loss utilisation.

 comparing the key assumptions and business unit budgets for consistency with those tested by us, as set out in the recoverability of noncurrent assets, including property plant and equipment and intangible assets key audit matter, and taxable profit concepts.

assessing the Group's tax loss utilisation models and key assumptions, by significant jurisdiction, by:

•

- comparing taxable profit to historical trends and performance to inform our evaluation of the current taxable profit forecasts;
- comparing the taxable profit forecasts to the Board approved budgets;
- evaluating the Group's aged utilisation sensitivity analysis in respect of the key assumptions, including the identification of areas of estimation uncertainty to focus our further procedures;
- understanding the timing of future taxable profits and considering the consistency of the timeframes of expected recovery to our knowledge of the business and its plans; and
- involving our tax specialists and teams from the relevant jurisdictions to assess the tax loss utilisation expiry dates and annual utilisation allowances for consistency with local practice, regulatory parameters and legislation.

Independent Auditor's Report (continued)

KPMG

Other Information

Other Information is financial and non-financial information in Nufarm Limited's annual reporting which is provided in addition to the Financial Report and the Auditor's Report. The Directors are responsible for the Other Information.

Our opinion on the Financial Report does not cover the Other Information and, accordingly, we do not express an audit opinion or any form of assurance conclusion thereon, with the exception of the Remuneration Report and our related assurance opinion.

In connection with our audit of the Financial Report, our responsibility is to read the Other Information. In doing so, we consider whether the Other Information is materially inconsistent with the Financial Report or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

We are required to report if we conclude that there is a material misstatement of this Other Information, and based on the work we have performed on the Other Information that we obtained prior to the date of this Auditor's Report we have nothing to report.

Responsibilities of Directors for the Financial Report

The Directors are responsible for:

- preparing the Financial Report that gives a true and fair view in accordance with Australian Accounting Standards and the Corporations Act 2001;
- implementing necessary internal control to enable the preparation of a Financial Report that gives a true and fair view and is free from material misstatement, whether due to fraud or error; and
- assessing the Group's ability to continue as a going concern. This includes disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the Financial Report

Our objective is:

- to obtain reasonable assurance about whether the Financial Report as a whole is free from material misstatement, whether due to fraud or error; and
- to issue an Auditor's Report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with *Australian Auditing Standards* will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error. They are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the Financial Report.

A further description of our responsibilities for the audit of the Financial Report is located at the Auditing and *Assurance Standards Board* website at: <u>http://www.auasb.gov.au/auditors_files/ar1.pdf</u>. This description forms part of our Auditor's Report.

KPMG

Report on the Remuneration Report

Opinion

In our opinion, the Remuneration Report of Nufarm Limited for the year ended 31 July 2019, complies with *Section 300A* of the *Corporations Act 2001*.

Directors' responsibilities

The Directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with *Section 300A* of the *Corporations Act 2001*.

Our responsibilities

We have audited the Remuneration Report included in the Directors' report for the year ended 31 July 2019.

Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with *Australian Auditing Standards*.



KPMG

Gordon Sangster Partner Melbourne 30 September 2019

Shareholder and Statutory Information

Details of shareholders, shareholdings and top 20 shareholders

Listed securities	Number of	Number of	Percentage
	holders	securities	held by top 20
Fully paid ordinary shares	16,948	379,639,334	82.12

Twenty largest shareholders

	Ordinary shares as at 30.09.19	Percentage of issued capital as at 30.09.19
HSBC Custody Nominees (Australia) Limited	77,082,433	20.30
Sumitomo Chemical Company Limited	60,271,136	15.88
J P Morgan Nominees Australia Pty Limited	57,236,292	15.08
Citicorp Nominees Pty Limited	41,013,362	10.80
National Nominees Limited	24,164,628	6.37
BNP Paribas Noms Pty Ltd <drp></drp>	15,940,873	4.20
BNP Paribas Nominees Pty Ltd <agency a="" c="" drp="" lending=""></agency>	8,977,073	2.36
Amalgamated Dairies Limited	6,934,328	1.83
CS Third Nominees Pty Limited <hsbc 13="" a="" au="" c="" cust="" ltd="" nom=""></hsbc>	4,077,415	1.07
JBWere (NZ) Nominees Limited <56950 A/C>	3,150,538	0.83
Medich Capital Pty Ltd <roy a="" c="" investment="" medich=""></roy>	2,600,000	0.68
Argo Investments Limited	2,246,407	0.59
CPU Share Plans Pty Ltd <gsp a="" c="" control=""></gsp>	1,781,677	0.47
Moturua Properties LTD	1,352,595	0.36
Citicorp Nominees Pty Limited <colonial a="" c="" first="" inv="" state=""></colonial>	1,128,883	0.30
HSBC Custody Nominees (Australia) Limited - A/C 2	1,054,248	0.28
CPU Share Plans Pty Ltd <gip account="" control=""></gip>	1,038,724	0.27
BNP Paribas Noms (NZ) LTD <drp></drp>	690,028	0.18
The Khyber Pass Investment Company Limited	587,635	0.15
Netwealth Investments Limited <wrap a="" c="" services=""></wrap>	442,581	0.12

Distribution of shareholders

Size of holding	Number of holders as at 30.09.19	Ordinary shares held as at 30.09.19
1 - 1,000	6,569	3,086,678
1,001 - 5,000	7,477	18,853,601
5,001 - 10,000	1,795	13,318,166
10,001 - 100,000	1,041	22,948,556
100,001 Over	66	321,432,333

Of these, 913 shareholders held less than a marketable parcel of shares worth \$500 (89 shares). In accordance with the ASX Listing Rules, the last sale price of the company's shares on the ASX on 30 September 2019 was used to determine the number of shares in a marketable parcel.

Stock exchanges on which securities are listed

Ordinary shares: Australian Securities Exchange Limited.

Substantial shareholders

In accordance with section 671B of the Corporations Act, as at 30 September 2019, the substantial shareholders set out below have notified the company of their respective relevant interest in voting shares in the company shown adjacent to their respective names as follows:

Name	Date of Notice	Number of shares	Interest
Sumitomo Chemical Company Limited	11 Oct 2018	60,271,136	15.88%
Nufarm Limited ¹	11 Oct 2018	60,271,136	15.88%
Firetrail Investments Pty Ltd	6 Nov 2018	25,400,315	6.69%
Ellerston Capital Limited	23 Apr 2019	52,734,476	13.89%
United Super Pty Ltd	18 Jun 2019	19,236,201	5.07%
Macquarie Group Limited	24 Jul 2019	28,045,844	7.38%
Allan Gray Australia Pty Ltd	8 Aug 2019	24,352,699	6.41%
Sumitomo Mitsui Trust Holdings Inc	9 Aug 2019	34,978,736	9.21%

Voting rights

On a show of hands every shareholder present in person or represented by a proxy or representative shall have one vote and on a poll every shareholder who is present in person or represented by a proxy or representative shall have one vote for every fully paid share held by the shareholder.

Shareholder information

Annual general meeting

The annual general meeting of Nufarm Limited will be held on Thursday 5 December 2019 at 10.00am in Bayside Rooms 5 & 6, Level 2, RACV Club, 501 Bourke Street Melbourne, Victoria. Full details are contained in the notice of meeting and explanatory memorandum sent to all shareholders.

Voting rights

Shareholders are encouraged to attend the annual general meeting. However, when this is not possible, they are encouraged to use the form of proxy by which they can express their views. Proxy voting can be completed online via www.investorvote.com.au or via post by completing the proxy form and sending it back in the return envelope.

Every shareholder, proxy or shareholder's representative has one vote on a show of hands. In the case of a poll, each share held by every shareholder, proxy or representative is entitled to:

- (a) one vote for each fully paid share; and
- (b) voting rights in proportion to the paid up amount of the issue price for partly paid shares.

¹ Nufarm Limited has a relevant interest in the shares held by Sumitomo Chemical Company Limited. The relevant interest arises under a Shareholder Deed dated 22 January 2010 between Nufarm and Sumitomo which contains certain obligations to the voting and disposal of shares in Nufarm by Sumitomo.

Shareholder and Statutory Information (continued)

Stock exchange listing

Nufarm shares are listing under the symbol NUF on the ASX. The securities of the company are traded on the ASX under CHESS (Clearing House Electronic Sub-register System), which allows settlement of transactions without having to reply on paper documentation.

Shareholders seeking more information about CHESS should contact their stockbroker or the ASX.

Shareholder details

The Nufarm Limited Share Register is managed by Computershare Investor Services Pty Limited. You can gain access to your shareholding information in the following ways.

Online via investor centre

Details of individual shareholdings can be checked by visiting our share registry's website at www.investorcentre.com.

Existing users can simply log in. New users will need to create a log in. You will need to enter your security reference number (SRN) or holder identification number (HIN), your postcode or country of residence, enter Nufarm as the company name and then follow the prompts to complete registration.

By telephone via InvestorPhone:

InvestorPhone provides telephone access 24 hours a day, seven days a week.

Step 1 Call the Nufarm shareholder information line on 1300 652 479 (within Australia) or +61 3 9415 4360 (outside Australia).

Step 2 Follow the prompts to gain secure, immediate access to your:

- holding details
- registration details
- payment information

Shareholder communications

The default for receiving the annual report is now via the Company's website - www.nufarm.com

Shareholder enquiries

Contact:

Computershare Investor Services Pty Limited Yarra Falls, 452 Johnston Street, Abbotsford Victoria 3067 GPO Box 2975 Melbourne Victoria 3001 Telephone: 1300 652 479 (within Australia) +61 3 9415 4360 (outside Australia) Website: www.investorcentre.com For enquiries relating to the operations of the company, please contact the Nufarm Corporate Affairs Office on: Telephone: +61 3 9282 1088 Email: corporate.information@nufarm.com Written correspondence should be directed to:

Corporate Affairs Office Nufarm Limited PO Box 103 Laverton Victoria 3028 Australia

Key dates

1 November 2019	Annual report sent to shareholders
5 December 2019	Annual general meeting
31 July 2020	End of financial year

This page has been left intentionally blank.

Corporate Directory

Directors

DG McGauchie AO – Chairman GA Hunt – Managing Director AB Brennan GR Davis FA Ford ME McDonald PM Margin T Takasaki

Company Secretary

F Smith

Auditors

KPMG

Tower Two Collins Square 727 Collins Street Melbourne Victoria 3008 Australia

Trustee for Nufarm step-up securities

The Trust Company (Australia) Limited

Level 15, 20 Bond Street Sydney NSW 2000 Australia

Share registrar

Australia Computershare Investor Services Pty Ltd

GPO Box 2975 Melbourne Victoria 3001 Australia Telephone: 1300 652 479

Outside Australia: +61 3 9415 4360

Step-up securities registrar

New Zealand Computershare Registry Services Limited Private Bag 92119 Auckland NZ 1142

Telephone: +64 9 488 8700

Registered office

103-105 Pipe Road Laverton North Victoria 3026 Australia Telephone: +61 3 9282 1000 Facsimile: +61 3 9282 1001

NZ branch office

6 Manu Street Otahuhu Auckland New Zealand Telephone: +64 9 270 4157 Facsimile: +64 9 267 8444

Website

www.nufarm.com

Nufarm Limited

ACN 091 323 312



103–105 Pipe Road Laverton North Victoria 3026 Australia Telephone: +61 3 9282 1000 Facsimile: +61 3 9282 1001 nufarm.com