2019

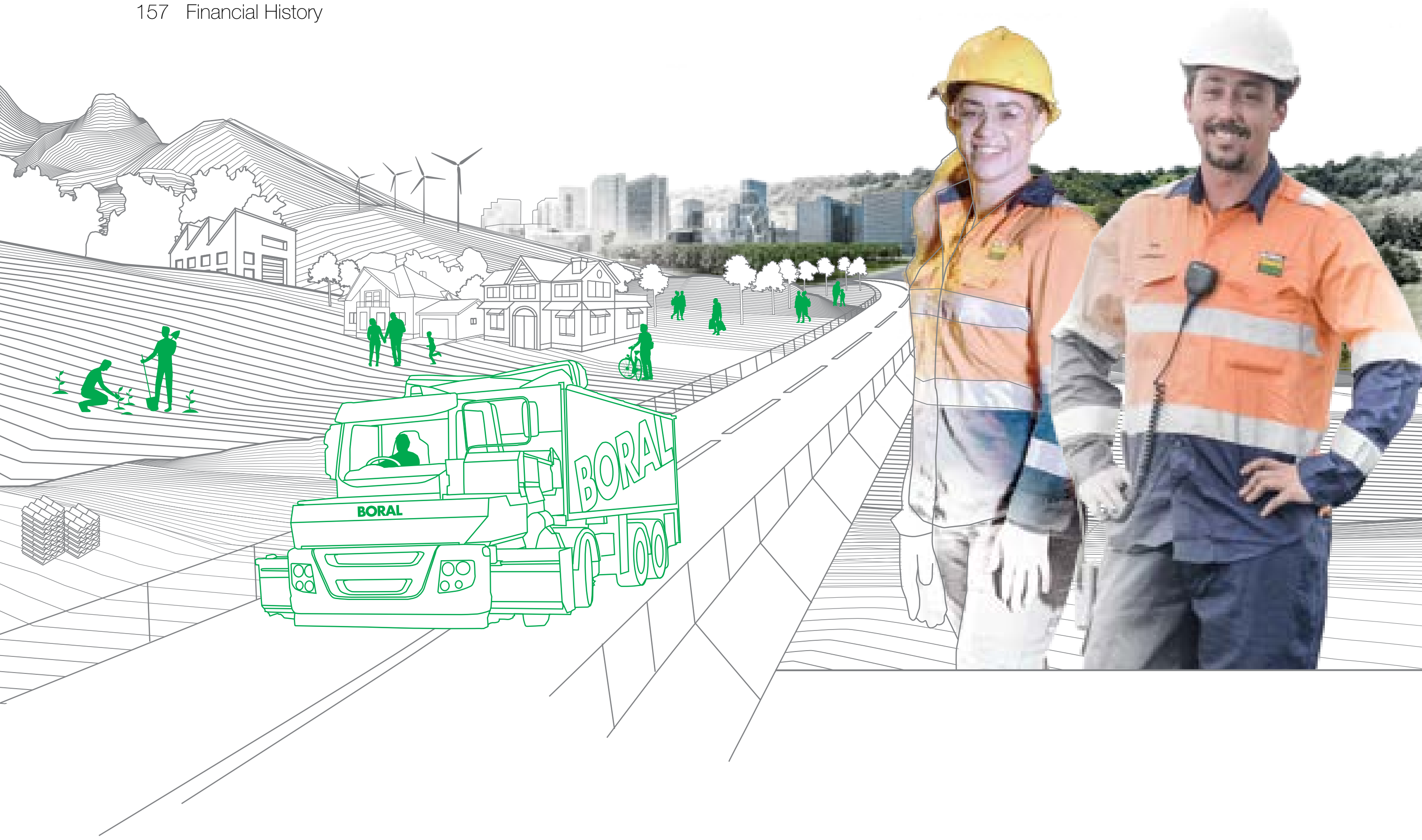
Boral Annual Report

BORAL LIMITED ANNUAL REPORT
FOR THE YEAR ENDED 30 JUNE 2019

Working together to
build something great

CONTENTS

01 Year at a glance
02 Who we are
04 Results at a glance
06 Chairman's review
08 Message from Mike Kane
10 Group President Ventures & Chief Financial Officer's review
13 Divisional Performance
20 Summary of Boral's Risks and Responses
22 Sustainability Overview
38 Executive Committee
39 Board of Directors
40 Corporate Governance Statement
55 Directors' Report
61 2019 Remuneration Report
83 Financial Statements
148 Statutory Statements
154 Shareholder Information
157 Financial History



NON-IFRS INFORMATION

EBIT before significant items and net profit after tax before significant items are non-IFRS measures used to provide a greater understanding of the underlying performance of the Group. This information has been extracted or derived from the financial statements. Significant items are detailed in note 2.6 to the financial statements and relate to income and expenses that are associated with significant business restructuring, impairment or individual transactions.

The sections of our Annual Report titled Chairman's review, Message from Mike Kane, Group President Ventures & CFO's review and Divisional Performance comprise our operating and financial review (OFR) and form part of the Directors' Report.

FINANCIAL CALENDAR

Record date for final dividend	2 September 2019
Final dividend payable	1 October 2019
Annual General Meeting	6 November 2019
Half year end	31 December 2019
Half year results announcement	20 February 2020
Ex dividend share trading commences	26 February 2020
Record date for interim dividend	27 February 2020
Interim dividend payable	16 March 2020
Year end	30 June 2020

Please note, dates are subject to review.

BORAL LIMITED
ABN 13 008 421 761

Boral delivered a solid result in FY2019 with benefits from cost reductions and improvement initiatives, and continued strong infrastructure activities, helping to offset impacts of residential market declines.

In FY2019, we delivered an underlying profit after tax of $440 million, down 7% on the prior year. Headwaters acquisition synergies of US$32 million were slightly ahead of plan, and our year-four synergy target of US$115 million remains on track.

Boral's strategy to deliver improved performance and sustainable growth for all our stakeholders is progressing well.

YEAR AT A GLANCE

2 JULY 2018

The sale of Boral's Denver Construction Materials business for US$127 million closed.

29 AUGUST 2018

Boral reported a 47% increase in net profit after tax[1] to $514 million for the year ended 30 June 2018, compared to the prior year.

17 OCTOBER 2018

Boral agreed to sell its US Block business for US$156 million.
The transaction closed on 30 November 2018.

30 OCTOBER 2018

At the Annual General Meeting, Peter Alexander and John Marlay were re-elected as Directors. The resolution to adopt the Remuneration Report was well supported with 91.3% of shareholder votes cast in favour.

4 FEBRUARY 2019

Boral provided a trading update and revised FY2019 guidance.

25 FEBRUARY 2019

Boral reported a 6% decrease in net profit after tax[1] to $224 million for the six months ended 31 December 2018, compared to the first half last year.

21 JUNE 2019

Boral entered into a property development management deed with Mirvac in relation to the company's Scoresby site in Victoria. Mirvac will manage the urban development of the 171-hectare site over a multi-decade period. Boral expects Scoresby to deliver in excess of $300 million over the life of the project subject to rezoning and market conditions.

23 AUGUST 2019

Boral agreed to sell its Midland Brick business for $86 million[2] in line with strategy.

26 AUGUST 2019

Boral entered into an agreement with Knauf to form an expanded 50:50 plasterboard joint venture in Asia and for Boral to return to 100% ownership of USG Boral Australia and New Zealand.

1. Before acquired amortisation and significant items.
2. Boral's net proceeds are expected to be around $82 million, following adjustments to working capital and other completion adjustments, which is broadly in line with book value.

Who we are

OUR PURPOSE

At Boral, we help our customers *build something great* by supplying them with high-quality, sustainable building products and construction materials.

OUR GOALS

In operating our three divisions, our **key strategic objective is to deliver shareholder returns that exceed the cost of capital through the cycle**, while creating value for our customers, employees, suppliers and the communities in which we operate. We strive to create value for our stakeholders by:

- driving safety outcomes towards world's best practice based on Zero Harm Today
- investing in our people to enable them to deliver their best
- minimising our environmental footprint and building our resilience to climate-related impacts
- delivering superior performing, innovative and sustainable products and solutions for our customers, and
- operating ethically and making a positive contribution to our local communities.

Our strategy to harness sustainable growth has seen Boral invest in less energy-intensive, lighter weight, more innovative products and reduce exposure to lower growth, energy-intensive, higher cost operations.

17
countries

672
operating sites

154
distribution sites

CURRENT STRATEGIC PRIORITIES

In Boral Australia, maximise returns and maintain leading positions

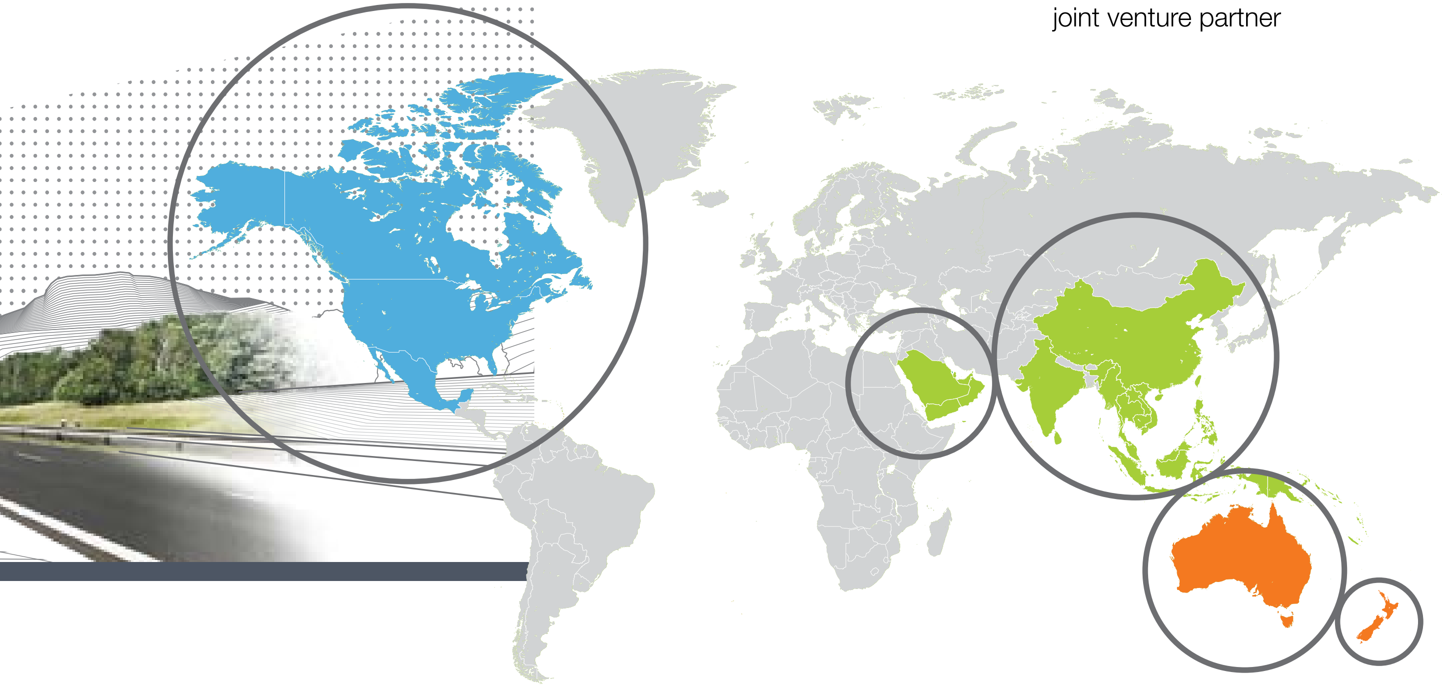
- Profitably supply multi-year growth in major roads and infrastructure
- Harness our leading position in Australia, including delivering benefits from quarry, cement and plant network reinvestments
- Maintain strong returns and margins through customer, commercial and operational excellence programs

In Boral North America, continue the transformation by delivering targeted synergy benefits and growth

- Drive improved returns on funds employed (ROFE)
- Leverage growth from the Headwaters acquisition, including progressing delivery of our year-four synergy target of US$115 million
- Grow through market recovery and innovation, and by delivering our fly ash strategy to increase volumes

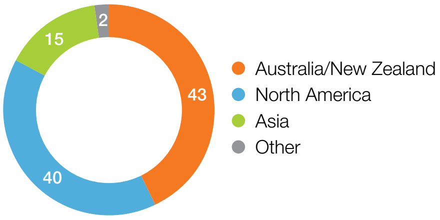
In USG Boral, deliver long-term growth and value from strategic opportunities

- Continue to grow our business through product penetration and innovation including next generation Sheetrock®
- Respond to changes in cyclical demand and competitive pressures through business improvement initiatives and capacity planning
- Create value through strategic growth opportunities, including working with our joint venture partner



17,104
total employees (including JVs)

~9,400
contractors (including JVs)



EMPLOYEES BY LOCATION (%)

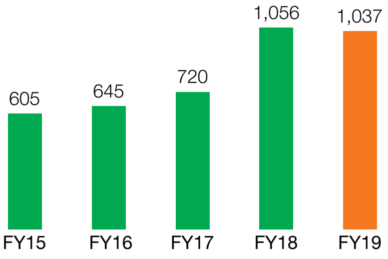
Results at a glance

OUR RESULTS

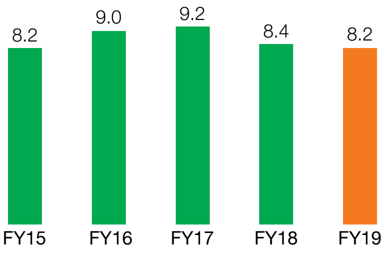
Year ended 30 June (A$ million unless stated)	FY2019	FY2018
Revenue – total operations basis	5,863	5,869
– continuing operations basis	**5,801**	**5,579**
EBITDA[1] – total operations basis	1,037	1,056
– continuing operations basis	**1,033**	**1,015**
EBITA[1]	721	749
EBIT[1]	**660**	**688**
Net interest[1]	(103)	(104)
Profit before tax[1]	557	585
Tax[1]	(116)	(111)
Net profit after tax[1]	**440**	**473**
Net significant items	(168)	(32)
Statutory net profit after tax	**272**	**441**
Net profit after tax and before amortisation[1]	**486**	**514**
Cash flow from operating activities	762	578
Gross assets	9,544	9,510
Funds employed	8,052	8,183
Liabilities	3,685	3,780
Net debt	2,193	2,453
Stay-in-business capital expenditure	340	375
Growth capital expenditure	113	51
Acquisition capital expenditure	11	–
Depreciation and amortisation	378	368
Boral employees	11,916	11,898
Total employees including in joint ventures	17,104	17,131
Revenue per Boral employee, $ million	0.492	0.493
Net tangible asset backing, $ per share	2.12	1.99
EBITDA margin on revenue[1], %	17.7	18.0
EBIT margin on revenue[1], %	11.3	11.7
EBIT return on funds employed[2], %	8.2	8.4
EBIT return on average funds employed[3], %	8.1	8.6
Return on equity[1],%	7.5	8.3
Gearing		
Net debt/equity, %	37	43
Net debt/net debt + equity, %	27	30
Interest cover[1], times	6.4	6.6
Earnings per share[1], ¢	37.5	40.4
Dividend per share, ¢	26.5	26.5
Employee safety[4]: (per million hours worked)		
Lost time injury frequency rate	1.3	1.6
Recordable injury frequency rate	7.5	8.7

Figures may not add due to rounding.

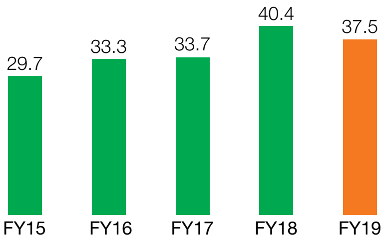
FINANCIAL HIGHLIGHTS



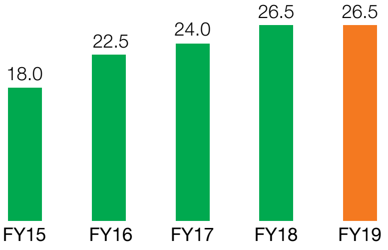
EBITDA (A$m)[1]



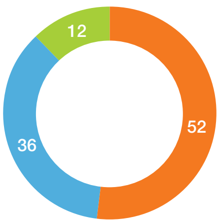
RETURN ON FUNDS EMPLOYED (%)[1,2]



EARNINGS PER SHARE (¢)[1,5]

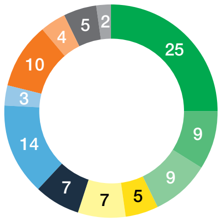


DIVIDENDS PER SHARE (¢)



REVENUE BY DIVISION (%)[6]

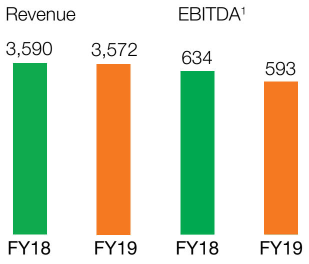
● Boral Australia
● Boral North America
● USG Boral



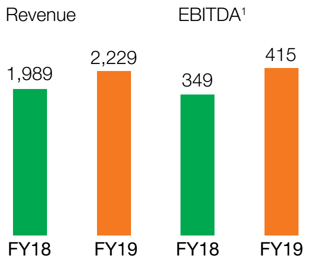
REVENUE BY MARKET (%)[6]

● Australian roads, highways, subdivisions & bridges, and other engineering
● Australian non-residential
● Australian detatched dwellings
● Australian multi-dwellings
● Australian alterations and additions
● Asia and Middle East
● USA single-family residential
● USA multi-family residential
● USA repair and remodel
● USA non-residential
● USA infrastructure
● Other

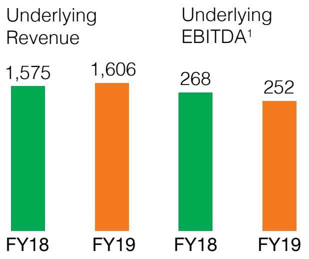
THREE FOCUSED OPERATING DIVISIONS



BORAL AUSTRALIA (A$m)

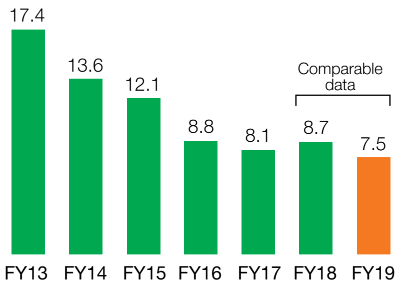


BORAL NORTH AMERICA (A$m)

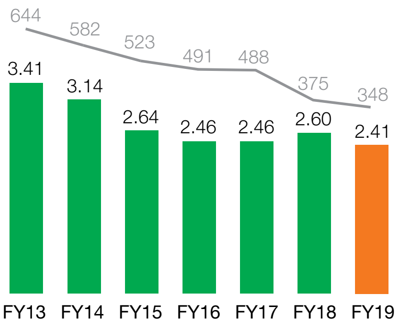


USG BORAL (A$m)

HEALTH, SAFETY AND ENVIRONMENT



RECORDABLE INJURY FREQUENCY RATE (RIFR)[7,8]
(per million hours worked)



GREENHOUSE GAS EMISSIONS (GHG)[9]

● GHG emissions (million tonnes carbon dioxide equivalent (CO_2-e))
▬ GHG emissions intensity (tonnes CO_2-e per A$m revenue)

---

1. Excluding significant items.
2. Return on funds employed (ROFE) is based on EBIT before significant items on funds employed at period end.
3. Calculated as EBIT before significant items on the average of opening and closing funds employed for the year.
4. Includes employees and contractors in 100% owned businesses and all joint venture operations regardless of equity interest.
5. In accordance with AASB 133, historical earnings per share has been revised to reflect the bonus element in the equity raising completed in December 2016.
6. Includes Boral's 50% share of underlying revenue from USG Boral and Meridian Brick joint ventures, which are not included in Group-reported revenue.
7. RIFR is the combined lost time injury frequency rate (LTIFR) and medical treatment injury frequency rate (MTIFR).
8. Per million hours worked for employees and contractors in 100% owned businesses including Headwaters, and all joint ventures businesses regardless of equity interest from FY2018 onwards. Data for prior years only includes 50% owned joint ventures and excludes Headwaters.
9. GHG emissions data excludes some joint ventures, which in aggregate are not deemed to have material emissions. Emissions intensity based on Group-reported revenue adjusted to include a 50% share of underlying revenue from USG Boral and Meridian Brick joint ventures, which are equity accounted.

Chairman's review

My first year as Chairman of Boral has been a busy time for the business as we have faced challenges and embraced opportunities. With conditions in our markets more challenging than expected, our businesses responded by taking costs out, resizing activities and seeking opportunities to grow revenues.

ADAPTING TO CONDITIONS AND EMBRACING OPPORTUNITIES

Overall, a 4% increase in revenues to $5.8 billion and a 2% increase in EBITDA[1] to $1.03 billion for continuing operations was a solid result.

Net profit after tax (NPAT) before significant items of $440 million, was 7% lower than last year. Boral's statutory NPAT of $272 million included $168 million of post-tax significant items with a profit on sale of the Denver Construction Materials and Texas Block businesses more than offset by the $174 million impairment of our investment in the Meridian Brick joint venture. The impairment was triggered by further underperformance of Meridian Brick due to lower US and Canadian housing activity and a continued decline in brick intensity per housing start.

Strengthening our USG Boral growth platform

On 26 August we announced that Boral and Knauf have agreed to form an expanded joint venture in Asia and for Boral to return to 100% ownership of the Australian and New Zealand business, with a call option granted to Knauf to buy back a 50% share within five years if Knauf sells its stand-alone Australian plasterboard business, subject to regulatory approvals.

This agreement followed our rigorous review of options in relation to USG Boral, triggered by Knauf's announced acquisition of USG (which closed on 24 April 2019). In reviewing the strategic opportunities for Boral, our approach has been to create value for our shareholders in a way that is aligned with our strategy – and in a way that helps ensure our balance sheet remains strong.

The announced transaction (which is further explained in the CEO's message) is compelling for Boral and our shareholders. It is well-aligned with our strategy, and the plasterboard assets of Knauf in Asia are highly complementary to USG Boral's business in the region. We have maintained a disciplined approach to structuring and funding the transaction, and we are confident that value is created in both the short- and longer-term.

Shareholder perspectives

The Board declared a 50% franked final dividend of 13.5 cents per share, for a full year dividend of 26.5 cents per share. This was steady on last year and represents a payout ratio for the full year of 71%.

We recognise the importance of Boral's dividends to our shareholders, particularly in an environment of volatile share price performance, which has been the case for many stocks, including Boral, over the past 12 months.

Our investor engagement program continued during the year, giving me the opportunity to discuss strategy, governance, safety, climate-related risks and opportunities, and remuneration amongst other issues with our largest shareholders and their representatives. Once again, our Remuneration Report on pages 61 to 82 of Boral's 2019 Annual Report, reflects some of the feedback we have received in recent years.

The Board

The Board has been stable over the past year, with the appointment of Peter Alexander as our first North American-based non-executive Director in September 2018 and his endorsement by shareholders at the 2018 Annual General Meeting.

1. Earnings before interest, tax, depreciation and amortisation, and excluding significant items.
2. Based on Boral's Scope 1 and Scope 2 emissions of 2.4 million tonnes of CO_2-e in FY2019 and emissions intensity of 348 tonnes of CO_2-e per A$ million of revenue.

Boral's Board continues to benefit from diversity of gender, tenure and experience across a range of sectors, functions and professions. Our board members demonstrate a depth of operational knowledge and experience in building products and construction materials, as well as financial, merger and acquisitions (M&A), and strategy experience. We also have experience across different geographies, specifically Australia, Asia and North America – aligned with Boral's operations.

However, as previously flagged we would like to enhance that experience by having an Asia-based Director with industry experience.

Our operations and culture

Board site visits, business reviews and employee engagement provide valuable opportunities for the Board to stay connected with our people and see first-hand how we are managing safety, quality and operations, and gain insights into culture, capability and strategy execution.

In September 2018, we spent time at our Roofing, Stone and Fly Ash operations in North America reviewing progress around integration of the Headwaters acquisition, including meeting customers. We returned to the USA in January 2019 for an in-depth review of progress against our long-term Fly Ash supply strategy, which is progressing well.

In November 2018, we met with Boral Australia's customer service and digital solutions teams to better understand how digital innovation is supporting our customers and providing safety enhancements. The Board Health, Safety & Environment (HSE) Committee also spent time at our Thornleigh concrete plant and Peats Ridge Quarry to have a first-hand look at safety in action and to meet with our people on the ground.

Finally, in May 2019 we spent several days with the USG Boral team reviewing business strategies including customer relationships in key markets, safety initiatives, and their conduct risk and compliance program. In Singapore, we met with several of our sales people and our largest customers from Indonesia. We finished the trip with a visit to our NSW operations at Camellia.

We have confidence that our people are focused on the right things. Boral's leaders are committed to a workplace culture that is safety-focused, customer-centric, embraces diversity and drives for sustainability. There is no tolerance for unethical or unlawful behaviour, and where it is found, appropriate action is taken.

Our commitment is demonstrated through the safety and environmental improvements delivered for FY2019. Boral's recordable injury frequency rate of 7.5 represented a 14% improvement on last year, with all divisions making substantial progress. Boral's greenhouse gas emissions and the emissions intensity[2] of our operations both reduced by a further 7%. Further details are provided in our Sustainability Report.

Executive development and succession

In February 2019, we announced leadership changes, effective 1 March, intended to provide development opportunities for executives and provide the Board with well developed, experienced and capable internal candidates to be considered for CEO succession and other senior roles at the appropriate time.

At the time we confirmed that we expect Mike Kane to stay in the role as Boral's CEO for another two to three years, which remains the case.

Ros Ng, who has been Chief Financial Officer (CFO) for the past six years, has an expanded role as Group President Ventures & CFO. In addition to group strategy and M&A, Ros has responsibility for the USG Boral and Meridian Brick joint ventures, and she has been leading the execution of our strategy in relation to the USG Boral transaction with Knauf. Ross Harper, who was Executive General Manager Cement, stepped up into the new role of Group President Operations, to further strengthen our operational, R&D and safety outcomes. Wayne Manners stepped up into the role of President & CEO of Boral Australia from his previous role of Executive General Manager, Western Australia, Building Products & Major Projects, while Joe Goss, who had been Divisional Chief Executive Boral Australia for the previous six years moved to a senior advisory role.

In March 2019, Sims Metals Management (Sims) announced Mike Kane's appointment as a non-executive Director of Sims. Some investors expressed concern this was signalling Mike's early departure from Boral, which is not the case. In consultation with the Board, Mike assessed his capacity to take on the appointment to Sims, without compromising his ability to perform his role as CEO of Boral. The Sims opportunity seemed to be a good fit for Mike, and with senior executive development and succession well progressed, the Board supported Mike's appointment.

From my experience, there is significant advantage in having an external Board role at the same time as being in an executive role. I have found it energising taking on additional responsibilities, and the broader exposure can strengthen one's perspective and knowledge. I know Mike is finding the same.

I thank Mike, the senior team and all of Boral's people, for their hard work, persistence and responsiveness during FY2019 as we continue to transform Boral into a higher performing and more sustainable business.

Kathryn Fagg
Chairman

BOARD OF DIRECTORS

Mike Kane

Peter Alexander

Dr Eileen Doyle

John Marlay

Karen Moses

Paul Rayner

Message from Mike Kane
CEO & Managing Director

In FY2019, as demand softened in several key markets and some external delays and disruptions impacted the industry, we maintained our focus on improving the things we can control.

DELIVERING OUR STRATEGY

Our strategy is for Boral to be an integrated construction materials player in Australia; a gypsum-based product leader throughout Asia, Australasia; and a leading supplier of fly ash and building products in North America. To harness more sustainable growth, our strategy is focused on investing in less energy-intensive, lighter weight, more innovative products and reducing exposure to lower growth, energy-intensive, higher cost operations.

We have deployed capital from non-core businesses into businesses that we know will secure Boral's future. Specifically, we:

- divested Denver Construction Materials for US$127 million, in July 2018
- divested the Texas-based Block business for US$156 million, in November 2018
- delivered US$32 million of Headwaters acquisition synergies in year two versus a target of US$25 million
- progressed our Fly Ash supply strategy by commissioning our first landfill reclaim project and introducing imports from Mexico into the USA, and enhanced our fixed and mobile storage capability
- completed quarry upgrades at Deer Park (Victoria), Orange Grove (Western Australia) and Ormeau (Queensland)
- progressed construction of our $130 million clinker grinding and storage facility at the Port of Geelong in Victoria, and
- advanced our strategy to move out of brick manufacturing globally with the 23 August 2019 announcement of the sale of Midland Brick to a Western Australian consortium for $86 million. This follows the $134 million divestment of the east coast Australian brick business to CSR in November 2016, and leaves the Meridian Brick joint venture in the USA as our last remaining brick business.

This year, we impaired our investment in Meridian Brick by US$122 million (A$174 million), as a result of continued underperformance. While our strategy is to exit bricks globally, we are working with our joint venture partners to return the business to profitability.

Finally, and most significantly, on 26 August, we announced that Boral reached agreement with Knauf, the new owners of USG, to form an expanded joint venture in Asia, and for Boral to return to 100% ownership of USG Boral Australia and New Zealand. Boral has agreed to grant Knauf a call option to buy back 50% of the Australian and New Zealand business, within five years, with both the grant and exercise of the call option subject to Australian and New Zealand regulatory approval.

Boral will invest a total of US$441 million, including US$200 million to buy the other half of USG Boral Australia and New Zealand. This is a great business and until Knauf exercises its call option, Boral will enjoy 100% of its strong cash flows while continuing to benefit from USG's R&D and intellectual property.

The remaining US$241 million of Boral's investment represents our 50% share to acquire Knauf Plasterboard Asia, which will become part of the expanded USG Boral Asia joint venture, substantially increasing USG Boral's business in China and strengthening its position across South East Asia.

The expanded USG Boral joint venture in Asia will be a world-class operation, bringing together Knauf – now the largest plasterboard manufacturer in the world – and USG Boral in Asia, which has an enviable position in the fastest growing plasterboard region in the world.

Of Boral's US$441 million investment, a proportion will be funded within the USG Boral Asia joint venture, with the balance of US$335 million to be funded by Boral through debt and proceeds from recent divestments.

The transaction is expected to complete around the end of calendar year 2019, and will be immediately value enhancing for Boral's shareholders. Based on FY2019 pro-forma financials, we expect earnings per share accretion of around 3% to 5%, before synergies, and we expect synergies of around US$30 million per annum in year four.

Focused on delivering results

While volumes were short of expectation in FY2019 as demand softened in several key markets and some external delays and disruptions impacted the industry, we maintained our focus on improving the things we can control.

---

1. Earnings before interest, tax, depreciation and amortisation, and excluding significant items.
2. Recordable injury frequency rate (RIFR) and Lost time injury frequency rate (LTIFR) per million hours worked for employees and contractors in 100% owned businesses and all joint venture businesses regardless of equity interest.

For Boral Australia, infrastructure activity has been very strong, but some unplanned delays, disruptions and phasing of projects put pressure on volumes at a time when Australian housing starts were 15% lower in FY2019.

A concerted effort to reduce overhead costs, align our operations with demand and optimise margins, underpinned the strong EBITDA[1] of $593 million, including Property earnings of $33 million. This was in line with our long-term average Property earnings but lower than the very high contribution of $63 million in FY2018. Excluding Property, EBITDA margins were strong and broadly steady at 15.8%.

In FY2019, the US housing market, which drives around half of the earnings in Boral North America, contracted for the first time in eight years, with extreme rainfalls disrupting activity across the country. Against this backdrop, the US business delivered 10% EBITDA growth to US$297 million (or in Australian dollars, earnings were up 19% to A$415 million), with better than targeted year two synergies of US$32 million.

Boral North America EBITDA margins increased from 17.5% to 18.6%, strengthened by synergies, other cost reductions and solid price outcomes.

Boral's equity income from USG Boral was $57 million compared with $63 million last year, reflecting a sharp cyclical downturn in housing activity in South Korea. The South Korean market decline; the Australian housing downturn which will flow through in FY2020; and higher input costs more broadly, were the impetus for USG Boral's cost reduction program which is expected to deliver $21 million of benefits over two years.

Despite the declines in Australian and US housing starts, Boral's revenue growth of 4% to $5.8 billion and 2% lift in EBITDA to $1.03 billion from continuing operations, highlights the resilience of the underlying business, especially as Property EBITDA was $30 million lower than last year.

As we move closer to best practice performance, I am proud of Boral's safety results delivered in FY2019. A recordable injury frequency rate (RIFR)[2] for employees and contractors of 7.5 represents a 14% improvement for the year, and our lost time injury frequency rate (LTIFR)[2] of 1.3, is a 19% improvement on last year. During the year, we increased our focus on lead indicators, recording in excess of 150,000 safety observations across the Group, which demonstrates that our people are committed to delivering Zero Harm Today.

Boral's outlook

Given our FY2019 results, the outlook for Boral's markets in FY2020, and the trading conditions we have seen in July and August, we expect Boral's net profit after tax (NPAT) before significant items to be around 5–15% lower in FY2020 relative to FY2019.

In FY2020, we expect earnings pressure in Boral Australia as the slowdown in residential construction continues to impact and won't be fully offset by growing volumes in infrastructure projects. Higher than average Property earnings and further benefits from improvement initiatives will help the result.

Boral North America is expected to deliver underlying earnings growth with an additional ~US$20m of Headwaters synergies expected.

USG Boral will be impacted by the slowdowns in residential construction activity in Australia and South Korea, only partially offset by improvements in other geographies. Of course, once the announced USG Boral/Knauf transaction completes, which is expected around the end of the calendar year, we will see an earnings uplift coming through in the USG Boral plasterboard division.

Beyond FY2020, I am confident that Boral is well placed to deliver medium- and longer-term growth.

In Australia, we expect continued infrastructure growth in coming years, coupled with forecasters expectations of a more modest downturn in residential construction relative to past cycles. In Boral North America, we remain on track to deliver US$115 million of synergies by the end of FY2021 and our Fly Ash supply strategy is ramping up to deliver growth in the coming years.

In USG Boral, we will benefit from 100% earnings from the Australia and New Zealand business until Knauf exercises its call option. The expanded USG Boral joint venture in Asia is expected to deliver US$30 million of synergies in year four and should see continued growth through product innovation, penetration of plasterboard products and economic growth in emerging markets.

I am looking forward to continuing in the role of CEO for around two more years, working with Boral's people across 17 countries to deliver on our strategy and to deliver great results.

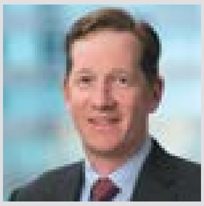
Mike Kane
CEO & Managing Director

EXECUTIVE COMMITTEE

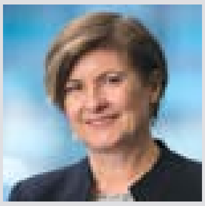

Rosaline Ng
Group President
Ventures & CFO


Ross Harper
Group President
Operations


Wayne Manners
President & CEO,
Boral Australia


David Mariner
President & CEO,
Boral North America


Frederic de Rougemont
CEO, USG Boral


Linda Coates
Group Human Resources
Director


Kylie FitzGerald
Group Communications
& Investor Relations
Director


Dominic Millgate
Company Secretary


Damien Sullivan
Group General Counsel


Tim Ryan
Group Strategy and M&A
Director (reporting to Group
President Ventures & CFO)

Group President Ventures & Chief Financial Officer's review

2019 has been a busy period of change on many fronts. Earlier this year I took on the role of Group President Ventures & Chief Financial Officer, with additional responsibility for delivering the results and strategies of Boral's joint ventures.

This year, we achieved solid earnings performance despite softer than expected market conditions. We made significant progress executing our long-term strategy through divestments of the Denver Construction Materials and US Block businesses. We also agreed to sell Midland Brick and finalised the expansion of our plasterboard footprint through the announced transactions with Knauf.

2019 RESULT HIGHLIGHTS

Boral's FY2019 underlying performance was underpinned by strong Australian infrastructure activity, Headwaters acquisition synergies and benefits from cost savings and improvement initiatives across the business, which helped to offset the downturn in Australian and US housing starts, lower Boral Australia Property earnings and a cyclical decline in USG Boral's key market of South Korea.

Boral's reported revenue of $5.86 billion was substantially in line with the prior year. Excluding discontinued operations, revenue from continuing operations increased $221 million to $5.80 billion.

Group EBITDA of $1.04 billion declined 2% on the prior year. For continuing operations, we saw a 2% lift in Group EBITDA to $1.03 billion, with strong earnings growth from Boral North America, partly offset by lower earnings from Boral Australia, including $30 million of lower Property earnings.

Income statement

Year ended 30 June	2019			2018		
$m	Group	Continuing operations	Discontinued operations	Group	Continuing operations	Discontinued operations
Sales revenue	**5,862.7**	**5,800.6**	**62.1**	5,869.0	5,579.3	289.7
EBITDA[1]	**1,037.4**	**1,033.2**	**4.2**	1,056.0	1,014.5	41.5
Depreciation and amortisation	**(377.8)**	**(373.6)**	**(4.2)**	(367.6)	(351.0)	(16.6)
EBIT[1]	**659.6**	**659.6**	**–**	688.4	663.5	24.9
Interest expense	**(103.1)**	**(103.1)**	**–**	(103.8)	(103.8)	–
Tax expense[1]	**(116.4)**	**(116.4)**	**–**	(111.4)	(103.4)	(8.0)
Underlying profit after tax[1]	**440.1**	**440.1**	**–**	473.2	456.3	16.9
Net significant items	**(167.7)**	**(225.5)**	**57.8**	(32.2)	(32.2)	–
Net profit after tax	**272.4**	**214.6**	**57.8**	441.0	424.1	16.9

1. The presentation of before significant items measures of EBITDA, EBIT and underlying profit after tax are non-IFRS measures used to provide a greater understanding of the underlying business performance of the Group. The disclosures are extracted or derived from the audited financial statements.

Boral's net underlying interest expense of $103 million was steady on the prior period. This reflects reduced expense as a result of the repayment of loans using the proceeds from the sale of the US businesses partially offset by an unfavourable currency translation of the US interest expense.

Our tax expense of $116 million increased from $111 million in FY2018. The average underlying tax rate for the year increased from 19% in FY2018 to 21% in FY2019. Boral's effective tax rate reflects the recognition of previously unrecognised US tax losses and the utilisation of capital losses, as well as the continued benefit from lower income tax rates on US earnings following the reduction of the US federal tax rate in December 2017. Excluding the benefit of previously unrecognised US tax losses and utilisation of capital losses, our effective rate was around 24%.

Underlying profit after tax of $440 million, represented a 7% decrease on the prior year. Boral's reported net profit after tax of $272 million included a net loss of $168 million from significant items. This compares to a net profit after tax of $441 million in the prior year, which included a significant item loss of $32 million.

The Group recorded a net loss of $168 million for significant items that were excluded from the underlying result. This primarily relates to the impairment of the Meridian joint venture investment and costs associated with the integration of Headwaters and restructuring, partially offset by the gains from the sale of our US businesses. Further explanation of our significant items can be found in Section 2.6 of the financial statements.

DIVISIONAL PERFORMANCE

Boral Australia

Boral Australia's revenue was steady at $3.57 billion with softer residential demand and the completion or near completion of several major projects offsetting the increase in infrastructure activity.

Boral Australia's EBITDA declined 6% from the prior year to $593 million primarily due to lower Property earnings. Excluding Property, EBITDA decreased by $10 million or 2% in the current year, due to lower concrete volumes, adverse product and geographic revenue mix and higher costs. Cost savings programs and improvement initiatives implemented across the business largely offset the impact of softer market conditions.

Boral North America

Boral North America delivered 12% revenue growth to $2.23 billion on a continuing operations basis.

Boral North America's EBITDA increased $66 million from the prior year to $415 million. In US dollars, EBITDA was 10% higher, benefiting from strong growth in Roofing and Windows and synergies of US$32 million. This was partially offset by the impact of lower volumes caused by high levels of rainfall in our key markets such as Texas, lower site service revenues in Fly Ash and a challenged result from the Meridian Brick joint venture.

USG Boral

USG Boral's underlying revenue of $1.61 billion was up 2% on the prior year, driven by volume growth in Thailand, China, Vietnam and India and a steady contribution from Australia. It was partially offset by a market driven decline in South Korea and heightened competition throughout Asia, particularly in Indonesia.

Reconciliation of underlying results to reported results for FY2019

$m	EBIT	Finance costs	Tax	Profit after tax
Underlying results	**659.6**	**(103.1)**	**(116.4)**	**440.1**
Significant items				
Sale of business	69.6	–	(11.8)	57.8
Restructure costs	(25.7)	–	8.0	(17.7)
Integration costs	(32.8)	–	6.7	(26.1)
Joint venture matters	(8.2)	–	–	(8.2)
Asset impairment	(195.6)	–	22.1	(173.5)
Total significant items	**(192.7)**	**–**	**25.0**	**(167.7)**
Reported results	**466.9**	**(103.1)**	**(91.4)**	**272.4**

STRONG OPERATING CASH FLOW

Free cash flow generated for the year was $712 million, which was an increase of $477 million compared to the prior year. This improvement primarily reflects the proceeds from the disposal of businesses and lower restructure, acquisition and integration costs.

Capital expenditure of $453 million was $28 million higher than the prior year. This reflected an increase in growth expenditure associated with our investments in the new Geelong clinker import terminal, quarry upgrades, and US Fly Ash storage facilities and reclaim activities. Stay in business expenditure of $340 million was lower than the prior year, with fewer plant upgrades in Australia and lower integration capital expenditure in Boral North America.

MAINTAINING A STRONG BALANCE SHEET

At 30 June 2019, Boral's net debt position was $2.19 billion, down from $2.45 billion at 30 June 2018 due to the repayment of loans using the proceeds from the business disposals, partially offset by an unfavourable exchange rate impact of $143 million.

Boral's principal debt gearing covenant with its financiers, measured as gross debt to gross debt plus equity, decreased slightly to 29%, comfortably within the 60% threshold.

Boral's balance sheet remains in a strong position and continues to support our existing BBB/Baa2 investment grade credit ratings.

DIVIDEND

In FY2019, a 50% franked interim dividend of 13.0 cents per share was declared and paid and a 50% franked final dividend of 13.5 cents per share was declared, for a full year dividend of 26.5 cents per share.

The Group's Dividend Reinvestment Plan remains suspended.

WRAP UP

Despite softer market conditions, Boral remains well placed with industry leading positions across many markets.

I look forward to continuing in my new role and would like to thank our staff for their tireless dedication.

Ros Ng
Group President Ventures &
Chief Financial Officer

Cash flow

For the year ended 30 June, $m	2019	2018
EBITDA[1]	**1,037**	1,056
Change in working capital	**(35)**	(86)
Share acquisition rights vested	**(8)**	(22)
Interest paid	**(97)**	(96)
Income taxes paid	**(51)**	(86)
Equity earnings less dividends	**(18)**	(22)
Profit on sale of assets and other items	**(12)**	(48)
Restructure, acquisition and integration costs paid	**(54)**	(118)
Operating cash flow	**762**	578
Capital expenditure	**(453)**	(425)
Acquisition of controlled entities	**(11)**	–
Proceeds on disposal of assets	**38**	75
Proceeds on disposal of controlled entities	**376**	8
Free cash flow	**712**	235
Dividends paid	**(317)**	(287)
Other items	**8**	(2)
Cash flow[2]	**403**	(54)

Debt and gearing

As at 30 June, $m	2019	2018
Total debt	**2,400**	2,527
Total cash and deposits	**207**	74
Net debt	**2,193**	2,453
Total shareholders equity	**5,859**	5,731
Gearing ratios		
Net debt/equity (%)	**37**	43
Net debt/equity plus net debt (%)	**27**	30
Interest cover (times)[3]	**6.4**	6.6

1. Excluding significant items.
2. Cash flow is the net change in cash and equivalents excluding the impact of borrowing proceeds/repayments.
3. EBIT before significant items/net interest expense.

Divisional Performance

BORAL AUSTRALIA

($m)	FY2019	FY2018		
Revenue	**3,572**	3,590	↓	**1%**
EBITDA[1]	**593**	634	↓	**6%**
EBIT[1]	**384**	433	↓	**11%**
EBITDA margin[1]	**16.6%**	17.6%		
EBITDA[1] (excluding property)	**560**	570	↓	**2%**
Net assets	**2,537**	2,482		
ROFE[2]	**15.1%**	17.5%		

Despite a 15% decline in residential housing starts and a 6% reduction in concrete volumes, revenue was only down 1%. EBITDA declined 6% to $593 million, primarily due to lower Property earnings. Excluding Property earnings, EBITDA declined 2% on lower volumes, partly offset by price growth, improvement initiatives and cost savings.

BORAL NORTH AMERICA

($m)[3]	FY2019	FY2018		
Revenue	**2,229**	1,989	↑	**12%**
EBITDA[1]	**415**	349	↑	**19%**
EBIT[1]	**252**	199	↑	**27%**
EBITDA margin[1]	**18.6%**	17.5%		
Net assets	**4,535**	4,514		
ROFE[2]	**5.6%**	4.4%		

USD

(US$m)[3]	FY2019	FY2018		
Revenue	**1,592**	1,539	↑	**3%**
EBITDA[1]	**297**	270	↑	**10%**
EBITDA (excluding Meridian)[1]	**304**	271	↑	**12%**

Figures may not add due to rounding

Revenue grew 12% to $2,229 million and EBITDA improved 19% to $415 million, largely driven by growth in building products, particularly Roofing, and US$32 million of Headwaters synergies, which were partially offset by softer Fly Ash earnings and lower results from the Meridian Brick joint venture. Extreme rainfalls and a 2.4% decline in housing starts impacted volumes.

USG BORAL

BORAL'S REPORTED RESULT

($m)	FY2019	FY2018		
Equity income[1,4]	**57**	63	↓	**10%**

USG BORAL UNDERLYING BUSINESS RESULT

($m)	FY2019	FY2018		
Revenue	**1,606**	1,575	↑	**2%**
EBITDA[1]	**252**	268	↓	**6%**
EBIT[1]	**168**	194	↓	**13%**
EBITDA margin[1]	**15.7%**	17.0%		
Net assets	**2,082**	1,955		
ROFE[2]	**8.1%**	9.9%		

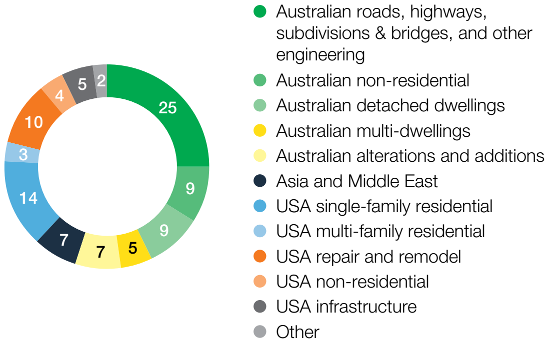
Boral's equity accounted income of $57 million, down 10% on the prior year, represents Boral's 50% share of USG Boral's underlying post-tax earnings. Revenue increased 2% to $1,606 million in the underlying business, reflecting top-line growth in Thailand, China, Vietnam and India, and a steady contribution from Australia. This was largely offset by a market-driven decline in South Korea and heightened competition in Asia, particularly in Indonesia.

---

1. Excluding significant items.
2. Divisional ROFE is annual EBIT before significant items on divisional funds employed.
3. Continuing operations basis.
4. Post-tax equity income from Boral's 50% share of the USG Boral joint venture.

MARKET CONDITIONS AND EXTERNAL IMPACTS

BORAL FY2019 external revenue[1] by market (%)



Australia

Boral Australia's largest exposure is to roads, highways, subdivisions and bridges (RHS&B). While activity remained at high levels, based on estimates, RHS&B value of work done[2] declined 6% in FY2019, with a reduction of 11% in Queensland (Qld), 5% in New South Wales (NSW) and 3% in Victoria (Vic).

Other engineering activity[2] is estimated to have declined 22%, as strong activity in Vic and NSW was offset by lower levels of Western Australia (WA) and (Qld) activity.

Australian housing starts[3] declined 15% to an estimated 195,000 annualised starts in FY2019, from 230,200 starts in FY2018. Detached housing starts are estimated to be down 8%, with multi-residential starts down 23%.

On a state-by-state basis, housing starts declined by 19% in Vic, 14% in NSW, 13% in Qld, 21% in South Australia (SA) and 16% in WA.

Australian alterations and additions activity[4] grew by an estimated 3% in FY2019.

Non-residential activity[4] grew by an estimated 2%, with higher demand in NSW and Vic.

In FY2020, on average, market forecasters[5] expect housing starts to be ~166,000.

In FY2020, concrete volumes are expected to remain high, but Macromonitor[6] is currently forecasting concrete industry volumes to reduce by ~2% nationally and ~5% in NSW. Macromonitor[6] is forecasting asphalt industry volumes to remain high in FY2020 with further growth in the next two to three years.

The list of project work in Table 1 includes some of the largest infrastructure projects Boral is currently supplying and a selection from the potential pipeline.

Table 1: Australia – project work

Logan Motorway – Enhancement Works, Qld	Est. completion 2019
Barangaroo – Crown Casino, NSW	Est. completion 2020
Bruce Highway Cairns Southern Access, Qld	
Norfolk Island Airport, Qld	
Northern Road – Stages 4, 5 & 6, NSW	
Pacific Motorway M1 M2 upgrade, Qld	
Pacific Motorway M1 M3 merge, Qld	
RAAF – East Sale, Vic	
Sydney Metro rail, NSW	
West Gate Tunnel (early works), Vic	
Melbourne Metro Rail project (precast), Vic	Est. completion 2021
Road Asset Management Contracts, Qld	Est. completion 2024
Armidale Road (Northlake Bridge), WA	Tendering
Brisbane Metro, Qld	
Capricorn Highway, Qld	
Clark Creek Windfarm, Qld	
Cross River Rail, Qld	
Haughton River Bridge, Qld	
Inland Rail Project – Narrabri to NorthStar, NSW	
Mordialloc Bypass, Vic	
Northern Road – Stages 4, 5 & 6, NSW	
Queens Wharf – resort development, Qld	
Snowy Hydro 2.0, NSW	
Suburban Roads – Upgrade North, South East & West, Vic	
Sydney Metro (Victoria Cross & Pitt St Stations), NSW	
Tonkin Highway extension, WA	
WestConnex – stage early works, NSW	
North East Link Melbourne, Vic	Pre-tendering
Sydney Stewardship Maintenance, NSW	
Warragamba Dam raising, NSW	
Western Sydney Airport, NSW	
Inland Rail Project, stages 10, 11 & 12, Qld	

1. Includes Boral's 50% share of underlying revenue from USG Boral and Meridian Brick joint ventures, which are not included in Group-reported revenue.
2. Average of Macromonitor and BIS Oxford Economics forecasts of value of work done (constant 2016/17 prices).
3. Australian Bureau of Statistics (ABS) original housing starts; average of Macromonitor, BIS Oxford Economics and Housing Industry Association (HIA) forecasts for June 2019 quarter.
4. Original series (constant 2016/17 prices) from ABS to March 2019 quarter. Average of Macromonitor and BIS Oxford Economics forecasts for June 2019 quarter.
5. Average of HIA, BIS Oxford Economics and Macromonitor forecasts.
6. Macromonitor Construction Materials forecast, July 2019 estimates.

USA

US housing starts[1] declined 2.4% to an estimated 1.22 million starts, with single-family starts down 3.4% and multi-family starts slightly up in FY2019.

In other US construction markets, the repair and remodel[2] market was up an estimated 2%, while non-residential[3] construction market grew an estimated 2%. Based on estimated ready mix concrete volumes, US infrastructure[4] activity increased 6%.

In FY2019, extended periods of well above average rainfall – in some cases at record levels – impacted activity in the South, Midwest and Northeast. This led to construction delays, most notably in our key state of Texas, with the disruption more extensive and widespread than in the prior period.

In FY2020, on average, market forecasters[5] expect total US housing starts to grow by ~4% to ~1.27 million starts.

Across other US construction markets, in FY2020 the repair and remodel market[6] and the non-residential market[7] are both expected to grow by ~3%, while the infrastructure sector[8] is expected to grow by 4%.

Asia[9]

In South Korea, the residential construction market has been in a cyclical decline in FY2019, due to government initiatives to tighten mortgage lending. The residential market (particularly multi-residential) and consequently plasterboard demand, is expected to contract further in FY2020.

In China, while the economy continues to grow, construction has been slowing due to regulatory controls and tighter lending policies. US–China trade relations have also created uncertainty.

In Indonesia, market growth has returned and the economy is strengthening, but conditions are highly competitive as additional capacity has entered the market and the domestic manufacturing sector is competing with cheaper imported building materials.

In Thailand, construction market activity was stable. The emerging markets of India and Vietnam continue to grow.

In most of its building product markets Boral faces competition from a range of large and small players. Many of Boral's large competitors in Australia, Asia and North America have global leadership positions.

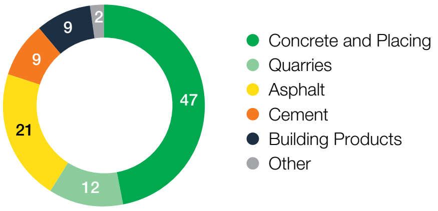
Some of Boral's businesses experience competition as a result of imports, including Boral's Timber business in Australia and the USG Boral joint venture in Asia.

For the concrete and asphalt markets in Australia, barriers to entry are low, and new entrants are attracted to markets when demand is strong.

Boral aims to differentiate itself through service excellence and product innovation. Specific challenges and responses relating to competition are highlighted on pages 20 and 21.

BORAL AUSTRALIA

FY2019 revenue by business (%)



Revenue

Boral Australia revenue decreased 1% to $3,572 million, with higher contributions from Quarries and Cement offset by lower contributions from Concrete & Placing, Asphalt and Building Products.

A 15% decline in housing starts – particularly impacting activity in NSW metro, a marked decline in non-residential activity in Southeast Queensland (SEQ), and completion or near completion of several major projects slowed revenue growth.

EBITDA

Reported EBITDA[10] decreased 6% to $593 million, primarily due to $30 million of lower Property earnings. Excluding Property, EBITDA was only down 2%. A concerted effort to reduce overhead costs, align operations with demand and optimise margins underpinned the result. Cost savings of $28 million realised through supply chain optimisation, Organisational Effectiveness (OE) and rightsizing programs, together with other improvement initiatives, substantially offset the impact of 6% lower concrete volumes, a less favourable product and geographic mix, and operational inefficiencies associated with project delays.

Excluding Property, EBITDA margins were strong and broadly steady at 15.8%.

ROFE[11] decreased to 15.1% from 17.5% in the prior year. This reflects the fact that Property contributed $33 million of EBIT this year versus $63 million in the prior corresponding period.

Concrete & Placing earnings (EBITDA) decreased, with revenue down 2%. Earnings declined due to the combination of lower volumes, particularly in SEQ, and a less favourable mix shift with a higher proportion of revenue derived from the lower margin Concrete Placing business, which reported strong growth as project activity stepped up.

Concrete volumes declined 6% as infrastructure growth was more than offset by softer residential demand across all regions, lower commercial activity in WA and a marked decline in non-residential construction in SEQ, with few projects awarded and commenced during the period. While volumes to major projects were higher compared to the prior year, they were below expectation, with project delays impacting both productivity and costs.

---

1. US Census seasonally adjusted annualised housing starts. Based on data up to July 2019.
2. Moody's retail sales of building products, July 2019.
3. Management estimate of square feet area, using Dodge Data & Analytics and US Census data.
4. Management estimate of ready mix demand, using Dodge Data & Analytics and Portland Cement Association shipments.
5. US Census seasonally adjusted annualised housing starts (July, 2019). Based on average of analysts' forecasts (Dodge, Wells Fargo, NAR, NAHB, Fannie Mae, Freddie Mac, MBA).
6. Based on forecasts from Moody's retail sales (July 2019), LIRA (July 2019) and HIRA (November 2018).
7. Based on Dodge Data & Analytics (June 2019), Oxford Economics construction forecast (Q2, 2019) and FMI US construction outlook (Q2, 2019).
8. Based on Dodge Data & Analytics, Infrastructure Ready Mix Demand (June 2019) and PCA cement consumption outlook (Spring 2019).
9. Based on various indicators of building and construction.
10. Excluding significant items.
11. Return on funds employed (ROFE) is based on total EBIT before significant items on funds employed at period end.

Major infrastructure projects contributing to revenue in FY2019 included NorthConnex, Pacific Highway and Sydney Metro in NSW and the Toowoomba Second Range Crossing in Qld, with several projects completing or nearing completion in FY2019 ahead of others commencing, including the Forrestfield Airport Link (WA), NorthConnex (NSW) and Sydney Metro (NSW).

Concrete like-for-like (LFL) prices were up 2%, with solid gains in Vic and NSW, moderate price gains in SEQ and lower prices in WA.

Quarries reported higher revenue. Quarry volumes (internal and external) were up 1%, with significant growth in NSW and Vic partly offset by declines in Qld and WA. Growth in external volumes, primarily driven by roadbase, were largely offset by lower internal volumes. While revenue grew 9%, earnings grew modestly, primarily reflecting an increase in lower value product in Vic, NSW and SEQ.

Nationally, LFL pricing for Quarries was steady as gains in SEQ and Vic were offset by a decline in NSW and subdued results across other regions.

Asphalt earnings declined on a 5% reduction in revenue, driven by lower volumes and weaker margins in Qld and Vic. Earnings were adversely impacted by higher costs and lower productivity on some major projects. Major projects contributing to revenue in the full year included Gateway Upgrade North and Logan Enhancement in Qld, Geraldton Airport Upgrade in WA, and Northern Road and Pacific Highway in NSW.

Cement revenue was up 7% and earnings were modestly higher. Benefits from favourable pricing, higher external volumes and cost saving programs offset a lower contribution from our Sunstate joint venture and higher fuel and clinker costs. Production at the Berrima Kiln also normalised in the second half of FY2019.

Property reported EBITDA of $33 million, with earnings from the sales of Jandakot and Donnybrook properties flowing through in the second half of FY2019. Property earnings were $30 million lower than the prior year.

Building Products (Timber, Roofing and Bricks WA) reported a decline in revenue and weaker earnings due to softer detached residential housing construction in the second half and higher costs in Timber. These more than offset the benefit of higher average selling prices and cost reduction programs.

Excellence programs

Our Commercial Excellence program is delivering benefits across most businesses, including through customer market segmentation, which helped to deliver the reported price increases of 1–3%. Through our Customer Experience program (initiated in FY2018) we continue to focus on transforming the Boral customer experience and improving customer satisfaction, as reflected by our improved Net Promotor Scores (NPS) that have been delivered so far. We are now continually capturing NPS in the Southern Region and rolling out a similar approach in other regions.

Our multi-year supply chain optimisation project is part of our Operational Excellence program, which aims to reduce supply chain costs. In FY2019, the supply chain optimisation program delivered around $15 million of savings.

Organisational Effectiveness

We continue to focus on reducing costs and rightsizing our business to align resources with demand. Our OE program, together with regional rightsizing, delivered savings of around $13 million via the reduction of around 300 positions.

Strategy and priorities

Despite some cyclical market pressures, Boral Australia remains strong and the business is performing well. Our strategy is to protect and strengthen our leading, integrated construction materials position, which continues to benefit from the multi-year pipeline of major roads and infrastructure work.

During FY2019, a total of $291 million of capital was invested in Boral Australia. As part of our capital investment program, we continued to progress the new 1.3 million tonne clinker and slag grinding plant and cementitious storage facility at the Port of Geelong in Victoria, which is expected to cost up to $130 million. The investment is on track and construction is expected to be completed by the end of calendar year (CY) 2020.

Our quarry reinvestments at the Orange Grove Quarry (WA) and Ormeau Quarry (Qld) were completed in FY2019. Orange Grove is producing at targeted capacity and Ormeau has reached practical completion and continues to ramp up in line with expectations. Benefits will be delivered from FY2020.

In Boral's concrete and asphalt plant network, our new higher capacity concrete batch plant at West Melbourne (Vic) is commissioned. In Asphalt, our new plant at Toowoomba (Qld) is also commissioned.

As market conditions soften, Boral Australia is focused on lowering overhead costs through our OE program. Rightsizing the business to align resources with demand remains an ongoing focus. In FY2019, we reduced our headcount in WA and SEQ in line with the market softening in those regions, and we will continue to rightsize our business in response to cyclical markets.

Overall, through OE and rightsizing, around 300 positions were taken out of the organisation through a combination of natural attrition, a hiring freeze and 220 redundancies. These largely occurred in the last quarter of FY2019 and are expected to deliver further savings in FY2020.

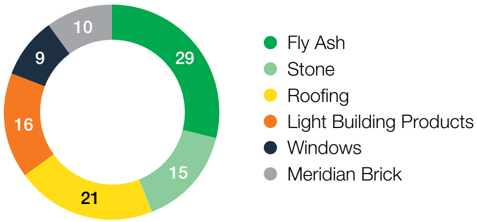
While a hiring freeze is no longer in place, we continue to implement tight controls on headcount additions. Net one-off costs associated with our rightsizing and OE program total approximately $18 million, with these costs recognised in FY2019 as a significant item.

We are also focused on reducing costs through our Operational Excellence programs, including through supply chain optimisation. The supply chain program is targeting to reduce supply chain costs (which total around $650–$750 million) by 5–10%.

Through our OE, rightsizing and supply chain optimisation programs, we delivered around $28 million of savings in FY2019. We expect further savings of around $40–$50 million in FY2020 from these initiatives.

BORAL NORTH AMERICA

FY2019 revenue by business (%)



In May 2018, Boral agreed to sell its Denver Construction Materials business, which settled on 2 July 2018. Boral also agreed to sell its US Block business on 17 October 2018 which settled on 30 November 2018.

The following commentary relates to FY2019 results for continuing operations. Results for the Denver Construction Materials and US Block businesses are not included in Boral North America earnings for continuing operations. The result does include post-tax equity income from the Meridian Brick joint venture formed 1 November 2016.

An average AUD/USD exchange rate of 71.45c is used for FY2019, and 77.35c for FY2018.

Revenue

Revenue was up 3% to US$1,592 million, largely driven by significant growth in Roofing and an improved contribution from Windows. Extremely high levels of rainfall experienced in the South, Midwest and Northeast regions disrupted construction activity during the year and, when coupled with softer housing starts, slowed volumes.

EBITDA

EBITDA[1] increased 10% to US$297 million, with synergy benefits of US$32 million slightly ahead of plan. In Australian dollar terms, EBITDA increased 19% to A$415 million, reflecting favourable currency movement. Price increases helped to offset higher costs. Several legal cases related to the Headwaters acquisition were resolved below expected cost outcomes, providing a one-off benefit of approximately US$10 million in FY2019. This benefit was largely offset by the impact of lower volumes.

Higher earnings from Roofing and Windows were offset by softer earnings from Fly Ash and lower results from the Meridian Brick joint venture. Excluding the Meridian Brick joint venture, EBITDA was up 12%.

ROFE[2] improved to 5.6% from 4.4%. Boral North America remains well placed to deliver above cost of capital returns over time through full realisation of acquisition synergies and market growth.

Fly Ash revenue was broadly steady, with strong 11% like-for-like (LFL) price gains offsetting a 3% decline in volumes and lower revenues associated with the completion of two major site services construction projects, known as Barry and Gaston. Excluding site services, revenue from Fly Ash was up 7%. In FY2019, site services represented 23% of Fly Ash revenue, down from 28% in the prior year, but still above the historical average of 20%.

Fly Ash earnings were also down because of lower earnings from site services. EBITDA margins of ~22%, compared to ~24% in the prior year, reflect higher costs and the completion of the Barry and Gaston projects, which delivered above average margins in the prior year. Synergies of US$7 million were in line with expectations.

Fly Ash volumes declined 3% to ~7 million tons in FY2019; first half volumes were down 6% while second half volumes were up 3% on the prior corresponding period. The expected full year impact of prior period Texas utility closures, unplanned intermittent power plant outages and extreme wet weather conditions – particularly in the first half – adversely impacted volumes. Volumes were partly recovered through network optimisation and additional storage capacity, as well as new contracts.

Our first landfill reclaim operation at Montour in Pennsylvania was commissioned during the year, with volumes ramping up by year end after a slow winter. We are supplying the market with modest volumes of imports from Mexico, which will grow over time. Continued investment in fly ash storage has resulted in our total capacity reaching 600,000 tons, as planned.

Roofing delivered strong earnings growth driven by a 15% increase in revenue. Despite softer construction markets in the second half and a lower spring re-roof season due to weather, concrete tile volumes benefited from strong demand in Colorado, Nevada and Florida where growth continues to exceed housing starts.[3]

An increase in Concrete Roofing average selling prices of 5% more than offset inflationary and demand-driven cost pressures. Roofing delivered synergies of US$11 million.

Manufacturing performance continues to improve at the Okeechobee and Lake Wales plants (FL), and production constraints at the Oceanside metal roofing plant (CA) were rectified in the second half.

Stone delivered steady revenue and a modest increase in earnings. Earnings benefited from price gains, cost savings associated with the rationalisation of two distribution facilities, and completion of commissioning at the Greencastle plant in the prior period. This was partly offset by inflationary costs pressures, primarily from labour and raw materials, and a decline in volumes reflecting softer demand in US Central, Northeast and Southern regions, as well as Canada. Synergies of US$6.4 million were delivered.

Light Building Products reported stable revenue and modest earnings growth. Double-digit volume growth in TruExterior® Siding & Trim and good price gains in Versetta and TruExterior® were offset by softer volumes across most other product categories due to weather and lower housing activity. Raw material costs were steady, while labour and production costs were higher. The BCI production challenges experienced in the prior period were rectified and synergies of US$4.5 million were delivered.

Windows reported a 5% lift in revenue, reflecting market share gains, partly offset by lower volumes due to adverse weather conditions. Earnings were higher, benefiting from higher volumes, modest price growth, reduced raw material costs and improvements in logistics, which offset higher labour costs.

Meridian Brick joint venture delivered an underlying post-tax equity earnings loss of US$7 million, compared with a loss of US$1 million in the prior period. The Meridian Brick joint venture generated underlying revenue of US$375 million and EBITDA of US$6 million. Compared to the prior period, revenue declined by 5% and EBITDA declined by 76%.

Underperformance of the business, particularly during the second half of FY2019, reflects a significant downturn in the Canadian housing market – which has historically contributed a significant portion of the earnings of the joint venture – and a softening of US housing starts in the second half. In response to lower demand, a significant number of plants were temporarily closed in the second half, helping to address inventory and working capital, but adversely impacting EBITDA due to lower fixed cost recovery.

1. Excluding significant items.
2. Return on funds employed (ROFE) is based total EBIT before significant items on funds employed at period end.
3. Dodge Data & Analytics housing starts.

BORAL NORTH AMERICA continued

These factors, together with the recent decline in brick intensity per housing start in the USA, triggered a net impairment of the investment in the Meridian Brick joint venture of $174 million, reported as a significant item.

Strategy and priorities

We continue to make good progress integrating the Headwaters acquisition. In Stone, we completed the first phase of plant network optimisation initiatives, while in Roofing, we continued to optimise our operations in Florida, and launched our branding and channel to market strategies around our metal roofing line. The consolidation of back office, finance and IT systems is continuing in line with our expectations.

We continue to deliver improvements in plant operational issues in Roofing, Stone and Windows that impacted in FY2018 and realise benefits from operational improvements implemented in FY2019.

Synergies achieved in FY2019 of US$32 million were better than the expected US$25 million of targeted benefits. We have now delivered US$71 million of synergies from the Headwaters acquisition and remain on track to deliver our targeted year-four synergies of US$115 million per annum.

During FY2019, we invested US$114 million of capital into Boral North America. This included ~US$40 million in fly ash fixed and floating storage and completing our Montour fly ash reclaim facility, and the US$10 million upgrade at our Stonecraft manufactured stone plant in Ohio.

In the Fly Ash business, we are making progress to deliver our target of a net increase of 1.5–2 million tons per annum on FY2018 volumes of available fly ash over the next two years.

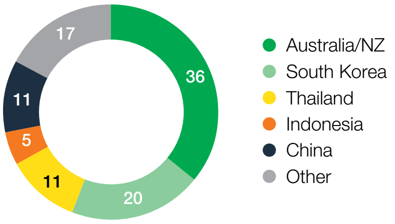
By the end of FY2021, we expect to be supplying fly ash at a run rate of at least 8.6 million tons per annum, with volume growth coming from a range of initiatives including opportunistic imports, new contract volumes, fixed and mobile storage of off-season production, landfill reclamation and mining natural pozzolans to supplement ash production.

In FY2020, however, the well-flagged (previously disclosed) closure of the Navajo utility in Nevada will have an adverse volume impact of approximately 400,000 tons per annum from December 2019. Despite this, we expect our Fly Ash growth strategy to result in some volume uplift in FY2020.

In FY2020, revenue and earnings from site services are expected to be down, with site services returning to ~20% of Fly Ash revenue as we complete a major Synmat construction project at the TVA Cumberland utility ahead of starting other potential work in the pipeline.

USG BORAL

FY2019 external revenue (%)



Boral's equity accounted income of $57 million, down 10% on the prior year, represents Boral's 50% share of USG Boral's underlying post-tax earnings.

Revenue increased 2% to $1,606 million in the underlying business reflecting top-line growth in Thailand, China, Vietnam and India, and a steady contribution from Australia. This was largely offset by a market-driven decline in South Korea and heightened competition in Asia, particularly in Indonesia. Price outcomes were mixed.

Non-board revenue, from ceiling tiles, metal stud, compounds and plasters, gypsum and contracting, represented 42% of total revenue. It increased 3% mainly due to higher gypsum and metal studs sales and contracting in Australia.

Underlying EBITDA declined 6% to $252 million, primarily reflecting lower earnings from South Korea. Excluding South Korea, earnings were steady, as lower earnings from Indonesia, China and the Philippines were offset by increased contributions from Thailand, Vietnam and India, as well as a continued strong contribution from Australia. Project Horizon, USG Boral's rightsizing and LEAN improvement initiative, which was launched in response to cyclical market declines in South Korea and Australia, and higher input costs more broadly, benefited the result. Project Horizon is expected to deliver annualised cost savings of ~$21 million by FY2021, of which $4.5 million was delivered in FY2019.

Australia and New Zealand

Australia and New Zealand revenue was stable at $576 million. Plasterboard volumes remained at reasonably strong and steady levels in FY2019, as modest market share gains offset the impact of market softness which began in the fourth quarter. Earnings were steady, with broadly steady prices and cost reduction programs offsetting inflationary cost increases.

Asia

Asia revenue increased 3% to $1,031 million, with growth across most countries offset by a cyclical decline in South Korea and increased competition in Indonesia. While cost escalation was largely offset by improvement programs, earnings were adversely impacted by lower South Korean volumes and softer pricing more broadly.

- **South Korea** plasterboard volumes were down ~10% with residential construction slowing and lower prices reflecting intense competition as a competitor added new capacity. The business maintained its market share. While margins contracted, they continue to be well above USG Boral's average.

USG BORAL continued

- **China** revenue increased due to growth in non-board product such as metal stud, while earnings were lower with a reduction in plasterboard volumes and higher production costs. Both plasterboard demand and price growth were lower than expected as a number of competitor plants reopened following the implementation of environmental controls in the prior period.
- **Thailand** revenue and earnings were higher with margins improving and market share remaining strong.
- **Indonesia** revenue was lower as price pressures continued, driven by excess market capacity. Earnings declined due to price weakness and higher raw material costs.
- **Vietnam** reported revenue and earnings growth underpinned by double digit volume gains and strong price improvement.
- **India** reported improved revenue and earnings with higher volumes and an unfavourable reserve adjustment in the prior period not recurring.

Strategy and priorities

The USG Boral joint venture, formed in March 2014, is a long-term organic growth platform for Boral. The business is positioned to deliver strong growth through innovation, economic growth in Asia and as product penetration accelerates for gypsum-based linings and ancillary products.

In addition to the announced strategic growth transactions with Knauf, which will significantly strengthen Boral's earnings from the business, USG Boral is implementing a rightsizing and lean improvement initiative known as Project Horizon in response to cyclical market declines in South Korea and Australia, and higher input costs more broadly.

While Project Horizon will see a total reduction of around 240 positions in the business – a 7% reduction in the total USG Boral employee base – the headcount reduction involved close to 140 redundancies across 11 countries, with all employees notified between April and August 2019. The remaining 100 positions were eliminated through natural attrition coupled with a hiring freeze implemented in the second half of FY2019.

Project Horizon delivered early benefits of ~$4.5 million of cost savings in FY2019, and is expected to deliver ~$21 million of annual cost savings by FY2021, with the vast majority delivered in FY2020. One-off costs associated with the project total approximately $8–9 million, with most of these costs recognised in FY2019.

FY2020 OUTLOOK

Taking into account where we finished the year in FY2019, the outlook for Boral's markets in FY2020, and the trading conditions we have seen in July and August, Boral expects NPAT[1] to be ~5–15% lower in FY2020 relative to FY2019, due to lower earnings in Boral Australia and USG Boral, but underlying earnings growth in Boral North America, together with higher depreciation charges.

Other FY2020 financial considerations

- Above average Property earnings are expected in FY2020
- Headwaters synergies of ~US$20 million are expected in FY2020
- Depreciation and amortisation is expected to be higher and in the range of $400–$410 million in FY2020 (before the impact of the new leasing standard), reflecting completion of quarry upgrades in Australia
- Boral's interest expense is currently expected to reflect a continued cost of debt of ~4.25–4.50% per annum with net debt increasing to reflect the announced investments in USG Boral
- Boral's effective tax rate is currently expected to be in the range of 22–24%
- We expect capital expenditure to be lower in FY2020 in the range of $350–400 million

The above FY2020 outlook is in AUD before the positive impact of additional earnings from the announced USG Boral/Knauf transaction and before the impact of accounting changes resulting from the adoption of the new leasing standard (IFRS 16).

Implications of the new IFRS Leasing Standard

Changes in accounting treatment of operating leases as set out in the **new IFRS 16 Leasing Standard** are expected to impact Boral's reported earnings in the following way:

- EBITDA will be ~$90 million higher
- EBIT will be ~$5 million higher
- NPAT will be ~$10 million lower

Implications of the USG Boral/Knauf transaction on Boral's reporting and FY2020 earnings

The USG Boral transaction with Knauf is anticipated to close around the end of CY2019, subject to regulatory approvals. Once complete, Boral will combine its share of equity accounted earnings from the expanded Knauf/USG Boral joint venture in Asia with fully consolidated earnings from USG Boral Australia and New Zealand and report them under its USG Boral division.

Key financial information regarding the acquired businesses was provided in the ASX release/presentation material announcing the transaction on 26 August 2019.

Transaction costs of around A$20 million are expected and will be reported as a significant item in FY2020.

---

1. Excluding significant items.

Summary of Boral's Risks and Responses

		Health, safety and environment (HSE) and social risks	Industry and market risks
RISKS		• Heightened stakeholder expectations • Injury and accidents • Acute environmental damage • Regulatory requirements • Community impacts • Physical climate-related risks • Human rights and workplace relations • Conduct risk, anti-corruption • Sustainable supply chain and modern slavery	• Structural and cyclical demand changes • Political and regulatory change • Macroeconomic and geopolitical conditions • Inflationary impacts from rising input costs • Movements in foreign exchange rates • Future resource supply constraints • Changes to construction methods and materials • Changing demographics and urbanisation
EXAMPLES OF DIVISIONAL INITIATIVES / RESPONSES	BORAL GROUP RESPONSES	• Group-wide **commitment to Zero Harm** 27 • Global **HSEQ management system** and minimum standards 27–28 • **HSE performance monitoring**, reporting and accountability 21 • Monitoring **regulatory changes** and engaging with regulators • Progressive adoption of TCFD recommendations including **climate-related scenario analysis** 32–42 • **Flood mitigation** plans 35 • Group-led **diversity and inclusion** program 24–25 • **Organisational culture** work 25 • Leadership development and **workforce capability** building activities 26 • Supply chain **modern slavery risk** framework 51 • Third-party managed **whistleblower hotline**, monitoring and reporting in all jurisdictions 22, 51	• **Diversified business portfolio** to reduce impacts of individual geographies and markets • Continued **monitoring of government policies** including tax, labour and infrastructure policies • US debt utilised to **limit impacts of foreign exchange** rate movements • **Staged and long-dated debt maturity** profile • **Adequate liquidity** via committed undrawn facilities and cash • Energy inputs hedged and interest **rates swapped to reduce cyclical impacts** • Group procurement to optimise cost base and mitigate supply constraints 50 • Cost out initiatives and rightsizing resources to market conditions • **Investment in R&D**, innovation and customer-centric programs 49
	BORAL AUSTRALIA	• **Heavy vehicle safety** management to meet Heavy Vehicle laws as a minimum 46 • **Vehicle and pedestrian interaction** improvement initiatives • **Community consultation** programs and initiatives to minimise impacts of operations 46 • **Flexible work policy** and guidelines 25	• Leveraging demand shift to major infrastructure through **investments in quarries, asphalt and concrete** operations and **strengthened project capability** 11 • **Strengthened import capability** with Boral Cement Geelong clinker import terminal under construction in Victoria 11 • Reducing costs through **Operational Excellence** programs including Supply Chain Optimisation and **Organisational Effectiveness** programs 50–51
	BORAL NORTH AMERICA	• **Ongoing post-Headwaters integration** review of safety exposures and compliance, including audits 31 • **Dedicated capital investment** for safety enhancement projects in Headwaters acquired businesses 31 • **Safety management and recovery plans** for major weather events 36	• **Reposition portfolio** from high fixed cost, energy intensive to lighter building products, with more variable cost base • Delivery of **synergy targets** to reduce costs, achieve efficiencies, and capture growth • **Fly Ash strategic initiatives** and network optimisation to grow supply and enhance returns 34
	USG BORAL	• **HSE standards** applied consistently across Asia, Australasia and the Middle East 28 • **Anti-corruption measures** including clear accountability, policies, training, and audits 22 • Use of **CCTV to aid incident investigations** and improvements 31	• **Product leadership** and **product differentiation** strategy underpinning performance 48 • **Securing gypsum supply** through acquisition of reserves and stable supply agreements 37 • Long-term **raw material supply contracts**, e.g. paper • **Cost reduction program** and lean initiatives 9

To achieve our strategic objectives and create value for our stakeholders, we need to adapt to a continually changing external environment by mitigating potential risks and capturing opportunities.

Group Risk manages Boral's risk identification and management process, which includes an annual bottom-up assessment and review. Here, we identify some of our main near- and longer term risks and challenges across our business. We carefully manage these risks and, when necessary, adapt our strategies to drive success. We highlight some of the actions we are taking in response to the challenges we face. Page references indicate where the topics are covered in the 2019 Boral Review.

Further information about risk identification and management at Boral can be found in the Corporate Governance Statement. Boral's Risk Management Policy is also available on our website.

Competition risks

- New capacity and market entrants
- Customer concentration
- Pricing dynamics
- Regulatory requirements
- Technology/R&D and product innovation
- Disruptive product innovation and product substitution

• **Monitoring** and reporting **regulatory changes** and industry trends	
• **Transformation Action Group** to foster new ways to make and sell new and existing products	
• **Leveraging technology** for more targeted sales and marketing	49
• Centralised **competition law training**	
• Regionally based dedicated **R&D teams** focused on **product innovation**	49
• **Commercial Excellence** and Customer Experience initiatives to improve customer-centricity, enhance service and grow margins	49
• **Supply Chain Optimisation program** enhancing supply logistics and reducing costs	50–51
• **Innovation hub** focused on identifying and implementing new technologies and processes	26
• Dedicated **Integration and Synergy Delivery program**	
• Divisional **procurement strategy and initiatives** to enhance supply chain, including logistics and continuity of supply, and reduce costs	50–51
• Regionally focused **product price** analytics and sales strategies	
• **National R&D centre** to bring new technologies and products to market	49
• **Expanded product portfolio** aimed at enhancing revenue and earnings	15, 48
• **Innovation investment** to further strengthen competitive advantage, e.g. EcoSmart Panels, Ensemble™	49
• **New enterprise resource planning (ERP) system**, initially in Australia with roll-out to other countries planned	

Business interruption risks

- Plant and systems failure
- Cybersecurity
- Weather impacts
- Reserves and resources
- Supply chain failure
- Business conduct/reputational damage
- Digital disruption
- Business partnerships misalignment

• **Business continuity planning** with regular crisis simulations	
• **Disaster recovery plans** in place for critical IT systems and operational equipment	
• Formal bottom-up **enterprise risk management processes**	35
• **Geographically diversified portfolio** mitigates regional weather events	35
• **Reserves planning** and **capital optimisation**	
• Centralised **Code of Business Conduct** and associated policies	22
• Centrally managed **data breach monitoring** and response	23
• **Cybersecurity plans** coordinated across divisions and aligned with National Institute of Standards and Technology (NIST) Cybersecurity Framework	23
• **Governance structures** to monitor performance of third-party agreements and joint ventures	
• Boral Digital Services using **agile processes and cloud-based** application and storage	
• **Targeted technology enhancements** to improve operational and core financial systems	
• Monitoring and **preparedness for weather affected disruption** including water management plans, flexible workforces and additional equipment	35–36
• **Long-term availability of fly ash** monitored and future sources identified including reclamation of landfilled ash	13, 34
• **Prioritisation of capital investment** aligned with product and market growth, with focus on increasing fly ash storage	
• Streamlining and **upgrading IT systems** and investment in cybersecurity controls and tools	23
• **New IT implementation** in key regions, e.g. ERP solution in Australia	
• **Investment in cybersecurity** controls and monitoring	23
• Improved **anti-bribery** and **competition training**	22

Sustainability Overview

How we report

Boral's 2019 Sustainability Report, which forms part of the 2019 Boral Review, provides detailed information on the sustainability issues assessed as material to Boral. In addition to our Sustainability Report, we provide this sustainability overview.

Additional information on Boral's sustainability performance and approach is available:

- in the Corporate Governance Statement and Directors' Report, and
- on our website, including our policies, supplementary sustainability information, Reconciliation Action Plan, Tax Transparency Report, reports to the Workplace Gender Equality Agency, community engagement programs and Boral News magazine.

Managing sustainability

Our commitment and approach to sustainability is embedded in our business strategy and all that we do. We strive to deliver returns above our cost of capital through the cycle for our shareholders and to create value for all our stakeholders. We recognise that delivering sustainable outcomes is vital to our long-term success.

To meet the sustainability challenges of today and tomorrow, it is critical that we drive progress and continuous improvement. Our governance, accountability, management systems and reporting frameworks help us drive better outcomes and meet the evolving and increasing expectations of our stakeholders.

In FY2019, we continued to improve our safety outcomes, reduce our carbon emissions, and increase gender diversity in our workforce. We enhanced our customer experience through digital tools and solutions, strengthened our governance, strategy and risk management of climate-related impacts, and enhanced our supply chain, including our approach to identifying and managing modern slavery risk.

We also continued to strengthen our sustainability approach and reporting. We:

- enhanced our climate-related disclosure, as we progressively adopt the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD)
- strengthened how we identify and manage modern slavery risks in our operations and supply chains, as we prepare to publish a Modern Slavery Statement in 2020
- broadened our sustainability metrics and related information that has been subject to independent assurance – these metrics are listed in Ernst & Young's (EY's) assurance statement on page 52 of the 2019 Boral Review, and
- identified the United Nations Sustainable Development Goals (SDGs) and targets we can most impact and integrated these into our sustainability reporting.

We will consider how we can further contribute to the SDGs through our planning and sustainability approach, and report on our progress.

REPORTING SCOPE

This sustainability overview covers Boral's wholly owned operations and joint ventures that were at least 50% owned by Boral for the year ended 30 June 2019, unless otherwise stated.

Boral's HSE data includes joint venture entities, irrespective of equity or management control. Safety data includes employees and contractors in all businesses.

Safety data reported prior to, and including FY2017, includes 100% owned businesses and joint ventures where our equity interest was 50% or more – and has not been retrospectively adjusted.

While Boral's joint ventures have their own management structure and regulatory responsibilities, we expect them to meet the same minimum HSE standards as fully owned Boral sites.

HSE data for Headwaters businesses, acquired in May 2017, is consolidated from FY2018.

OUR MATERIAL SUSTAINABILITY ISSUES

We define our material sustainability issues by undertaking a formal biennial materiality assessment, which forms part of our broader risk management processes.

We assess materiality, in the context of sustainability, based on the significance of issues to Boral and to our stakeholders. Specifically, our issues were assessed with reference to the Global Reporting Initiative's (GRI's) definition of materiality which covers 'significant economic, environmental and social impacts; or the issues that substantively influence the assessments and decisions of stakeholders.'

In FY2019, we updated the materiality assessment completed in FY2017, to consider evolving stakeholder priorities, megatrends, regulatory developments, and Boral's strategy, risks and opportunities.

The materiality assessment process involved:

- **a desktop assessment**, including peer and media analysis, and analysis of global frameworks and industry reports
- **internal workshops and discussions** with multidisciplinary leaders, including Executive Committee members with an understanding of our key external stakeholder groups
- **issue prioritisation** based on the findings of the desktop analysis and internal stakeholder feedback, and
- **validation** and final review of the outcomes by senior executives.

We engaged EY to undertake the desktop assessment and help us validate the outcomes.

The updated materiality assessment identified 14 material issues, some of which were previously embedded in broader categories. These are:

- culture and business conduct (2019 Annual Report (AR) p. 23–24, 2019 Boral Review (BR) p. 22)
- cyber and data security (AR p. 24, BR p. 23)
- diversity, inclusion and equality (AR p. 25, BR p. 24–25)
- employee development and engagement (AR p. 26, BR p. 25–26)
- human rights and workplace relations (AR p. 26, BR p. 26)
- health, safety and wellbeing (AR p. 28, BR p. 29–31)
- climate-related impacts (AR p. 29–32, BR p. 32–42)
- energy (AR p. 32, BR p. 39)
- environmental impacts (AR p. 32–34, BR p. 43–45)
- social and community impacts (AR p. 34–35, BR p. 46–47)
- customers (AR p. 35–36, BR p. 48–49)
- sustainable products and innovation (AR p. 35–36, BR p. 48–49)
- sustainable procurement (AR p. 36–37, BR p. 50–51), and
- supply chain logistics (AR p. 37, BR p. 51)

In addition, the future of work was identified as an emerging issue.

United Nations Sustainable Development Goals

In collaboration with members of Boral's leadership team involved in the materiality assessment, and a broader representative group from the business, we identified which of the 17 SDGs and 169 SDG targets Boral can most significantly contribute to.

We prioritised 10 SDGs and 20 SDG targets that are most closely connected with our business strategy and material sustainability issues. See page 20 of the 2019 Boral Review for further details.

SUSTAINABILITY GOVERNANCE

Our approach to sustainability is underpinned by:

- effective governance and risk management
- open and constructive engagement with our stakeholders, and
- monitoring and transparent reporting on our material issues.

The **Board of Directors** maintains oversight of sustainability matters, including strategy, risk identification and management, and external reporting.

The **Board Health, Safety & Environment (HSE) Committee** is responsible for reviewing and monitoring:

- the Group's performance, assessed by reference to agreed targets and measures, in relation to HSE matters
- the effectiveness of Boral's policies, systems and governance structure in identifying and managing HSE risks which are material to the Group, and
- the policies and systems for ensuring compliance with applicable legal and regulatory requirements associated with HSE matters.

Divisional management teams and the corporate HSE function report on HSE performance, risks and management actions, including climate-related matters, to the Board HSE Committee on a quarterly basis. The Board HSE Committee considers energy and climate-related issues at each of its meetings.

The **Board Audit & Risk Committee** is responsible for satisfying itself that a sound system of risk oversight and management exists, and that internal controls are effective. It meets at least four times per year and receives an annual report on our organisation-wide risks, including climate-related risks.

Management responsibility

The CEO & Managing Director is accountable for the management of sustainability matters and delegates this responsibility to Boral's Executive Committee. The Executive Committee, which includes the CEO & Managing Director, is individually and collectively accountable for assessing and managing sustainability matters. The Group President Operations is responsible for HSE matters.

Sustainability is embedded into Group and business-level strategies, action plans and reporting, with performance monitored at a divisional and corporate level through relevant senior executives.

Line managers are supported by divisional specialist managers across HSE, procurement, human resources, marketing and community engagement, as well as corporate HSE and human resources teams. The corporate HSE team is responsible for policy, governance and functional leadership, in consultation with divisional specialists.

Sustainability risks are also integrated into Boral's organisation-wide risk management processes, which identify, assess and monitor the organisation's risks. Further information on our governance of climate-related impacts is on page 30.

Management remuneration

Managing sustainability, including safety, is considered an integral component of leadership, and is considered in reviewing performance and setting fixed remuneration increases. We therefore do not link remuneration incentives to sustainability metrics, including safety performance.

The Board has discretion to adjust executive remuneration outcomes if there is evidence that a breakdown in management oversight and processes has led to poor outcomes, including in safety performance.

CULTURE AND BUSINESS CONDUCT

Working with integrity, respect and fairness is fundamental to how we do business, and is underpinned by our values. We expect all employees and people representing Boral to meet the highest ethical standards as well as observing both the letter and spirit of the law.

Demonstrating strong ethical principles in all that we do is vital to our reputation and our ability to deliver long-term value to all of our stakeholders, including shareholders, customers, employees and communities.

Our Code of Business Conduct (Code) and supporting policies set out the high ethical standards we expect everyone to adhere to across our international operations. We are committed to working with third parties, including customers, subcontractors, distributors, suppliers and joint venture partners, whose business ethics and behaviour are consistent with our Code.

Our commitment to anti-corruption compliance is reflected in our Code, which prohibits bribery and corruption in all forms, whether direct or indirect. Our anti-corruption measures include clear policies, accountability, training, reporting and audit review. Conduct risk and corruption risk are also assessed through our enterprise risk management review process.

We complement our policy and risk management framework with clear communication and training on the Code and associated policies in our induction training and ongoing refresher training programs. The USG Boral joint venture conducts additional risk-based anti-corruption training and has established an externally managed anti-corruption audit program.

The Board and senior management take breaches of the Code or other misconduct very seriously. We have consistent and transparent policies and practices in place to address any non-compliance with our Code and supporting policies. Formal consequences include additional training, impact on reward and promotion, formal warnings and termination.

In FY2019, 246 employees of Boral Australia and Boral North America were dismissed, up from 183 in FY2018. This represents 2% of our employees in these two divisions. Of these dismissals, 62 were for breach of policy or misconduct, with the remaining 184 due to violation of rules or poor performance. They ranged from managers to frontline employees. These matters were considered isolated incidents and not systemic.

We provide easy and clear avenues for our people to report ethical concerns and improper behaviour. In addition to internal reporting channels – via senior management, human resources, internal audit and legal – we provide an external independent whistleblowing service, known as FairCall. Reports via FairCall can be made on an anonymous basis, and we are committed to maintaining the independence, impartiality and confidentiality of the reporting and investigative processes. The Company Secretary reports on these matters to the Board Audit & Risk Committee.

Boral's Code prohibits political donations or contributions.

TAX TRANSPARENCY

Boral's approach to taxation is consistent with our Code, and our tax function works within our broader governance and risk management framework.

We are committed to meeting our taxation obligations in the jurisdictions where we conduct business, and to paying our taxes on time. Tax outcomes do not drive our business transactions.

In response to the Australian Voluntary Tax Transparency Code, we have published an annual Tax Transparency Report on our website since 2017. The report discloses Boral's approach to taxation and information on our Australian and global income taxes and other taxes paid in Australia.

CYBER AND DATA SECURITY

Businesses face a growing risk of cybersecurity breaches and attacks on information systems by increasingly sophisticated cybercriminals.

In response, we have increased investment in cybersecurity controls and monitoring across the Group to mitigate potential risks to our technical infrastructure, data security and customer privacy.

Boral's cybersecurity response plan aligns with the National Institute of Standards and Technology (NIST) Cybersecurity Framework, which is recognised as global best practice. During the year, we implemented improvement plans to achieve NIST targets across each of our divisions.

Cybersecurity managers in each division are responsible for reviewing our security framework, and developing mitigation and improvement plans. We also engage third-party cybersecurity specialists to conduct regular penetration testing to assess security controls and identify required remediation measures.

In FY2019, we rolled out a Group-wide information security awareness training program to all employees, and cybersecurity training to all USG Boral employees.

The Board monitors cybersecurity risks and strategy, and engages with external experts and internally with Boral's Digital Solutions team to understand cybersecurity risks.

HUMAN RIGHTS

We support the United Nations Guiding Principles on Business and Human Rights, and are committed to respecting and promoting internationally recognised human rights through our operations and supply chain.

Our Human Rights and Modern Slavery Working Group, established in FY2018, continues to support work being undertaken to further develop our approach to modern slavery in light of the *Modern Slavery Act 2018*. The working group comprises members of Boral's Executive Committee and key functional roles, including human resources, procurement, risk and legal.

Details about our approach and work undertaken to strengthen how we assess and manage modern slavery risk in our operations and supply chain can be found on pages 26 and 37 respectively.

INDUSTRY ASSOCIATIONS

We are members of, and actively participate in, a number of industry associations in Australia and the USA.

These industry associations offer a forum for sharing industry best practice and new ideas, developing technical standards, and advocating on behalf of the industry, to the government and the community.

Participants in industry associations are provided competition law training to ensure that association with other industry participants is always compliant with the law.

The associations also develop public policy positions. Typically, the policy positions of our industry associations are to support regulation in the national and industry interest, and encourage business to sustainably prosper and remain competitive.

We acknowledge that some industry associations may have policy positions that do not fully align with Boral's positions. When appropriate, we engage with our industry associations to help them understand our position.

We have not identified any major energy and climate policy positions held by our industry associations that are materially inconsistent with our own position.

Further information is available on our website.

Our people

We strive to have a diverse, talented and capable workforce, so we can continue to succeed and innovate. We work to develop our people, build a culture of respect and trust, and enhance our employees' experience.

As at 30 June 2019, we had 17,104 full-time equivalent employees, including in joint ventures, and approximately 9,400 contractors working across 17 countries. Our contractors work in a variety of roles, including as product installers and drivers in our transport operations.

Full-time equivalent	FY2019	FY2018	FY2017
Boral employees	**11,916**	11,898	11,499[1]
Boral contractors	**~5,300**	~5,200	~4,800
Joint venture employees[2]	**5,188**	5,233	4,976
Joint venture contractors[2]	**~4,100**	~3,500	~3,400

At end FY2019	Boral Group	Boral Australia[3]	USG Boral[3]	Boral North America[4]
Women at Boral	19%	13%	17%	25%
Average length of service (years)	8.0	8.9	9.3	6.5
Average age (years)	43.4	44.8	40.6	43.5
20+ years service	12%	12%	16%	9%
Employee turnover	23%	18%	9%	36%
Voluntary	16%	12%	6%	25%
Involuntary	7%	6%	3%	11%

Boral North America's employee turnover of 36% was up from 29% last year, reflecting a tight labour market in the USA as voluntary turnover increased to 25%, up from 19% in FY2018. However, total turnover was in line with the average for the manufacturing sector in the USA. Involuntary turnover of 11%, compared to 10% last year, was impacted by plant closures in the Meridian Brick and Stone businesses.

We have undertaken a number of initiatives to reduce employee turnover in the division. These include implementing direct hires, improving recruitment processes and practices, assessment and selection capabilities, and leadership development to strengthen frontline leader capabilities.

DIVERSITY, INCLUSION AND EQUALITY

We value and actively promote workforce diversity. We respect and value the unique talents and contributions of each employee and aim to deliver gender pay equity.

Our Diversity and Inclusion Plan, sponsored by Boral's Diversity and Inclusion Council, provides a robust framework that supports our commitment to a diverse and inclusive workplace and culture.

Our framework focuses on six elements: leadership, communication and education, system and process design, gender equality and pay equity, generational diversity, and Indigenous relations.

In FY2019, we continued to focus on increasing the representation of women, particularly in leadership roles, and provided education and training on the impact of unconscious bias. Women represented 19% of our employees, compared to 18% the prior year.

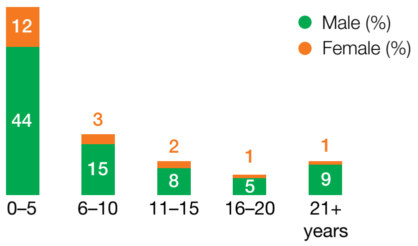
WORK180, a global advocate for working women, endorsed us as an employer that proactively supports the increased representation of women.

Pay equity outcomes in Boral Australia continue to be favourable, with a female-to-male average base salary ratio[5] of 1:1.

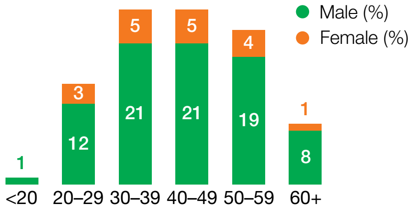
Boral recognises the importance of having work environments that support employees' work and family responsibilities and, where practicable, the opportunity to access flexible work arrangements. To increase awareness and uptake of flexible work arrangements among employees, we rolled out our flexible work guidelines and online education module to support our flexible work policy.

Boral's 2019–2020 Reflect Reconciliation Action Plan extends and broadens our existing Indigenous Employment Program. Our Reconciliation Action Plan outlines planned actions to further support Aboriginal and Torres Strait Islander peoples through employment – including through long-term career pathways and training.

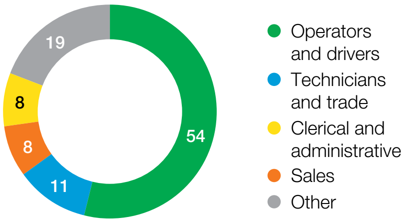
Length of service of employees



Age profile of employees



Employees by occupation (%)



---

1. Includes 4,016 full-time equivalent employees from Headwaters and excludes employees from Boral Bricks in North America, who were included as joint venture employees.
2. Includes USG Boral, Meridian Brick and other small Australia-based joint ventures.
3. Excludes joint ventures.
4. Includes Meridian Brick joint venture.
5. Calculated as the average base cash salary for females as a proportion of the average base cash salary for males, as included in our confidential report to the Workplace Gender Equality Agency.

EMPLOYEE ENGAGEMENT

A motivated and engaged workforce, supported by a culture of safety, transparency and performance, are critical drivers of our business success.

We regularly measure employee engagement to better understand and track our employees' experiences. This provides insights to identify opportunities for improvement, enabling us to develop targeted strategies to enhance our employees' experiences.

Our three divisions use formal surveys to gather feedback on our employees' experience every few years.

In FY2019, USG Boral completed its third Aon Hewitt Employee Survey, involving 89% of the workforce across 14 countries. The engagement score of 65% was a nine-point improvement on 2017 and a 15-point improvement on the first survey completed in 2015. In FY2020, USG Boral will continue to focus on collaboration, learning and development, and empowerment to achieve its objective of being an Asia Pacific Best Employer.

Boral North America conducted a Safety Cultural Awareness Survey, which is informing improvement programs that focus on delivering the next evolution of Zero Harm Today. Information on the survey findings and focus areas for improvement are on page 28.

With a top quartile score of 72/100 in Boral Australia's 2018 employee satisfaction survey – using the McKinsey & Company Organizational Health Index[1] – the division continued to focus on the three areas identified for improvement: customer-centricity, innovation, and people development and recognition. It will roll out a three-year plan for leadership programs in FY2020. The plan will complement the division's broader strategic initiatives, focusing on enhancing customer-centricity and innovation.

TRAINING AND DEVELOPMENT

We invest in training and developing our people to enable them to perform at their best, providing opportunities to build their skills, capabilities and knowledge. These range from job-related skills training to senior leadership development and coaching.

Our leadership programs, together with placements, coaching and mentoring, focus on developing capable and effective leaders. In FY2019, more than 680 employees undertook the zero|one|ten Leader program, with 29 completing the General Manager and Emerging Leader programs. The more than 900 frontline leaders who completed the zero|one|ten Leader program in recent years will build on their learning by participating in the Leading Safe Systems of Work program in FY2020.

In Australia, 1,330 employees completed Certificates II, III or IV, diploma qualifications, units of competency, and tailored learning solutions and training modules, in areas like chain of responsibility, sales and marketing, surface extraction, laboratory skills, driving operations, and work health and safety.

Our centralised training and compliance system, My Learning Space, provides standardised access to online training and monitors the ongoing training needs of more than 6,000 staff members across Boral Australia.

Brandon Hall Group, a leading independent research and analyst firm, awarded Boral a Gold medal for its use of the My Learning Space technology to monitor training and learning requirements.

Boral's Executive Committee, divisional leadership teams and other managers have continued to participate in a bespoke, multi-year development program designed to help our leaders to be more effective by being more self-aware and others-focused.

In FY2019, Boral North America started deploying Skilled4Action training modules to frontline leaders, providing hands-on training in management, leadership and lean principles.

HUMAN RIGHTS AND MODERN SLAVERY

Boral is committed to respecting and promoting internationally recognised human rights in its global operations. This includes providing a workplace free from discrimination and harassment, and contributing to eliminating all forms of forced or compulsory labour, and the effective abolition of child labour.

We have revised our Human Rights and Labour Policy, with our supporting policy framework to be updated in FY2020.

An initial desktop assessment of the risk of modern slavery in our operations, including joint ventures, was completed during the year. While the risk of modern slavery in our operations was assessed as low, where we have identified areas of potential risk, we undertake robust employment checks as part of the commencement and onboarding processes for all new employees.

An internal training program on human rights and modern slavery for human resources managers and key leaders will be developed and launched in FY2020.

WORKPLACE RELATIONS

We respect the rights of our employees to freedom of association – and to be represented by trade unions, in line with local laws. We are committed to working honestly and transparently with labour unions and engaging in constructive negotiations to reach agreements on employment conditions.

We have 82 enterprise or industrial agreements covering approximately 3,400 employees in Australia, South Korea, Indonesia and Vietnam. These agreements on average cover a term of two to four years.

Our approach is to work collaboratively and cooperatively with our people and their representatives, and provide fair and equitable employment conditions that deliver sustainable performance.

We have accessible, fair and accountable grievance mechanisms in place. These include Boral's independent external whistleblowing service, FairCall, through which people can raise anonymous concerns. These measures enable our people to raise concerns without fear of recrimination.

---

1. Benchmarked against a global database of 1,500 companies.

FUTURE OF WORK

Rapid changes and developments in automation, digitalisation and global demographics are transforming labour markets and the skills required for emerging jobs. These offer both significant opportunities and challenges.

In Boral Australia, we created a dedicated innovation facility called B/HUB to help us adapt and further develop the innovation capability of our people. At B/HUB, we consider conceptual ideas and work collaboratively with customers, and in partnership with startups, to test, validate and commercialise these ideas. Through our 'learn to fail fast' and accelerator programs, we have strengthened our problem-solving capabilities, allowing us to develop services for industry trends and new emerging markets.

HSE management

Our overarching priority is Zero Harm Today, to people and the environment. We want our people, and those we interact with through our activities, to be safe today and every day. And we strive to eliminate any adverse environmental impacts of our operations, or where this is not possible, minimise harm.

We are committed to maintaining a culture focused on Zero Harm Today, through strong leadership, management accountability, engagement and collaboration with our frontline people.

We engage and communicate with our frontline people on HSE matters in numerous ways. These include holding formal HSE training, daily pre-start meetings or shift hand-over meetings, more formal monthly HSE meetings at larger sites, Kaizen events for focus areas and improvement projects, and supervisors engaging with their teams on the job and through peer-to-peer observations.

Boral's CEO & Managing Director, the Group President Operations and divisional senior executives regularly spend time at our operations, which provides an opportunity to discuss safety and environmental management issues and challenges directly with site teams.

Our approach to HSE is underpinned by a robust strategy, systems, policies and processes, and a focus on continuing improvement.

HSE STRATEGY

Our priorities and approach to managing HSE are guided by our four Group-wide strategic objectives and supporting programs. See page 27 of the 2019 Boral Review for a description of these.

Each division is responsible for establishing and implementing their own HSE strategies and improvement plans, consistent with Boral's Group-wide HSE strategy.

In recent years, our HSE journey has been defined by applying a consistent strategy to deliver improved performance. We have focused on firmly establishing robust processes and improvement programs across the Group and engaging all our people, from business leaders through to frontline staff, to build a clear and shared understanding of our priorities and processes.

The continued improvement in Boral's HSE performance is testament to our people's commitment to consistently apply our systems and processes in practice.

HSEQ Management System

Boral's Group-wide Health, Safety, Environment and Quality Management System (HSEQ MS) provides the standards, guidelines and tools that enable us to improve performance. It establishes a robust governance framework, equips our businesses with standardised processes where appropriate, and affords operational teams flexibility on how they meet minimum requirements.

Our HSEQ MS incorporates a risk-based approach to supplier safety management. Any supplier who performs work on a Boral-controlled worksite is required to complete a formal Supplier Prequalification Program.

Oversight of the effectiveness and ongoing development of the system rests with the HSEQ MS Governance Council. The Council, comprising Group and divisional heads of HSEQ, meets quarterly to review and approve amendments to the system.

We engage with our workforce to drive continuous improvement in our HSEQ MS and ensure we use standards and tools that are practicable across our workplaces.

Managing risks

We focus on identifying and eliminating conditions and behaviours that have the potential to injure people or harm the environment. This requires carefully planning activities, thoroughly assessing risks, following effective systems and processes, and investing in equipment and other improvements.

We review and assess HSE issues and risks as part of due diligence processes on all potential acquisitions and, commensurate with HSE risks, new or expansion projects.

Following any acquisition, our integration process includes aligning the business's HSE systems and processes to at least meet our minimum requirements.

HSE incidents

For more serious HSE incidents, including near-miss events, we have a formal process to communicate, investigate and share safety learnings, with requirements tailored to the severity of the actual or potential consequence.

More serious HSE incidents are escalated to senior management, including the CEO & Managing Director. Incident review meetings are also held involving relevant divisional leaders, the Group President Operations, Group HSE Director and local line management.

> Our people are responsible for abiding by our safety policies and standards. We take poor safety management or safety breaches very seriously.
>
> In FY2019, 30 employees in Boral Australia and Boral North America were dismissed for poor safety management or breaches. Contractors and other service providers who breach Boral's safety policies or standards are also stood down.

Health, safety and wellbeing

SAFETY OUTCOMES

We are committed to achieving our Zero Harm safety goal, and encouraged by our continuing progress in reducing our injury rates. Each of our three divisions reported a marked improvement in recordable injury frequency rate (RIFR[1,2]).

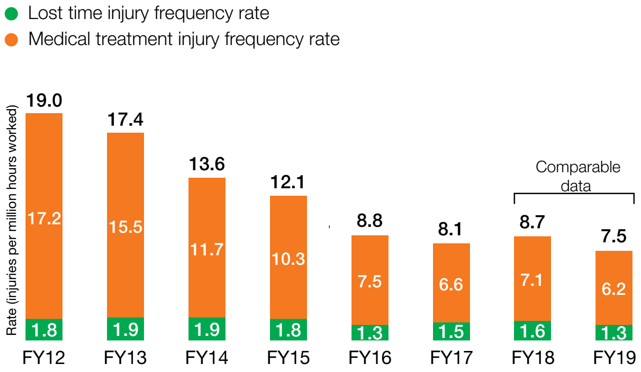
By sticking to the programs and improvement initiatives we have established, we are confident we will achieve our goal.

Pleasingly, in FY2019, we had no fatalities among employees or contractors.

Our injury rates improved significantly, continuing our long-term improvement trend. Our RIFR of 7.5 is a 14% improvement on 8.7 reported in FY2018.

Our lost time injury frequency rate (LTIFR[1]) of 1.3 is a 19% improvement on 1.6 reported last year.

Boral Group recordable injury frequency rate



Boral Australia reported an RIFR of 10.5, a 7% improvement on 11.3 last year.

Boral North America's RIFR improved 15% to 7.6, down from 8.9 in FY2018, demonstrating our continued efforts to embed a Zero Harm Today culture across the Headwaters businesses.

USG Boral's 24% improvement in RIFR to 3.4 from 4.5 last year (including all minority-owned joint ventures) demonstrates the benefit of targeted safety improvement programs and a maturing safety culture.

Percentage hours lost[3], which monitors the severity of our more serious injuries by the total time lost, remained steady in FY2019 at 0.05%.

Hours away on restricted or transferred duties[3], a more holistic measure of the effect of all recordable injuries, also remained steady at the relatively low level of 0.17%. This suggests that injuries remain generally less severe or respond well to treatment and return to work programs.

PROMOTING A SAFETY-FOCUSED CULTURE

The acquisition of Headwaters added over 4,000 employees, more than doubling the size of our USA workforce, and tripling our USA operating sites to 170. Improving Headwaters' safety performance has been a key focus of our integration activities.

Our efforts have focused on embedding a Zero Harm Today culture through proactive leadership, improvement programs, safety training and ongoing engagement with our frontline people. We also invested in safety upgrades, including machine guarding and improving traffic flow, facilities' lighting and processes across Headwaters' businesses.

A recent Safety Cultural Awareness Survey conducted by the Boral North America division had an impressive 80% response rate. The survey results revealed that the business has a mature safety culture that rates 74% above other comparable benchmark organisations and is working hard to embed a Zero Harm Today culture; and employees feel comfortable stopping work if they feel it is unsafe, and believe injuries are preventable.

The survey also highlighted several areas for further improvement, which will be a key focus in FY2020. These include continuing to standardise common tools and approaches, developing new leading indicators to drive behaviours and performance, and increasing face-to-face interactive training.

REDUCING HEAVY VEHICLE ROAD SAFETY RISKS

Boral Australia's logistics business manages a fleet of more than 3,000 heavy road vehicles that drive some 150 million kilometres a year. Reducing heavy vehicle road safety risks, including rollover risk, is therefore a high priority.

Since 2012, we have made considerable progress to reduce the risk of heavy vehicle rollovers through improved truck design and driver training. For example, we mandate that new company and contractor agitator trucks are fitted with electronic roll stability and that new tipper trucks are fitted with low-friction bin floor liners.

After reviewing our performance against world's best practices last year, we established a comprehensive improvement program in FY2019. The program encompasses: driver onboarding, ongoing training, behavioural safety, developing formal minimum operating standards and improving vehicle standards.

---

1. Per million hours worked for employees and contractors in 100% owned businesses including Headwaters, and all joint ventures businesses regardless of equity interest from FY2018 onwards. Data for prior years only includes 50% owned joint ventures and excludes Headwaters.
2. RIFR is the combined LTIFR and medical treatment injury frequency rate.
3. Defined as a percentage of total hours affected against total hours worked – for employees only.

Climate-related impacts

The global transition to a low-carbon economy and potential physical climate-related impacts present both challenges and opportunities. Our approach is to continue developing strategies that build our business portfolio's resilience to climate-related impacts while capturing opportunities.

Boral recognises that climate-related physical risks and a global transition to a low-carbon future are expected to impact our operations, customers and suppliers.

We support the Paris Agreement and mechanisms to achieve its objective of limiting future average global temperature rises to well below 2°C, as well as Australia's 2030 target of a 26–28% reduction in carbon emissions below 2005 levels.

Looking at how Boral's carbon emissions are tracking relative to 2005 levels, in Australia we have reduced emissions by around 40% since FY2005. We achieved about half of this decrease largely by realigning our portfolio away from emissions-intensive businesses. The remainder of the decrease is due to reducing clinker manufacturing in Australia in favour of importing it from more efficient and larger scale operations in Asia.[1] Including Boral North America, our Scope 1 and 2 emissions[2] decreased by 43% since FY2005.

We continue to progressively adopt the recommendations of the TCFD. In FY2019, we enhanced our climate-related governance and risk management, completed scenario analysis of Boral Cement's business and continued to strengthen our resilience to a 2°C scenario. We also broadened our reporting of physical climate-related risks and Scope 3 emissions.[2]

We completed a Group-wide review of our climate-related risks and opportunities using the TCFD framework. This review informed a two-year roadmap to undertake further scenario analysis of key climate-related business risks.

We transparently and constructively engaged with Climate Action 100+ investor representatives and other stakeholders during the year, sharing our progress in aligning our efforts with the TCFD recommendations and building greater resilience to climate-related impacts.

Strategy

Our strategy is to strengthen our resilience to climate-related impacts by further reducing our operational emissions intensity; creating innovative solutions and products that support a lower carbon future; and mitigating our climate-related risks. Through our Boral North America Fly Ash business, we also aim to increase our contribution to reducing carbon emissions in the production of ready mix concrete, by making more fly ash available as a cement substitute.

In FY2018, Boral set three climate-related goals that reflect our strategic ambitions. Our performance against these goals and targets is outlined on pages 31–32.

As a global manufacturer of construction materials and building products, we are a large emitter of greenhouse gas (GHG), particularly through our clinker manufacturing operations in Australia.

Our Cement business accounted for nearly 60% of our total 2.4 million tonnes of GHG emissions in FY2019. Our brick businesses in Western Australia and the USA together accounted for a further 9% of our GHG emissions.

Since FY2012, we have reduced our Scope 1 and 2 emissions from our operations by 32% and our emissions intensity by 48%, including a 7% reduction in emissions intensity in FY2019.

We achieved this by realigning our portfolio towards lighter weight products and less carbon-intensive businesses, reducing clinker manufacturing in Australia in favour of importing clinker, and investing in energy efficiency and low-carbon fuels programs.

Repositioning the business has reduced our risks associated with transitioning to a lower carbon economy and cut our exposure to energy costs. In FY2019, Boral's energy and fuel costs totalled $353 million, accounting for 6% of our cost base.

We are confident we will continue to reduce our emissions intensity going forward. We do not intend to invest in new cement or brick kilns, and these manufacturing operations are unlikely to be in Boral's portfolio in the long term. In fact, in August 2019, we announced that we are divesting our Western Australia Midland Brick business, which will help bring down our GHG emissions by around 60,000 tonnes per year. We cannot put targeted dates on the life of remaining kiln-based operations, as this will be determined by economic drivers.

Clinker manufacturing is highly emissions-intensive, so we continue to develop ways to reduce carbon emissions from our Cement business and bolster its resilience to climate-related transition risks.

We completed scenario analysis to get a better understanding of the potential transition risks and opportunities facing our clinker manufacturing operations, which we had begun in FY2018. The scenario analysis methodology, key assumptions, levers and implications for the business are detailed on pages 40–41 of the 2019 Boral Review.

Boral Cement's climate-related strategic priorities, including our roadmap to reduce Scope 1 and 2 emissions by around 20%, are detailed on pages 41–42 of the 2019 Boral Review.

More broadly across the Group, we continue to focus on energy efficiency improvements, and using recycled materials to reduce our carbon emissions.

We continue to grow the revenue contribution of our lower carbon and high-recycled-content businesses and products.[3] These include our Boral North America Fly Ash and TruExterior® Siding & Trim businesses, and in Boral Australia, our Recycling business and lower carbon concretes such as ENVISIA®, Envirocrete® and Aspire®.

USG Boral is also continuing to progress plant trials and product development of USG-developed Sheetrock® EcoSmart Panels to suit the Australian market. EcoSmart Panels are produced using less water than other boards. This means less energy is used to dry the product, reducing carbon emissions by 20% during manufacturing.

---

1. Following the closure of Boral's clinker manufacturing plant at Waurn Ponds, Victoria in 2013, we have imported clinker from Asia. The emissions intensity of our Waurn Ponds clinker manufacturing operations in FY2013 was 0.98 tonnes CO_2-e per tonne of production. The emissions intensity of our imported clinker, included as Scope 3 emissions, is 0.95 tonnes CO_2-e per tonne of production, including shipping to the Port of Geelong (a 3% reduction in emissions).
2. See page 53 of the 2019 Boral Review for definitions of Scope 1, 2 and 3 emissions.
3. Defined as having a minimum of 40% recycled content.

Climate-related risks and opportunities review

As part of our planning and risk management efforts during the year, we undertook a targeted review of our climate-related risks and opportunities across the Group, using the recommended framework set out by the TCFD. The work updated and revised the climate-related review we completed previously in FY2017.

Group HSE managed and coordinated the review, with assistance from Group Risk and an external consultant. The review incorporated input from functional managers and senior representatives of Boral's three divisions, obtained through a series of workshops and one-on-one interviews.

The review assessed and prioritised potentially significant physical and transition climate-related risks and opportunities, based on high-level climate scenarios.

Boral's key physical and transition climate-related risks include:

- increased severity and frequency of extreme weather such as cyclones, severe precipitation causing floods or deluge, and bushfire events
- shifts in climate, including precipitation patterns, unseasonal variability, rising mean temperatures and rising sea levels
- carbon policy changes and the potential introduction of regulatory pricing mechanisms and/or trading systems, which may impact the cost of non-renewable energy and the supply and/or cost of fly ash and synthetic gypsum
- energy policy changes which may increase energy costs due to changes in supplied energy mix (such as more renewables) , resulting in higher cost of raw materials, either domestic or imported
- disruptive technology which may affect our competitiveness, either through reduced demand or supply-side cost impacts, and
- building and construction industry standards which may result in decreased demand for higher carbon products.

Boral's climate-related opportunities include:

- increased building and construction rectification and remediation work
- increased demand for more resilient infrastructure and buildings
- growth from changes in construction industry standards, and
- reduced energy costs from improved energy efficiency.

Further details on our climate-related risks and key mitigation measures as well as opportunities are provided on pages 36–37 of the 2019 Boral Review.

TCFD-based scenario analysis roadmap

Based on the outcomes of our climate-related risks and opportunities review, we established a two-year roadmap to further assess our most significant risks using comprehensive TCFD-based scenario analysis.

The planned scenario analysis will enable us to test the potentially significant business risks identified under different climate-related and regulatory scenarios. The findings from this work will inform our business strategies and actions, and be incorporated into Group-level climate-related financial risk modelling.

The scenario analysis to be undertaken over FY2020–21 includes:

- physical climate-related risks in key geographies
- carbon pricing risks across Boral's supply chain
- availability and supply of synthetic FGD[1] gypsum at USG Boral[2], and
- supply chain impacts on Boral North America Fly Ash from a potential decline in coal-fired electricity generation.

Governance

Our approach to sustainability governance, including climate-related impacts, is outlined on page 23.

This year, we established a Group Environmental Sustainability Governance Steering Group that will be responsible for coordinating and reviewing climate-related risks, strategy and reporting. The group, chaired by Boral's Group President Operations, comprises senior functional leaders including from Group HSE, Group Risk and Investor Relations.

The group will oversee the implementation of Boral's climate-related scenario analysis roadmap, and review and endorse assurance activities, including recommendations to Boral's Executive Committee and the Board.

The group reviews the climate-related information in this sustainability overview, including performance against our targets and goals, as do the CEO & Managing Director, the Board HSE Committee and the full Board. The Board also reviews performance against divisional strategic objectives and business plans. These include initiatives to develop and drive market expansion of lower carbon products, and to reduce costs and operational emissions through energy efficiency and low-carbon fuels programs.

We have had our performance against quantitative climate-related goals and targets – and our reported energy and carbon emissions data – independently assured. For more details, see EY's limited assurance statement on page 52 of the 2019 Boral Review.

Risk management

Climate-related risks are incorporated into Boral's enterprise risk management (ERM) framework and processes, which identify, assess, monitor and report on our organisation's risks.

Managed by Group Risk, these processes include business-specific, bottom-up risk assessments, as well as top-down reviews. The Group Risk team works with business leaders and functional managers to ensure risks are adequately considered through Boral's ERM process.

Group Risk reports to the Board Audit & Risk Committee at least annually on Boral's organisation-wide risks.

Based on our existing categorisation of climate-related risks, we determine their relative significance using the same established methodology as for other risks. We review and revise these categorisations regularly, based on emerging issues. Climate-related risks are now also incorporated as a standalone category of risk in our ERM framework.

---

1. Flue gas desulfurisation.
2. FGD scenario analysis is subject to outcomes of strategic ownership changes of USG Boral.

Boral's risk-scoring methodology assesses risks based on consequence and likelihood of occurrence, to identify the severity of the risk. The consequence is rated according to a number of factors including potential financial impact.

Divisional chief executives are responsible for managing identified risks and implementing mitigation action plans, and may delegate this responsibility to line managers.

A summary of our key risks and responses, including climate-related risks, is included on pages 20–21.

Metrics and targets

Our climate-related goals and targets are to:

- further reduce emissions intensity by 10–20% on FY2018 by FY2023[1,2]
- deliver annual growth in share of revenue from lower carbon and high-recycled-content products from 9%[3], and
- reduce 1.1–1.5 million tonnes CO_2-e in the supply chain on FY2018 through increased fly ash supply by FY2022.

Our FY2023 emissions-intensity reduction target of 10–20% on FY2018 does not capture the potential exit of non-core brick operations, or other possible divestments or acquisitions. It reflects higher expected growth in our less energy- and emissions-intensive businesses, and the benefit of our low-carbon fuels program at Berrima Cement Works (Berrima).

During FY2019, we sold our Denver Construction Materials and Block businesses in the USA. In August 2019, we announced the sale of our remaining Australian brick business, Midland Brick, and an agreement to acquire Knauf's 50% stake in USG Boral Australia and New Zealand, and form an expanded USG Boral Asia joint venture with Knauf. These business portfolio changes are expected to impact our reported emissions intensity from FY2020, so we intend to review our emissions-intensity reduction target in FY2020.

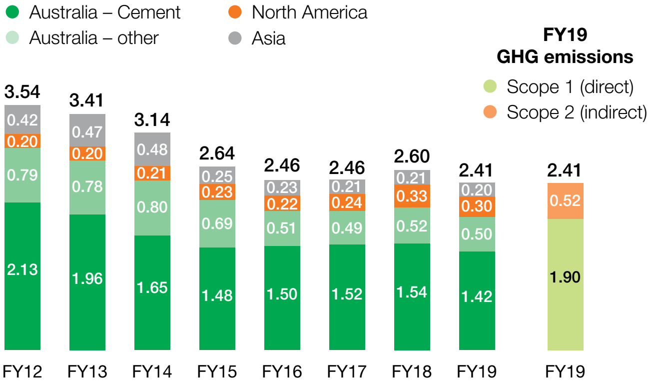
Greenhouse gas emissions from operations

Our Scope 1 and 2 emissions decreased by 7% to 2.4 million tonnes compared to the prior year.[1] The decline largely reflected lower clinker production, the benefit of the low-carbon fuels program at Berrima, and the divestment of the Denver Construction Materials and Block businesses in the USA.

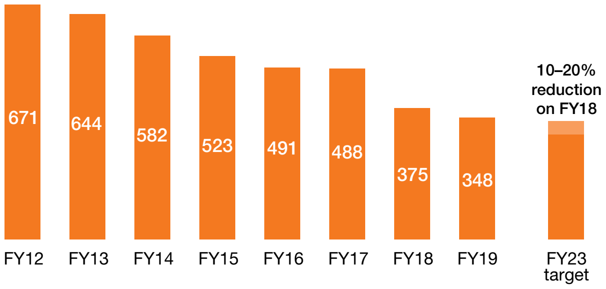
Boral's GHG emissions intensity decreased by 7% to 348 tonnes of CO_2-e per A$ million of revenue, down from 375 tonnes in FY2018, reflecting lower absolute emissions and steady underlying Group revenue.[1,2] Excluding the divestment of our businesses in the USA in FY2019, our emissions intensity decreased by 9% compared to the prior year.[4]

Our lower carbon and high-recycled-content products and businesses accounted for 10% of Group revenue in FY2019, up from 9% in FY2018. See page 29 for a description of these.

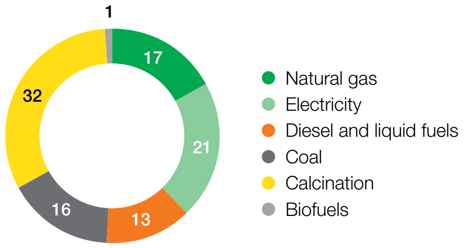
GHG emissions from operations[1,5] (million tonnes CO_2-e)



GHG emissions intensity from operations[1,2] (tonnes CO_2-e per A$m revenue)



GHG emissions by source[1] (%)



Scope 3 emissions

This year, we expanded data collection and reporting for our Scope 3 emissions. We considered each of the 15 categories of Scope 3 emissions as defined in the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. With the aim of identifying and reporting on more than 95% of Boral's indirect emissions, each of our three divisions reviewed potential sources of Scope 3 emissions likely to account for more than 50,000 tonnes of CO_2-e of emissions per year across these categories.

---

1. GHG emissions data excludes some joint ventures, which in aggregate are not deemed to have material emissions.
2. Group-reported revenue adjusted to include a 50% share of underlying revenue from the USG Boral and Meridian Brick joint ventures, which are equity accounted.
3. Based on Group-reported revenue – this excludes underlying revenue from joint ventures which are equity accounted.
4. Assumes FY2018 emissions and revenue for businesses divested in FY2019.
5. Data may not add due to rounding.

On this basis, we identified 3.0 million tonnes of Scope 3 emissions in FY2019. Of these emissions, 90% related to purchased raw materials, and the remaining 10% related to the upstream emissions associated with our energy and fuel purchases, and downstream emissions associated with contractor haulage. Boral Australia's clinker imports and domestic cement purchased, together with Boral North America's cement purchased for use in the Stone and Roofing businesses accounted for 55% of our Scope 3 emissions.

Going forward, we will continue to refine and improve our Scope 3 reporting and methodologies.

Avoided emissions

GHG emissions avoided through the sale of fly ash in the USA were modestly lower at 5.1 million tonnes[1], down from 5.2 million tonnes in FY2018. We are targeting a reduction of 1.1–1.5 million tonnes carbon emissions in the supply chain on FY2018 by FY2022 through increasing annual supply of fly ash by 1.5–2.0 million tons.

ENERGY

We aim to implement strategies to reduce our energy costs as well as our carbon footprint. This means we are investing in opportunities that improve our energy efficiency or decrease our energy costs while abating carbon emissions, where it makes economic sense to do so.

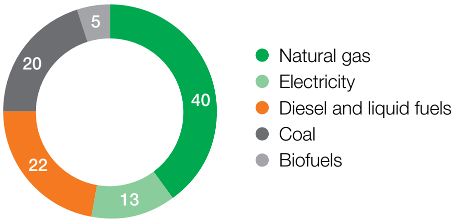
For example, the new low-carbon solid-waste derived fuels program at Berrima reduced our consumption of coal by 16,000 tonnes in FY2019, and we expect to replace more than 40,000 tonnes of coal in FY2020. Our Boral Timber business is also progressing the development of a project to convert sawmill residues into renewable diesel and bitumen.

In FY2019, our operations consumed 20.6 petajoules of energy, down 4% on the prior year. This decline largely reflects lower clinker production at Berrima and the sale of the Denver Construction Materials and Block businesses in the USA.

The low-carbon fuels program at Berrima increased the contribution of biofuels in our energy mix to 5%, up from 2% last year.

Expenditure on energy was A$353 million in FY2019, down 7% compared to FY2018.

Energy by fuel source[2] (%)



Further data on Boral's GHG emissions, including Scope 3 emissions by division, energy consumption and other emissions is available on our website.

Environmental impacts

We operate a diverse portfolio of businesses across a broad geographic footprint. Many of these operations are resource-intensive, including our quarrying, manufacturing and transport businesses. To ensure our business is sustainable for the long term, we work to mitigate our environmental impacts.

Our Environment Policy is to eliminate adverse environmental impacts and where elimination is not possible, seek to minimise our adverse environmental impacts.

In addition to our overarching climate-related goals and targets, we have a range of business-level improvement plans and goals, including targets for improving water efficiency, reducing waste generation and increasing use of recycled materials in our products in Boral Australia. We are also working to better quantify and align targets and improvement plans across our divisions.

Environmental compliance

Our policy is, at a minimum, to comply with environmental legislation, regulations, standards and codes of practice relevant to the particular business. We typically target better performance than laws require.

With more than 670 operating sites across a broad geographical footprint, Boral's environmental management systems and compliance programs are designed to accommodate local environmental requirements and business variations.

Operational and functional teams are responsible for ensuring compliance with environmental regulations. In Boral Australia, compliance is managed through an information management system for environmental requirements and regulations.

During FY2019, we conducted 60 internal environmental compliance audits in Boral Australia and 21 in Boral North America.

USG Boral conducts a range of compliance activities across its operations, focusing on the key areas of stack emissions and dust control, with annual audits conducted on burners and dust control equipment.

In addition, the Group HSE function undertook 16 audits across a sample of sites, assessing areas of environmental risk, including environmental compliance.

We target zero environmental infringements and strive to continuously improve our environmental management and performance.

During the year, we received nine infringement penalties across the Boral Group, totalling $38,820. Seven of these infringements related to non-compliances in administrative arrangements, rather than causing environmental impacts.

---

1. We have used a conservative conversion factor to estimate CO_2-e emissions displaced as a result of fly ash substitution for cement in ready mix concrete, assuming that for every tonne of fly ash approximately 0.8 tonne of CO_2-e is displaced. This conversion rate accounts for varying qualities of fly ash, and so assumes a substitution rate of 1.25 tonnes of fly ash per tonne of cement in ready mix concrete, and assumes 1 tonne of cement produced results in 1 tonne of carbon emissions. We will review our methodology for calculating avoided emissions in FY2020.
2. Energy consumption data excludes some joint ventures, which in aggregate are not deemed to have material emissions.

Two infringements related to:

- washing out two concrete agitator trucks on a roadside near Port Stephens in NSW, and
- the release of water from our Cedars Quarry at Mackay in Queensland that was outside our licence parameters, following Tropical Cyclone Debbie.

Infringements and penalties	**FY2019**	**FY2018**	**FY2017**	**FY2016**
Number	9	6	10	9
Fines[1]	$38,820	$82,273	$110,083	$33,888
Penalties[1]	$0	$0	$30,000	$250,000
Undertakings	$0	$133,000	$133,556	$0

WATER MANAGEMENT

Water supply is essential to our operations. We require fresh water for our concrete and plasterboard operations, while our quarry and asphalt operations can use recycled, brackish and/or process water. Water is used in manufacturing, for dust suppression, cleaning and sanitation.

In FY2019, we used about 4 gigalitres of municipal water, in line with the prior year.

In our more water-intensive concrete and plasterboard businesses, where product specification does not allow the use of recycled water, we are investing in researching and developing new products and mixes that require less water.

Over time, we have expanded the use of site-captured rainwater, which is supplementing our municipal supply. At our larger sites, including our quarries, captured rainwater is often the primary source of water and largely used for dust control.

In Boral Australia, we are developing systems to collect reliable and more comprehensive data on captured rainfall.

Across the Group, we are focused on improving water consumption per unit of output and ensuring we have plans to underpin delivery of our efficiency improvement targets, particularly in geographic areas of potentially high water stress.

Individual Boral sites may from time to time be exposed to the risk of drought, deluge or flooding. The risk of insufficient or excess water at our sites is discussed in relation to physical climate-related risks on pages 35–36 of the 2019 Boral Review.

When building or acquiring new facilities, our due diligence process includes assessing the risks to water quality from site discharges, and ensuring sufficient water availability and supply, which may require river catchment assessments.

Across the Group, a relatively small amount of process water is discharged to sewers for treatment by water authorities, in line with our existing licensing conditions at relevant sites. We have well-established internal compliance systems to prevent pollution of discharged waters, as well as numerous regulatory controls through licensing and permitting.

WASTE MANAGEMENT

We strive to reduce waste within our operations, recycle the waste that we generate, and increase the recycling of materials from other industries as energy or raw materials.

Throughout Boral's operations, we reuse some materials in our production processes, including concrete washout, recycled asphalt pavement, and plasterboard waste from production and building sites.

Approximately 10% of Boral's revenue is derived from lower carbon and high-recycled-content products. A large proportion of this revenue is from our Fly Ash business in North America and Boral Recycling in Australia.

Opportunities to reuse production by-products and waste materials continue to grow and are being actively pursued.

Boral's businesses generate only small volumes of hazardous waste (such as waste oil) and this is managed in accordance with government regulations.

We use relatively small amounts of packaging, as the vast majority of our products are delivered in bulk. Boral businesses in Australia that do use some packaging are signatories to the Australian Packaging Covenant or fulfil the requirements of state regulations. Boral Cement, through its membership of Cement Concrete & Aggregates Australia, is a signatory.

LAND MANAGEMENT, REHABILITATION AND REMEDIATION

We manage our quarries and land assets responsibly. For each of our extraction and operating sites, we carefully plan to mitigate any adverse environmental impacts – from development applications and operational land use to rehabilitation and end-use planning and development.

We have a substantial land footprint. Across Australia and the USA, we own or lease over 150 locations that are greater than 20 hectares in size, totalling more than 26,000 hectares.

At sites where we extract natural resources or manufacture products, we anticipate having to fulfil environmental rehabilitation and/or remediation obligations. These obligations relate to the future rehabilitation of sites, or clean-up of contamination we caused, at the appropriate point in the life cycle of these operations. They enable the ongoing use of the relevant land, either as an industrial property or for a higher value end use.

The anticipated future costs associated with remediating and rehabilitating sites are provisioned for in our financial statements, based upon our estimate of associated costs.[2]

---

1. Regulators issue fines and the courts issue penalties.
2. See note 3.6 of the financial statements for details of the provision.

Biodiversity

Protecting the diversity of plant and animal species at and around our operational sites is a core component of our land management efforts.

Of Boral's operations, our Quarries business has the highest potential to contribute to but also mitigate biodiversity impacts.

All greenfield sites or expansions to existing operations undergo comprehensive internal and – where required – external assessments to identify biodiversity risks. When we identify risks we address them through a range of mitigation activities such as offsets (either on- or off-site) and biodiversity area enhancements.

We identify biodiversity risks associated with new operations through Boral's due diligence processes and address them in environmental impact assessments.

Biodiversity obligations that are integrated into site permits are audited under Boral's environmental audit program

All sites identified as having biodiversity values have management plans in place in accordance with site-specific needs. Where appropriate, these include specific targets and timeframes.

Some examples of the many initiatives in place to protect biodiversity at Boral's sites include:

- collaborating with the Royal Botanic Garden Sydney in research on the endangered Illawarra Socketwood population at Dunmore Quarry in NSW
- maintaining koala fodder plantations at Narangba and Petrie quarries in Queensland, and
- participating in conservation work to provide habitat for the threatened legless lizard and spiny rice-flower at Deer Park Quarry in Victoria.

AIR QUALITY

Controlling air quality around our operations is our responsibility as a good neighbour, and is typically a regulatory requirement. Boral has many processes and systems in place to minimise air emissions across our operations.

Where we have identified that emissions are a significant risk or local community health concern, our operations have engineered and procedural controls, ranging from scrubber and filtering systems at major manufacturing sites (such as cement, bricks or plasterboard manufacturing), to simpler dust suppression measures such as water sprinklers that are typical of quarries and concrete batching plants.

Where relevant, Boral's operations have either continuous or scheduled air quality monitoring programs, and data is available to local communities through regulatory reporting or stakeholder engagement programs.

At a national level, Boral reports data on various emissions to the National Pollutant Inventory (NPI) and the National Greenhouse and Energy Reporting Scheme (NGERS) in Australia.

Social and community impacts

We aim to create value for the local communities in which we operate, by providing economic and social benefits. We are committed to managing our operations responsibly and building positive long-term relationships with our local stakeholders.

Our operations contribute to the economic prosperity of our local communities by providing employment, supporting local enterprises, investing in the community more broadly and paying our fair share of taxes.

In addition to observing our site-specific regulatory requirements and planning approvals, we openly listen to community concerns. We address challenges and make improvements where possible.

We recognise that some elements of our business can contribute to local community concerns. These elements include traffic, noise, odours, water, waste, end use of quarry land, and the potential impact of our activities on biodiversity and cultural heritage. How we manage our environmental impacts is detailed on pages 32–34.

Boral's commitment to stakeholder engagement is underpinned by communication and consultation with local communities.

As part of our engagement, we operate Community Consultation Committees across our key sites in Boral Australia. The committees include elected community representatives who meet with interested residents and other local stakeholders. We also seek to keep local communities informed through online information resources, newsletters, local advertising, community inspections, community meetings and site tours.

We hold regular community liaison meetings at various operating sites – attended by community, council and government representatives – to address local issues concerning our operations.

INDIGENOUS ENGAGEMENT

Boral's Reconciliation Action Plan outlines our commitments and planned actions to strengthen relationships with, respect for and opportunities in Aboriginal and Torres Strait Island communities.

We are committed to protecting places and items of cultural significance to local Aboriginal and Torres Strait Island groups across our Australian operations. We work alongside Indigenous peoples to protect cultural heritage, including across our sites that are subject to Cultural Heritage Management Plans.

PUBLIC ROAD SAFETY

Boral operates or engages a large number of trucks on public roads, particularly in Australia, to transport and deliver our products and services.

Safety compliance requirements are generally well defined for heavy vehicle operations in most jurisdictions in which we operate. We comply with minimum requirements and in some cases do better than the minimal compliance requirements and industry norms – for example, by investing in higher-specification concrete agitator vehicles.

Our largest fleet is in Australia, where our dedicated Compliance team works to meet the requirements of the National Heavy Vehicle Regulator. These include mass management, load restraint, driver hours and vehicle condition.

Boral routinely collaborates with state and municipal authorities to ensure we adhere to legislated traffic safety and management requirements, including with regard to the road environment around our sites.

In FY2019, Boral launched a community partnership with Road Safety Education, to support youth education in road safety across Australia.

COMMUNITY INVESTMENT

Boral has a long and proud history of supporting the local communities in which we operate. Through our community investment program, we aim to make a valued and sustainable contribution to the wellbeing of these communities.

Our community investment framework helps us identify organisations and projects that share our values, and for which our resources can have the greatest impact.

Our community investment framework is underpinned by three pillars: Our People, Our Places and Our Products. It provides guidance in identifying and evaluating opportunities, and deciding how best to address community needs and priorities.

In FY2019, we contributed a total of $1,260,000 to our community partnerships and local community causes and projects, comprising $1,036,000 in cash, $63,000 in materials and $161,000 in fundraising and events. We also actively seek opportunities to engage our employees in our community partnerships, and to facilitate knowledge sharing.

Our key community partners are:

- Road Safety Education
- Habitat for Humanity
- Bangarra Dance Theatre
- Conservation Volunteers Australia
- Taronga Conservation Society, and
- HomeAid America.

Supplementing the work we do with our six key community partners, we provide modest funding and assistance to several other organisations, including Outward Bound Australia to support youth leadership development, and the University of New South Wales to help fund scholarships for women studying engineering.

Further information is available on our website.

Customers and sustainable products

We have tens of thousands of customers across our global operations, and we play a central role in providing the building products and construction materials that enable our customers to build the homes and cities of tomorrow.

Across our three divisions, we supply products to a wide range of customers, from people renovating their homes through to large-scale builders and commercial developers.

Through our integrated construction materials business in Australia, we also supply to major infrastructure projects that require complex and highly technical solutions. And through our Fly Ash business in the USA, we are helping cement and concrete producers deliver construction materials that perform better and produce fewer carbon emissions.

As construction technologies and the needs of our customers evolve, we will strive to remain at the forefront of new developments, and to deliver high-quality, innovative solutions and sustainable products.

Boral's concrete innovations

Boral's concrete solutions address specific engineering, design and sustainability needs over and above the capability of conventional concrete available in the market. Some examples of our advanced concretes are ENVISIA®, Aspire® and Enflo®.

ENVISIA® lower carbon concrete meets the targets of the Infrastructure Sustainability Council of Australia (ISCA) and helps the construction industry achieve higher Green Star ratings on projects assessed by the Green Building Council of Australia.

In addition to its lower carbon qualities, achieving a cement replacement of up to 65%, ENVISIA® provides other valuable benefits including high flexural strength, low shrinkage and high durability. This combination of qualities led to Boral being selected to supply to the Crown Sydney project at Barangaroo in NSW.

Its durability and sustainability led to the Queensland Department of Transport and Main Roads approving the ENVISIA® binder system, enabling us to supply it for Queensland infrastructure projects.

Aspire® is a very high-strength concrete specifically developed to maximise concrete stiffness. This allows designers to maximise floor space by incorporating thinner vertical elements in commercial and high-rise buildings. Aspire® also has a lower overall Portland cement content compared to equivalent high-strength concrete.

Enflo® is concrete that self compacts, enabling our customers to place concrete faster without the need for vibration to compact or consolidate, saving labour and time.

Plasterboard solutions

Launched in 2018, USG Boral's new Ensemble™ Acoustical Plasterboard Ceiling is an innovative solution for interior ceilings that combines the seamless look of plasterboard with acoustical properties.

USG Boral is also continuing to progress plant trials and product development to successfully adapt the USG-developed Sheetrock® EcoSmart Panels technology to local markets.

We are focusing initially on selected geographies including Australia, where we are optimising the process and formulations to suit Australia's thinner boards, and identifying opportunities to further lower material costs.

High-recycled-content exterior cladding

Boral North America's poly-ash TruExterior® Siding & Trim products offer the look of wood while surpassing the durability and workability of timber and alternative products. The products are certified by SCS Global as being manufactured using 70% recycled materials (fly ash) and are Cradle to Cradle Certified™.

IMPROVING THE CUSTOMER EXPERIENCE

In Boral Australia, our Customer Experience program is focused on delivering better outcomes for our customers and our business.

To help us understand how we can better serve our customers, we are strengthening the methods we use to capture customer feedback. This year, Boral Australia introduced customer surveys and began reporting three types of Net Promoter Score (NPS): an Interaction, Episode and Strategic score.

This data will establish a baseline NPS and form the basis of internal targets for improving our customers' experiences.

During the year, Boral North America has focused on cross-branding and providing a single entry point for our Boral North America suite of building products.

In USG Boral, our new customer-centric improvement program is underway. The initiative includes a focus on optimising our value propositions through improved customer segmentation. This has already led us to roll out several new products and systems, including EasiFinish™ in emerging markets in Asia.

Boral Connects

Making it easier for customers to deal with us is at the heart of Boral Australia's new customer portal, Boral Connects. Our portal makes our interactions more transparent to our customers, and saves customers' time when dealing with Boral, by allowing them to view, confirm or cancel orders online.

INVESTING IN INNOVATION

In FY2019, we invested about $30 million in research and development (R&D) across our three innovation centres in the USA, Australia and Thailand. Our Innovation teams are helping Boral deliver superior building products and construction materials to better serve our customers and develop new markets.

At our Innovation Factory in Maldon, NSW, we are focused on R&D in cement, concrete and alternative binders with a lower carbon footprint and improved properties for customers. The team recently developed and commercialised the Aspire® high-performance concrete.

At our North America Innovation Factory in San Antonio, Texas, our efforts are focused on developing the next generation of composite materials for the Stone, Roofing and Lightweight Building Products businesses. These product solutions aim to provide superior performance compared to conventional products, and will also incorporate recycled content.

USG Boral's R&D Centre in Saraburi, Thailand, is using world-class technologies to develop innovative products and systems that address market needs and deliver superior performance.

Supply chain

Boral has an extensive global supply chain across more than 25 countries. Each year, we spend about $4 billion on purchasing products and services from more than 10,000 suppliers and contractors.

Delivering an efficient, agile and cost-effective supply chain is vital to meeting our customers' expectations and delivering on our business strategy. Our Supply Chain Optimisation initiatives across Boral Australia and Boral North America are focused on improving our customer experience by building more reliable, more transparent and lower cost integrated supply chains.

Our customers and other stakeholders want to be confident that our products and services are sourced and produced in a responsible and sustainable way. We are committed to creating positive change by making responsible and sustainable purchasing decisions.

SUSTAINABLE PROCUREMENT

Our Sustainable Procurement Policy underpins our approach to sustainable procurement and outlines our commitments to purchasing goods and services in a responsible way.
This includes:

- ensuring suppliers are aware of and comply with our Supplier Code of Conduct
- promoting diversity and inclusion in our supply chain, including through social and Indigenous enterprises, and
- assessing and managing the risk of modern slavery in our supply chain.

The policy aims to align our practices with the International Standard for Sustainable Procurement, ISO 20400.

Boral's Supplier Code of Conduct requires our suppliers to adhere to minimum standards relating to health and safety, environment and labour, including prohibiting the use of child labour and complying with modern anti-slavery legislation.

Assessing our suppliers

We monitor supply chain risks by assessing suppliers' performance and their alignment with Boral standards, including through a pre-qualification questionnaire. In Australia, we engage a third-party service to register and monitor suppliers' compliance with our pre-qualification requirements.

We assess supply chain risks including corruption and bribery, human and labour rights, HSE compliance, and quality standards. We may also visit a supplier's factory based on our risk evaluation results.

In Boral Australia and USG Boral, we use a sanction screening process to identify any areas of risk associated with elements such as financial crime, fraud and human rights abuse.

During the year, we established a risk assessment framework focused on modern slavery risks in our supply chain, as detailed on the next page.

Modern slavery risk in supply chain

We respect internationally recognised human rights, and are committed to preventing and mitigating adverse human rights impacts throughout our supply chain, as outlined in our Human and Labour Rights Policy.

In FY2019, we continued to develop and strengthen our approach to preventing modern slavery in our Boral Australia and Boral North America divisions. We will consider USG Boral's approach in more detail once strategic ownership changes impacting the business have been resolved in FY2020.

We mapped our supply chain in Boral Australia and Boral North America, identifying the key areas of modern slavery risk for both direct and indirect suppliers, and developed a risk-ranking methodology.

Our risk assessment focused on supplier categories with significant expenditure, including raw materials, capital equipment, plant and equipment, packaging, fuel and labour, consumer goods and maintenance, and repairs and operational services.

Risk factor measurements considered the type of products and services provided, as well as the country of origin and industry. Our country risk rankings are based on established external indices and indicators.

During the year, key procurement staff participated in modern slavery assessment workshops and contributed to peer industry forums on the topic. We also extended our FairCall external whistleblowing service to suppliers.

We will continue to develop our approach to modern slavery, and in FY2020, will finalise the implementation of:

- systems and processes for reviewing new and existing suppliers, and conducting ongoing monitoring
- due diligence processes based on our modern slavery risk assessments, including third-party assurance for high-risk suppliers
- company-wide modern slavery awareness initiatives and training
- a fully rolled-out framework that includes internal audit reviews of supplier screening, and reporting to ensure compliance, and
- formal processes for reporting any incidents of modern slavery identified – including to the Board and Board Audit & Risk Committee – and implementing remedial actions.

SUSTAINABLE SOURCING OF TIMBER AND PAPER

We are committed to promoting responsible and sustainable forest management. Our most significant exposure to deforestation risk is through our Timber business and the paper USG Boral purchases for plasterboard lining.

All timber sourced by Boral Timber comes from sustainably managed forests through an accredited scheme. Boral Timber's supplier, Forestry Corporation of NSW, is the largest manager of commercial native and plantation forest in NSW, and is certified to meet the Australian Forestry Standard (AFS). AFS is an independently audited forest management standard that provides assurance that forests are managed in sustainable way.

Boral Timber's hardwood products are certified to the AFS Chain of Custody standard. Compliance with this standard confirms that our hardwood timber products are sourced from certified, legal and sustainable resources by tracking products back to their source.

In FY2019, USG Boral used about 170,000 tonnes of paper in manufacturing plasterboard, nearly all of which is certified as recycled paper by the Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certification (PEFC).

SUPPLY CHAIN LOGISTICS

Ensuring the effective and efficient management of supply chain logistics is critical to meeting our customers' expectations.

In Boral Australia and Boral North America, our focus on customer experience includes improving the rate at which orders are delivered in full and on time, and invoiced correctly (DIFOTIC).

Our multi-year Supply Chain Optimisation program in Boral Australia and Boral North America is a key initiative expected to deliver improved DIFOTIC outcomes. The program focuses on improving the efficiency and effectiveness of our operated and outsourced logistics, planning and inventory control, and related information flows.

Initiatives underway in Boral Australia include the automation of transport allocations, integrated end-to-end planning, and digitalisation of the information flow between our operations, fleet and customers. Our Boral Connects customer portal, discussed on page 36, is enabling a more efficient flow of information to and from our customers.

Achieving zero harm to our people, suppliers, customers and the public is a key priority in managing our logistics operations.

Our approach to managing public road safety and heavy vehicle safety is detailed on pages 28 and 34–35. Our contracted drivers must meet the same safety requirements as our employees, which includes complying with minimum mandated vehicle safety standards. We also have robust systems and processes in place to manage safe access and delivery to our customers' sites, which includes site inspections on arrival.

Our Supply Chain Optimisation program is expected to reduce energy and carbon emissions intensity by delivering more products over fewer kilometres.[1]

---

[1] The carbon emissions associated with our owned and outsourced transport logistics, encompassing road, rail and shipping, is included in our Scope 1 and 2, and Scope 3 carbon emissions data on pages 31–32.

Executive Committee

Mike Kane | Chief Executive Officer (CEO) & Managing Director

Biography available on page 39.

Rosaline (Ros) Ng | Group President Ventures & CFO

Rosaline Ng joined Boral in 1995 and held senior finance roles in Boral's Building Products division. Ros left in 2001 to join Phoneware/Sirius Telecommunications as Finance Director before returning to Boral in late 2002. In 2009, she was appointed Chief Financial Officer (CFO) of Boral Industries Inc in the USA and since 2013 she has been CFO of Boral Limited. Ros took on the expanded role of Group President Ventures & CFO in March 2019, with additional responsibility for delivering the results and strategies of Boral's joint ventures. She holds a Bachelor of Commerce from the University of NSW and is a member of Chartered Accountants Australia and New Zealand.

Ross Harper | Group President Operations

Ross Harper joined Boral in 2006 and held senior roles in Boral's Cement division, including as Executive General Manager Boral Cement from 2012. In March 2019, Ross was appointed Group President Operations, with responsibility for Boral Australia, Boral North America and Group HSE. He has more than 40 years' experience in industrial process industries, including the energy, pulp and paper, and building material sectors. He holds a Doctorate in Chemistry and completed the Executive Management Programme at the University of Michigan, Ann Arbor.

Wayne Manners | President & CEO, Boral Australia

Wayne Manners joined Boral in 2012 as Regional General Manager WA Construction Materials after a 20 year career in industrial companies, including as Chief Executive Officer of Gemco Rail and Fleetwood Pty Ltd.

He became Boral's Executive General Manager WA/NT and led Boral's Building Products in Australia and Boral's Major Projects Office with overlay responsibility for Boral Australia's Transformation & Innovation group and Value Improvement Program (VIP). In March 2019 Wayne was appointed President & CEO Boral Australia.

He holds a diploma in Civil Engineering and a Master of Business Administration from Deakin University, and is a Graduate of the Australian Institute of Company Directors.

David Mariner | President & CEO, Boral Industries Inc

David joined Boral in 2010 and was appointed President & CEO of Boral Industries Inc in July 2016. Prior to this he was Executive General Manager of Building Products and Chief Operating Officer for the Cladding division in the U.S. Through his career, David has performed a variety of management roles at Boral and Holcim as well as outside the building products space with Daimler Chrysler and Detroit Diesel. David holds a degree in Civil Engineering from Michigan Technological University and a Masters in Business Administration from Clemson University.

Frederic de Rougemont | CEO, USG Boral

Frederic de Rougemont joined in 2011 and was previously CEO of Lafarge Boral Gypsum Asia (LBGA). Prior to joining Boral, Frederic held senior roles with Lafarge in South Africa and South Korea, as well as research roles in France and the USA. He has a PhD in Physical Sciences from the University of Orsay. Since the formation of USG Boral in February 2014, Frederic has been employed by the USG Boral Building Products joint venture.

Linda Coates | Group Human Resources Director

Linda Coates joined Boral in 2000 and previously held Group and divisional human reource roles, including in Construction Related Businesses and Clay & Concrete Products. Linda was appointed Group Human Resources Director for Boral Limited in 2013. Prior to joining Boral, Linda was with Pioneer International in HR roles covering Australia and Asia. She holds a Master of Business Administration and a Bachelor of Arts with Honours majoring in Economics and Political Science from the University of NSW.

Kylie FitzGerald | Group Communications & Investor Relations Director

Kylie FitzGerald first joined Boral in 1995 and was appointed Manager, Investor Relations & Corporate Affairs in 2001, a role she continued in until August 2010. In January 2011, Kylie joined the GPT Group as Group Communications Manager, before returning to Boral in July 2012 to again lead Boral's Group Communications and Investor Relations. Kylie's early roles were in production management in Roofing. She holds an honours degree in Ceramic Engineering from the University of NSW and an MBA from the Australian Graduate School of Management.

Dominic Millgate | Company Secretary

Dominic Millgate joined Boral in 2010 and was appointed Company Secretary of Boral Limited in July 2013. Dom has previously been legal counsel and company secretary for listed entities in Australia and Singapore, and has held legal roles in London and Sydney. He is a Chartered Secretary and Fellow of the Governance Institute of Australia, a Member of the Australian Institute of Company Directors, is admitted to practise as a solicitor in NSW, and holds a finance degree from the University of New England, a law degree from the University of Sydney and a Master of Laws from the University of NSW.

Damien Sullivan | Group General Counsel

Damien Sullivan joined Boral in 2009 and was most recently General Counsel, Australia before being appointed Group General Counsel in 2013. Damien has worked as a lawyer in private practice and various in-house legal roles across a number of industries for more than 20 years in Sydney, New York and Los Angeles. Damien holds Law and Applied Science degrees from the University of Newcastle and is admitted as a solicitor in New South Wales, and as an attorney in New York.

Tim Ryan | Group Strategy & MA Director

Tim Ryan joined Boral in March 2011 in Strategy and the Mergers & Acquisitions team and was appointed to his current role in January 2017. Prior to joining Boral, Tim worked at EY in transaction advisory services roles. He is a Chartered Financial Analyst charterholder and a member of Chartered Accountants Australia and New Zealand, and he holds a Bachelor of Commerce from the University of Sydney. He reports to Boral's Group President Ventures & CFO.

Board of Directors

Kathryn Fagg AO | Non-executive Chairman | age 58

Kathryn Fagg joined the Boral Board in September 2014 and became Chairman effective 1 July 2018.

Ms Fagg is a Director of Incitec Pivot Limited, Djerriwarrh Investments Limited and a Board Member of the CSIRO. She is also a Director of the Myer Foundation, Chair of the Breast Cancer Network Australia, a board member of the Grattan Institute and a board member of Male Champions of Change. She was previously a Board member of the Reserve Bank of Australia, immediate past President of Chief Executive Women and former Chair of the Melbourne Recital Centre and Parks Victoria.

Ms Fagg is an experienced senior executive, having worked across a range of industries in Australia and Asia, including logistics, manufacturing, resources, banking and professional services. She was previously President of Corporate Development with the Linfox Logistics Group and prior to that she held executive roles at BlueScope Steel and ANZ and consulted for McKinsey and Co. She holds an Honorary Doctor of Business and a Master of Commerce in Organisation Behaviour from UNSW, and an Honorary Doctor in Chemical Engineering and a chemical engineering degree from the University of Queensland.

Ms Fagg is Chairman of the Board and a Member of the Remuneration & Nomination Committee.

Mike Kane | CEO & Managing Director | age 68

Mike Kane joined the Boral Board in October 2012, when he was appointed CEO & Managing Director, after being President of Boral USA since February 2010. Mr Kane has extensive experience in the building and construction industry, including 24 years in senior executive roles with US Gypsum, Pioneer/Hanson Building Materials, Johns-Manville Corp and Holcim.

His experience spans a broad range of geographies across America, Europe and the Asia Pacific, and his portfolio of responsibilities has included cement, aggregate, concrete, plasterboard, bricks and roof tile businesses. Prior to joining Boral, he was CEO and Board Member of Calstar Products Inc, a Silicon Valley Clean Technology start-up reinventing exterior building materials for sustainable construction. He holds a Bachelor of Arts in Sociology from Southern Illinois University, a Juris Doctorate from DePaul University's School of Law in Illinois and a Masters in Science from Creighton University, School of Law in Nebraska.

He was also appointed as a non-executive Director of Sims Metal Management Limited in March 2019.

Peter Alexander | Non-executive Director | age 62

Peter Alexander joined the Boral Board in September 2018. Mr Alexander is a seasoned former chief executive with more than 28 years of senior executive experience in US building materials and distribution, technology products and services. In 2010, Mr Alexander became CEO of Building Materials Holding Corporation and led the efforts to successfully combine Building Materials Holding Corporation with BMC Stock Holdings Inc (BMC). He continued as President and CEO of the newly merged NASDAQ listed group BMC through to early 2018.

In addition to his eight years as CEO of BMC, Mr Alexander was President and Chief Executive Officer of ORCO Construction Distribution from 2005 to 2009, serving large residential, commercial and concrete construction builders. He previously served as President and Chief Executive Officer or in executive positions for several other companies in the technology, retail, distribution and service industries, including GE Capital, ComputerLand/Vanstar, Premiere Global Services and Coast to Coast Hardware. Mr Alexander holds a BA from The Ohio State University and an MBA from The Pennsylvania State University.

Mr Alexander is a member of the Remuneration & Nomination Committee.

Eileen Doyle | Non-executive Director | age 64

Dr Eileen Doyle joined the Boral Board in March 2010. Dr Doyle is a Director of Oil Search Limited. She was previously the Deputy Chairman of CSIRO, a Director of GPT Group, Bradken Limited, OneSteel Limited and Ross Human Directions Limited, and Chairman of Port Waratah Coal Services Limited.

Her extensive executive and non-executive experience includes manufacturing and marketing in building and industrial materials throughout Australasia, Asia and North America. She holds a PhD in Applied Statistics from the University of Newcastle, is a Fulbright Scholar and has an Executive MBA from Columbia University Business School. She is a Fellow of the Australian Institute of Company Directors.

Dr Doyle is Chairman of the Health, Safety & Environment Committee and a member of the Audit & Risk Committee.

John Marlay | Non-executive Director | age 70

John Marlay joined the Boral Board in December 2009. Mr Marlay is Independent Chairman of Flinders Ports Holdings Pty Limited. He was previously Chairman of Cardno Limited, a Director of Incitec Pivot Limited and has senior executive experience in the global materials and cement industries as well as non-executive director experience in companies with significant North American business operations. Mr Marlay was the Chief Executive Officer and Managing Director of Alumina Limited from December 2002 until his retirement from that position in 2008. He has also held senior executive positions and directorships with Esso Australia Limited, James Hardie Industries Limited, Pioneer International Group Holdings and Hanson plc. He holds a science degree from the University of Queensland and a Graduate Diploma from the Australian Institute of Company Directors. He is a Fellow of the Australian Institute of Company Directors.

Mr Marlay is Chairman of the Remuneration & Nomination Committee and a member of the Health, Safety & Environment Committee.

Karen Moses | Non-executive Director | age 61

Karen Moses joined the Boral Board in March 2016. Ms Moses is a Director of Orica Limited, Charter Hall Group, Snowy Hydro and Sydney Symphony Limited, and a Fellow of the Senate of Sydney University. Ms Moses was previously a Director of SAS Trustee Corporation, Australia Pacific LNG Pty Limited, Origin Energy Limited, Contact Energy Limited, Energia Andina S.A., Australian Energy Market Operator Ltd, VENCorp and Energy, Water Ombudsman (Victoria) Limited and Sydney Dance Company. Ms Moses has over 30 years' experience in the energy industry spanning oil, gas, electricity and coal commodities and upstream production, supply and downstream marketing operations. This experience has been gained both within Australia and overseas. She holds a Bachelor of Economics and a Diploma of Education from the University of Sydney.

Ms Moses is a member of the Audit & Risk Committee and a member of the Health, Safety & Environment Committee.

Paul Rayner | Non-executive Director | age 65

Paul Rayner joined the Boral Board in September 2008. Mr Rayner is the Chairman of Treasury Wine Estates Limited, a Director of Qantas Airways Limited and a Director of the Murdoch Children's Research Institute. He was previously a Director of Centrica plc, a UK listed company. He brings to the Board extensive international experience in markets relevant to Boral including North America, Asia and Australia. He has worked in the fields of Finance, Corporate Transactions and General Management in consumer goods, manufacturing and resources industries. His last role as an Executive was Finance Director of British American Tobacco plc, based in London from January 2002 to 2008. He holds an Economics Degree from the University of Tasmania and a Masters of Administration from Monash University.

Mr Rayner is Chairman of the Audit & Risk Committee.

Corporate Governance Statement

INTRODUCTION

This Corporate Governance Statement outlines Boral's governance framework. Boral is committed to ensuring that its policies and practices reflect a high standard of corporate governance.

The Board recognises that good corporate governance is essential to building trust and creating long-term shareholder value, supported by the Boral Values:

- **Integrity** – open, honest, respectful and authentic in all our dealings
- **Excellence** – ambitious and disciplined in pursuit of the highest standards of performance
- **Collaboration** – working across businesses and developing partnerships, and
- **Endurance** – operating for the long term rather than the quick fix, and ever improving.

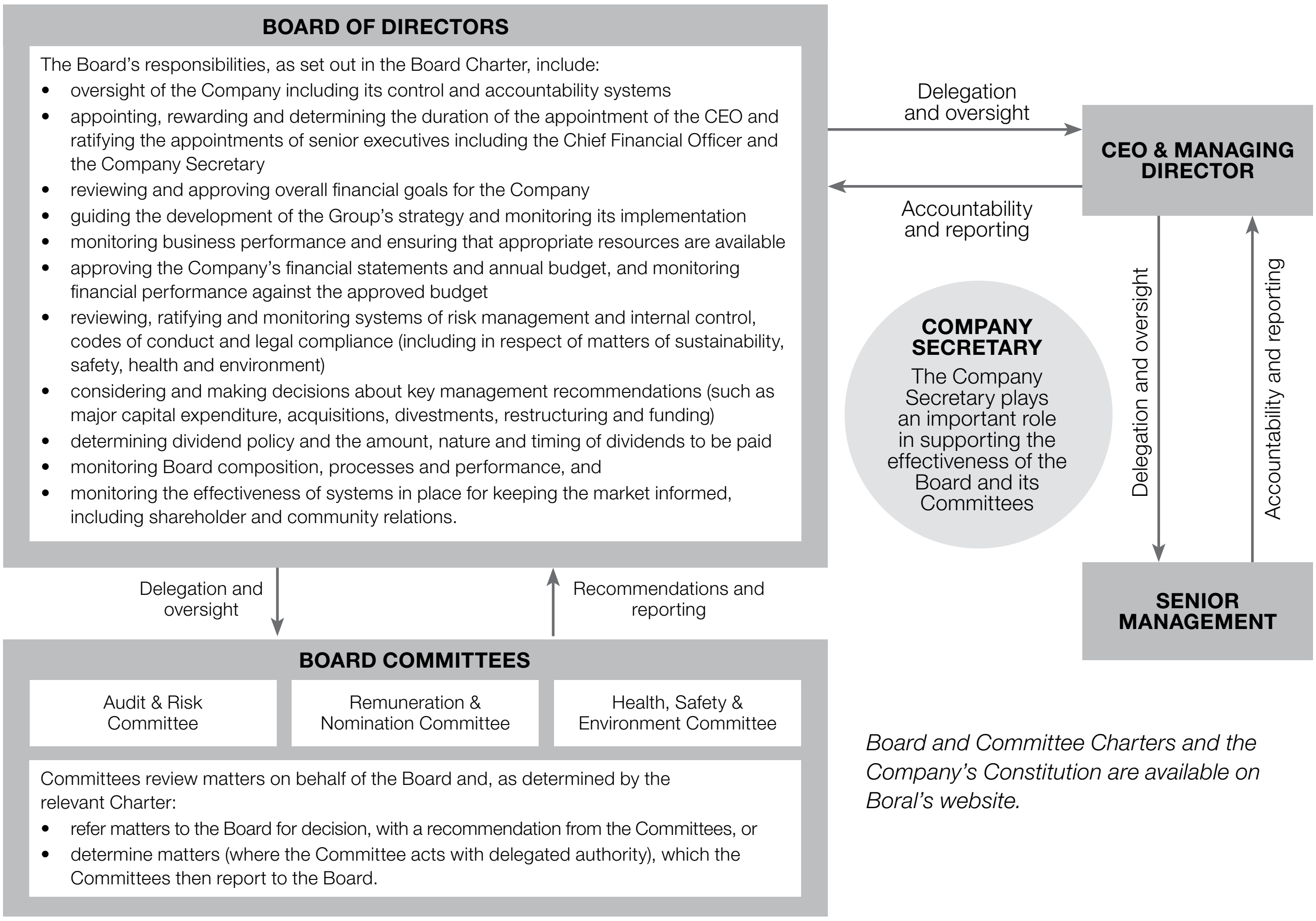
These values are expected to inform all our decisions, from the top down. The values are supported by our governance framework and underpin our corporate culture.

Throughout FY2019, Boral's governance arrangements were consistent with the Corporate Governance Principles and Recommendations (3rd edition) published by the ASX Corporate Governance Council (the ASX Principles and Recommendations).

The Board continually reviews governance at Boral to ensure that our arrangements remain appropriate in light of changing expectations and general developments in good corporate governance. Boral is pleased to report that its governance arrangements as outlined in this Corporate Governance Statement already address a number of the new issues raised in the 4th edition of the ASX Principles and Recommendations which will come into effect for Boral in FY2021.

In accordance with the ASX Principles and Recommendations, the Boral policies referred to in this statement have been posted to the corporate governance section of Boral's website: boral.com/corporate_governance.

This Corporate Governance Statement is current as at 30 June 2019 and has been approved by the Board of Boral Limited.



BOARD OF DIRECTORS

The Board's responsibilities, as set out in the Board Charter, include:

- oversight of the Company including its control and accountability systems
- appointing, rewarding and determining the duration of the appointment of the CEO and ratifying the appointments of senior executives including the Chief Financial Officer and the Company Secretary
- reviewing and approving overall financial goals for the Company
- guiding the development of the Group's strategy and monitoring its implementation
- monitoring business performance and ensuring that appropriate resources are available
- approving the Company's financial statements and annual budget, and monitoring financial performance against the approved budget
- reviewing, ratifying and monitoring systems of risk management and internal control, codes of conduct and legal compliance (including in respect of matters of sustainability, safety, health and environment)
- considering and making decisions about key management recommendations (such as major capital expenditure, acquisitions, divestments, restructuring and funding)
- determining dividend policy and the amount, nature and timing of dividends to be paid
- monitoring Board composition, processes and performance, and
- monitoring the effectiveness of systems in place for keeping the market informed, including shareholder and community relations.

CEO & MANAGING DIRECTOR

COMPANY SECRETARY

The Company Secretary plays an important role in supporting the effectiveness of the Board and its Committees

SENIOR MANAGEMENT

BOARD COMMITTEES

Audit & Risk Committee

Remuneration & Nomination Committee

Health, Safety & Environment Committee

Committees review matters on behalf of the Board and, as determined by the relevant Charter:

- refer matters to the Board for decision, with a recommendation from the Committees, or
- determine matters (where the Committee acts with delegated authority), which the Committees then report to the Board.

Board and Committee Charters and the Company's Constitution are available on Boral's website.

The Board and its role

RESPONSIBILITIES OF THE BOARD

Directors are accountable to shareholders for the Company's performance and governance. The Board has delegated to the CEO & Managing Director and, through the CEO & Managing Director, to other senior executives, responsibility for the day-to-day management of the Company's affairs and implementation of the Company's strategy and policy initiatives. The CEO and other senior executives have written agreements in place that set out their terms of appointment, and all executives are to operate in accordance with Board approved policies and delegated limits of authority, as set out in Boral's management guidelines.

The diagram on page 40 summarises Boral's governance framework and the functions reserved for the Board in accordance with the Board Charter.

Non-executive Directors spend at least 35 days each year (considerably more in the case of the Chairman) on Board business and activities, including Board and Committee meetings, meetings with senior management to discuss in detail the strategic direction of the Company's businesses, visits to operations, and meeting employees, customers and other stakeholders. The Board's engagement with our people through these business level reviews and operational visits provides additional insights and confidence around Boral's culture, capability and execution.

FY2019 business reviews and site visits by the Board and/or its Committees

Where	Key focus areas
Lake Wales Roofing (Florida), Greencastle Stone (Pennsylvania), Bowen Fly Ash operations (Georgia)	Headwaters integration progress, sales showcase and conversations with customers
Review of NSW operations and our Digital Solutions team (North Ryde, Sydney)	Focus on customer service enhancement initiatives Digital Solutions team – culture and innovation
Health Safety & Environment Committee engagement at Thornleigh concrete plant and Peats Ridge Quarry (NSW)	Review of vehicle and pedestrian separation, heavy vehicle safety, safety technology and innovation, and leadership development programs
Fly Ash management team in the USA (Texas)	Deep dive on long-term fly ash supply strategy and the Group's progress against the plan
Engagement with the USG Boral leadership team and Indonesia customers and distributors (Singapore), visited Camellia operations (NSW)	Review of USG Boral JV strategy, including customer relationships in key markets, safety initiatives, conduct risk and compliance program

Composition of the Board

Membership

The accompanying diagram illustrates the composition of the Board at 30 June 2019.

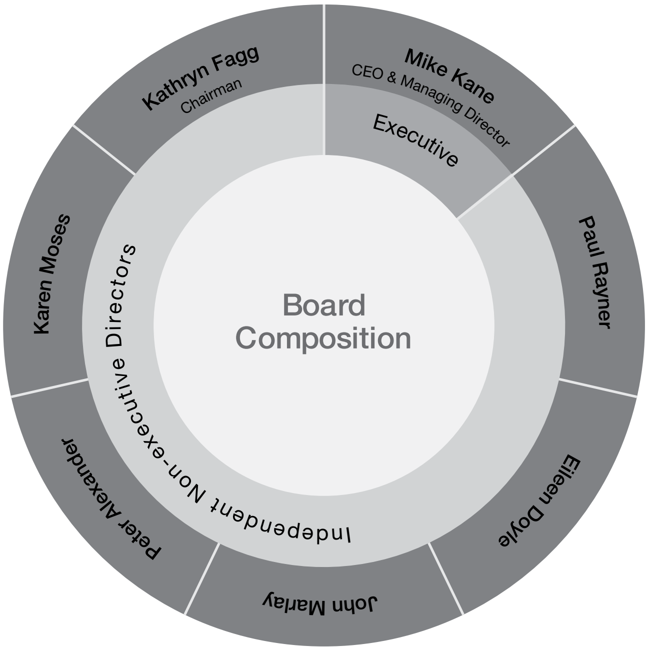
Boral's Constitution provides that there will be a minimum of three Directors and a maximum of 12 Directors on the Board.

The Board of Directors comprises six non-executive Directors (including the Chairman) and one executive Director, being the CEO & Managing Director.

The roles of the Chairman and the CEO & Managing Director are not exercised by the same individual.

Chairman's appointment and responsibilities

The Board selects the Chairman from the non-executive independent Directors. The Chairman leads the Board and is responsible for the efficient organisation and effective functioning of the Board, ensuring that Directors have the opportunity to contribute to Board deliberations. The Chairman regularly communicates with the CEO & Managing Director to review key issues and performance trends. They also represent the Company in the wider community.



SKILLS AND DIVERSITY OF THE BOARD

Matters relating to the composition of the Board and its Committees are considered by the Remuneration & Nomination Committee in accordance with the framework set out in the Remuneration & Nomination Committee Charter and through processes implemented by the Board.

The Board actively seeks to ensure that it has an appropriate mix of diversity, skills, experience and expertise to enable it to discharge its responsibilities effectively and to be well-equipped to assist our Company to navigate the range of opportunities and challenges we face.

Diversity includes differences that relate to industry experience, tenure, gender, age and cultural background, as well as differences in background and life experience, communication styles, interpersonal skills, education, functional expertise and problem-solving skills.

To assist in identifying areas of focus and maintaining an appropriate and diverse mix in its membership, the Board uses a skills matrix, which it reviews regularly. The matrix is an important, but not the only, basis of criteria applying to Board appointments. When the Board reviews the skills matrix, it looks to ensure that it covers the skills needed to address existing and emerging business and governance issues.

The Board skills matrix sets out the mix of skills, experience and expertise that the Board currently has and is looking to achieve in its membership. The matrix supports the Company's overarching strategy to "Fix, Execute and Transform" the business, as well as other areas of relevance to the composition of the Board.

For example, the Board identified that a key consideration in determining the composition of the Board should be to build on its existing global experience in the foreign jurisdictions in which Boral operates. Peter Alexander joined the Board as a non-executive Director on 1 September 2018. Mr Alexander brings extensive North American and industry experience to the Board, which contributes to the Board's oversight of Boral's expanding North American Division. The Board continues to monitor opportunities for appointing an Asia-based non-executive Director to build on the Board's existing experience in Asia.

The areas addressed in the matrix are as follows.

Board skills matrix –
skills and experience across the Board as a whole support Boral's strategy to "Fix, Execute and Transform"

Element	Skills
Leadership	Executive Leadership
	Health, Safety & Environment
Portfolio	Strategy / M&A
	Financial acumen
	Risk management
	Global experience
	Market and customer knowledge
	Innovation
	Change and transition
	Information technology
People	Organisational sustainability
	Remuneration and rewards
Governance	Governance and regulation
	Board experience

Each of these areas is currently well represented on the Board. The Board benefits from the combination of Directors' individual skills, experience and expertise in particular areas, as well as the varying perspectives and insights that arise from the interaction of Directors with diverse backgrounds.

The skills, experience and expertise of each Director are set out on page 39 of this Annual Report.

DIRECTOR INDEPENDENCE

The Board has assessed the independence of each of the non-executive Directors (including the Chairman) in light of their interests, positions, associations and relationships, and considers each of them to be independent. The criteria considered in assessing the independence of non-executive Directors include that the Director:

- is not a substantial shareholder of the Company or an officer of, or otherwise associated directly with, a substantial shareholder
- is not employed, or has not previously been employed, in an executive capacity by a Boral company or, if the Director has been previously employed in an executive capacity, there has been a period of at least three years between ceasing such employment and serving on the Board
- has not within the last three years been a partner, director or senior employee of a provider of material professional services to a Boral company
- has not been within the last three years in a material business relationship (that is, as a supplier or customer) with a Boral company, or an officer of or otherwise associated with someone with such a relationship

- has no material contractual relationship with a Boral company other than as a Director
- does not have close family ties with any person who falls within any of the categories described above, or
- has not been a Director of Boral for such a period that his or her independence may have been compromised.

It is considered that none of the interests of Directors (or the interests of persons with whom Directors have close family ties) with other firms or companies having a business relationship with Boral could materially interfere with the ability of those Directors to act in Boral's best interests. 'Material', in the context of Director independence is, generally speaking, regarded as being 5% of the revenue of the supplier, customer or other entity being attributable to the association with a Boral company or companies.

Accordingly, all of the non-executive Directors (including the Chairman) are considered independent.

TENURE

Under Boral's Constitution, and as required by the ASX Listing Rules, a Director must not hold office (without re-election) past the longer of the third Annual General Meeting (AGM) and three years following that Director's last election. Retiring Directors are eligible for re-election. When a vacancy is filled by the Board during a year, the new Director must stand for election at the next AGM. The requirements relating to retirement from office do not apply to the Managing Director of the Company.

The length of service of each current Director is set out on page 39 of this Annual Report, and shows that the Board is well served with an appropriate and diverse mix of tenure.

The Board does not regard nominations for re-election as being automatic but rather as being based on the individual performance of Directors and the needs of the Company. Before the business to be conducted at the AGM is finalised, the Board discusses the performance of Directors standing for re-election in the absence of those Directors. Each Director's suitability for re-election is considered on a case-by-case basis, having regard to individual performance. Tenure is just one of the many factors that the Board takes into account when assessing the independence and ongoing contribution of a Director.

The Board has determined that as a general rule, the Chairman must retire from that position at the expiration of 10 years in that role unless the Board decides otherwise.

INDUCTION AND TRAINING

Management, with the Board, provides an orientation program for new Directors. The program includes:

- briefings from executives and management, including detailed introductions to Boral's business and strategy implementation, history, culture, industry and key risks and opportunities
- an introduction to Boral's regulatory environment, including legal duties and responsibilities of Boral Directors, and accounting matters where the Director requests additional background
- the provision of induction materials such as the Strategic Plan and governance charters and policies, and
- site visits to some of Boral's key operations and discussions with other Directors.

The Company also supports continuing education for Directors to continue to develop their professional skills. This is considered regularly in light of emerging business and governance issues relevant to Boral. The Board receives appropriate briefings on material developments in laws, regulations and accounting standards relevant to the Company.

SUCCESSION PLANNING

Board succession planning, and the progressive and orderly renewal of Board membership, are an important part of the governance process. The Board's policy for the selection, appointment and re-appointment of Directors is to ensure that the Board possesses an appropriate range of skills, experience and expertise to enable the Board to carry out its responsibilities most effectively.

The Board is also committed to maintaining gender diversity in its membership. Currently, three of the six non-executive Directors on the Boral Board are women. As part of the appointment process, Directors consider Board renewal and succession plans, and whether the Board is of a size and composition that is conducive to making appropriate decisions.

The non-executive Directors meet on a regular basis without management present in a forum intended to allow for open discussion, including in relation to Board and management performance.

Process	Explanation
Board review	• The appointment of Directors follows a process during which the full Board (with the assistance of external search consultants) assesses the necessary and desirable competencies of potential candidates and considers a number of candidates before deciding on the most suitable candidate for appointment.
	• The selection process includes obtaining background checks on candidates and assistance from an external consultant, where appropriate, to identify and assess suitable candidates. Background checks are conducted before appointing a Director and putting forward a candidate to shareholders. These checks include the candidate's experience, education, criminal record and bankruptcy history, and reference checks.
	• Candidates identified as being suitable are interviewed by a number of Directors. Confirmation is sought from prospective Directors that they would have sufficient time to fulfil their duties as a Director.
Remuneration & Nomination Committee recommendation	• The Remuneration & Nomination Committee is responsible for making recommendations to the Board on matters such as succession plans for the Board, suitable candidates for appointment to the Board, Board induction and Board evaluation procedures.
Appointment	• At the time of appointment of a new non-executive Director, the key terms and conditions relative to that person's appointment, the Board's responsibilities and the Company's expectations of a Director are set out in a letter of appointment. All current Directors have been provided with a letter confirming their terms of appointment.
Shareholder communications	• When candidates are submitted to shareholders for election or re-election, the Company includes in the notice of meeting all information in its possession that is material to the decision whether to elect or re-elect the candidate.

CONFLICTS OF INTEREST

In accordance with Boral's Constitution and the *Corporations Act 2001* (Cth) *(Corporations Act)*, Directors are required to declare the nature of any interest they have in business to be dealt with by the Board. Except as permitted by the *Corporations Act*, Directors with a material personal interest in a matter being considered by the Board may not be present when the matter is being considered and may not vote on the matter.

ACCESS TO INFORMATION, INDEPENDENT ADVICE AND INDEMNIFICATION

After consultation with the Chairman, Directors may seek independent professional advice, in furtherance of their duties, at the Company's expense. Directors may also request relevant information from members of senior management at any time.

The Company Secretary, who is accountable to the Board through the Chairman, provides advice and support to the Board and is responsible for all matters to do with the proper functioning of the Board.

Board Committees

The qualifications and experience of each Committee member are set out on page 39 of this Annual Report. Details of the number of Committee meetings Directors attended during the reporting period are set out on page 58 in the Directors' Report.

Open lines of communication exist between all of Boral's Board Committees. This is intended to prevent any gaps in risk oversight and to maintain a broader picture of Boral's risk profile.

AUDIT & RISK COMMITTEE

Composition and role

Boral has an Audit & Risk Committee that assists the effective operation of the Board. The Audit & Risk Committee comprises only independent non-executive Directors. Its members are:

Paul Rayner (Chairman)
Eileen Doyle
Karen Moses

The Committee met four times during FY2019.

The Audit & Risk Committee has a formal Charter which sets out its role and responsibilities, composition, structure and membership requirements. Its responsibilities include review and oversight of:

- the financial information provided to shareholders and the public
- the integrity and quality of Boral's financial statements and disclosures
- the systems and processes that the Board and management have established to identify and manage areas of significant risk, and the effectiveness of Boral's risk management framework, and
- Boral's auditing, accounting and financial reporting processes and control framework.

The Committee has the necessary power and resources to meet its responsibilities under its Charter, including rights of access to management and auditors (internal and external), and to seek explanations and additional information.

Accounting and financial control policies and procedures have been established, and are monitored by the Committee to ensure that the financial reports and other records are accurate and reliable. Any new accounting policies are reviewed by the Committee. Compliance with these procedures and policies and limits of authority delegated by the Board to management are subject to review by the external and internal auditors.

When considering the yearly and half yearly financial reports, the Audit & Risk Committee reviews the carrying value of assets, provisions and other accounting issues. Questionnaires completed by divisional management are reviewed by the Committee half yearly.

Both the external and internal auditors attend each scheduled meeting of the Committee and report to the Committee as appropriate on the outcome of their audits and the quality of controls throughout Boral. As part of its agenda, the Audit & Risk Committee meets with the external and internal auditors, in the absence of the CEO & Managing Director and the Chief Financial Officer, in each meeting during the year.

The Chairman of the Audit & Risk Committee reports to the full Board after Committee meetings. Minutes of meetings of the Audit & Risk Committee are included in the papers for the next full Board meeting after each Committee meeting.

Responsibilities in relation to the external audit and internal audit

Boral's external auditor is KPMG. At least annually, as occurred in FY2019, the Audit & Risk Committee reviews the scope of the external audit and evaluates the quality of the performance, the effectiveness and the independence of the external auditor.

If circumstances arise where it becomes necessary to replace the external auditor, the Audit & Risk Committee will formalise a process for the selection and appointment of a new auditor, and recommend to the Board the external auditor to be appointed to fill the vacancy.

The Audit & Risk Committee monitors procedures to ensure the rotation of external audit engagement partners every five years as required by the *Corporations Act*.

The Audit & Risk Committee has approved a process for the monitoring and reporting of non-audit work to be undertaken by the external auditor. The type of services of the external auditor which are prohibited because they have the potential, or appear, to impair independence include the participation in activities normally undertaken by management and where the external auditor would be required to review their work as part of the audit.

The Independence Declaration by the external auditor is set out on page 60. The Committee's role in relation to the internal audit function is discussed on page 48.

REMUNERATION & NOMINATION COMMITTEE

Composition and role

The Board has a Remuneration & Nomination Committee that comprises three independent non-executive Directors.

The members of the Committee are:

John Marlay (Chairman)
Peter Alexander
Kathryn Fagg

The Committee met four times during FY2019.

The Remuneration & Nomination Committee has a formal Charter that sets out its role and responsibilities, composition, structure and membership requirements. The Committee's responsibilities include reviewing, advising and making recommendations to the Board on:

- Boral's remuneration framework (including incentive policies and practices, remuneration arrangements for the CEO and the CEO's direct reports)
- identification and recommendation of suitable candidates for appointment to the Board
- the Board skills matrix
- succession planning policy and approach generally, and the succession plan for the CEO in particular
- developing and implementing procedures for the Board's periodic evaluation of its performance and the endorsement of retiring Directors seeking re-election, and
- Board induction and the provision of appropriate training and development opportunities for Directors as required.

The Committee makes recommendations to the full Board on remuneration arrangements for the CEO & Managing Director and senior executives and, as appropriate, on other aspects arising from its functions.

Part of the role of the Remuneration & Nomination Committee is to advise the Board on the remuneration policies and practices for Boral generally and the remuneration arrangements for senior executives.

Further information relating to the key areas of focus for the Remuneration & Nomination Committee in FY2019 is set out in the Remuneration Report from page 61.

HEALTH, SAFETY & ENVIRONMENT COMMITTEE

Composition and role

The Board has a Health, Safety & Environment Committee that comprises four independent non-executive Directors.

The members of the Committee are:

Eileen Doyle (Chairman)
John Marlay
Karen Moses

The Committee met four times during FY2019.

The Health, Safety & Environment Committee has a formal Charter that sets out its role and responsibilities, composition and structure. The Committee's responsibilities include the review and monitoring of:

- the Group's strategy for health, safety and environment (HSE) and management's plans to improve HSE performance
- the effectiveness of the Group's policies, systems and governance structure for identifying and managing HSE risks which are material to the Group
- the policies and systems within the Group for ensuring compliance with applicable legal and regulatory requirements associated with HSE matters
- the performance of the Group, assessed by reference to agreed targets and measures, in relation to HSE matters, including the impact on employees, third parties and the reputation of the Group
- the output of the Group's audit performance in relation to HSE matters
- the adequacy of the Group's systems for reporting actual or potential accidents, breaches and significant incidents, and review of investigations and remedial actions in respect of any significant incident, and
- the Group's reports which are prepared and lodged in compliance with its statutory obligations concerning the environment.

In performing its role, the Committee seeks to support the activities of Management and enhance the HSE culture of the Group through its interactions with employees and others during meetings and site visits.

Role and responsibility of the Executive Committee

PERFORMANCE EVALUATION PROCESS

Under the supervision of the CEO, the Executive Committee is responsible for implementing Boral's strategic objectives.

The Executive Committee has also been delegated the responsibility for managing business performance, monitoring and reviewing material financial and non-financial risks and overseeing and developing Boral's people.

The Executive Committee as a whole is collectively responsible for meeting these delegated responsibilities, and each member is delegated specific accountability for overseeing their part of Boral's business (details of the Executive Committee are set out on page 38 of this Annual Report).

The Executive Committee is also responsible for providing timely and accurate reports to the Board on Boral's business and operations, in order to assist the Board in discharging its duties and responsibilities effectively.

Members of the Executive Committee (as well as other senior executives) are employed by Boral through individual Executive Services Agreements. The pre-employment process for executives includes obtaining background checks with the assistance, where appropriate, of an external consultant, to verify qualifications and determine suitability for the role.

Performance evaluation and remuneration

PERFORMANCE EVALUATION PROCESS

The following table explains the Company's performance evaluation processes for the Board, Committees, individual Directors and senior executives.

Board, Committees and Directors	CEO & Managing Director	Senior executives
The Board undertakes an evaluation of the performance of the Board, its Committees, individual Directors and the Chairman. Periodically, this review is undertaken with the assistance of an external facilitator. The evaluation encompasses a review of the structure and operation of the Board, and the skills and characteristics required by the Board to maximise its effectiveness. It also considers whether the blending of skills, experience and expertise and the Board's practices and procedures are appropriate for the present and future needs of the Company. Steps involved in the evaluation include the completion of a questionnaire by each Director, review of responses to the questionnaire at a Board meeting, and a private discussion between the Chairman and each other Director.	On an annual basis, the Remuneration & Nomination Committee and subsequently the Board formally review the performance of the CEO & Managing Director. The criteria assessed are both qualitative and quantitative, and include profit performance, other financial measures, safety performance, financial and non-financial risk identification and management, and strategic actions. Further details on the assessment criteria for CEO & Managing Director and senior executive remuneration (including equity-based plans) are set out in the Remuneration Report, which forms part of the Annual Report.	The CEO & Managing Director annually reviews the performance of each of Boral's senior executives, being members of the Executive Committee, using criteria consistent with those used for reviewing the CEO & Managing Director. The performance of senior executives is reviewed annually against appropriate measures as part of Boral's performance management system, which applies to all managers and staff. The system includes processes for the setting of objectives and the annual assessment of performance against objectives and workplace style and effectiveness. The CEO & Managing Director presents the outcomes of those reviews to the Board through the Remuneration & Nomination Committee. The Remuneration & Nomination Committee retains discretion as to the appropriateness of remuneration outcomes for the Executive Committee, both individually and as a whole.
In FY2019, the review took place as part of the Board's orderly succession process and evaluation. The next external evaluation of the performance of the Board, its Committees and individual Directors is planned for FY2020.	An evaluation of the performance of the CEO & Managing Director took place in FY2019 in accordance with the process described above.	An evaluation of the performance of senior executives of Boral took place in FY2019 in accordance with the process described above.

REMUNERATION

Remuneration of non-executive Directors

The remuneration of non-executive Directors is fixed. The non-executive Directors do not receive any options, at-risk remuneration or other performance-related incentives, nor are there any schemes for retirement benefits for non-executive Directors.

The remuneration arrangements for non-executive Directors are distinct from the arrangements for senior executives.

Remuneration of senior executives

Boral's remuneration policy and practices for senior executives, including the CEO & Managing Director, are designed to attract, motivate and retain high-quality people. The policy is built around principles that:

- executive rewards be competitive in the markets in which Boral operates
- executive remuneration has an appropriate balance of fixed and at risk reward
- remuneration be linked to Boral's performance and the creation of shareholder value
- at-risk remuneration for executives has both short- and long-term components, and
- a significant proportion of executive reward be dependent upon performance assessed against key business measures.

These principles ensure that the level and composition of remuneration is sufficient and reasonable and that its relationship to corporate and individual performance is defined.

Further information relating to the remuneration of the non-executive Directors and senior executives is set out in the Remuneration Report from page 61.

Boral policies and risk framework

RISK IDENTIFICATION AND MANAGEMENT

The Board (through the Audit & Risk Committee) is responsible for satisfying itself that a sound system of risk oversight and management exists and that internal controls are effective. In particular, the Board seeks assurance that:

- the principal strategic, operational, financial reporting and compliance risks are identified, and
- systems are in place to assess, manage, monitor and report on these risks and that these systems are rigorously tested to ensure they are operating effectively at all stages of the risk management cycle.

The managers of Boral's businesses are responsible for identifying and managing risks. Under supervision of the Board, management is responsible for designing and implementing risk management and internal control systems to manage the Company's material business risks. This comprises:

- the identification of core strategic, operational, financial and compliance risks
- the identification and monitoring of emerging business risks, and
- assessment, monitoring and mitigation of identified risks.

On at least an annual basis, the Group Audit & Risk Manager facilitates a formal bottom-up, organisation-wide risk management process with the business. Outcomes are shared with the Audit & Risk Committee and Management, who also receive presentations by senior divisional management on a regular basis following division-specific risk reviews. The process is governed centrally through Boral's risk management framework and directed by policies and procedures within functional areas such as Treasury, Health, Safety and Environment, Human Resources and Learning, Group Legal and Finance.

Boral's senior management has reported to the Board (through the Audit & Risk Committee) on the effectiveness of the management of the material business risks faced by Boral during FY2019. The Audit & Risk Committee has reviewed the risk management framework and is satisfied that it continues to be sound.

Boral's Risk Management Policy is available on Boral's website.

Internal audit

The internal audit function is carried out by Group Audit & Risk, which provides independent and objective assurance to Management and the Board on the effectiveness of Boral's internal control, risk management and governance systems and processes. The function is led by the Group Audit & Risk Manager, who oversees the execution of the internal audit plan as approved by the Audit & Risk Committee. The Group Audit & Risk Manager has a reporting line to the Chief Financial Officer as well as to the Audit & Risk Committee.

The function comprises a dedicated in-house team of qualified professionals based in Australia, Asia and the USA, with targeted support as required from external specialists. The internal audit function is independent of Management and has full access to all Boral entities, records and personnel.

The internal audit plan is formulated using a risk-based approach to align audit activity with the key risks of Boral. Internal audit activity and outcomes are reported to the Audit & Risk Committee on at least a quarterly basis.

Business and sustainability risks

Details regarding our approach to managing business and sustainability risks are contained in the OFR (pages 6–19 of this Annual Report), Sustainability Overview (pages 22–37 of this Annual Report) and the risks section of the Annual Report (including at pages 20–21 and 55–56). These explain the Company's exposure to economic, environmental and social sustainability risks, and how that exposure is managed.

Chief Executive Officer and Chief Financial Officer declaration

The CEO & Managing Director and the Chief Financial Officer give a declaration to the Board, before the Board resolves that the Directors' Declaration accompanying the full year and half year financial statements be signed, that in their opinion, the Company's financial records have been properly maintained, and the financial reports comply with the appropriate accounting standards and give a true and fair view of the financial position and performance of the Company, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

The CEO & Managing Director and the Chief Financial Officer gave this declaration to the Directors for the full year ended 30 June 2019 and the half year ended 31 December 2018.

COMPLIANCE WITH LAWS AND POLICIES

The Company has adopted policies to monitor compliance with occupational health, safety, environment, anti-corruption and bribery, competition and consumer laws throughout the jurisdictions in which it operates.

There are also procedures providing employees with alternative means to usual management communication lines through which to raise concerns relating to suspected illegal or unethical conduct. The Company believes that whistleblowing can be an appropriate means to protect Boral and individuals, and ensure operations are conducted within the law.

There are ongoing programs for the audit of the large number of Boral operating sites. Occupational health and safety, environmental and other risks are covered by these audits. Boral has staff to monitor and advise on workplace health and safety and environmental issues and, in addition, education programs provide training and information on regulatory issues.

Boral has a dedicated Compliance Council, tasked with achieving compliance within Boral through collaboration across functional areas including Legal, Risk, Internal Audit, HSE, Property Group, Product Councils, Insurance, Finance, Tax, HR / IR, IT security and other areas of expertise. Given the multi-disciplinary nature of the compliance effort within Boral, regular, open communication facilitating collaboration across those groups is critical. The Compliance Council provides a regular forum, connecting the relevant expertise to foster and improve communication and collaboration, and to ensure that the right functional experts are engaged and working together to achieve business-wide regulatory compliance.

CONDUCT AND ETHICS

The Board's policy is that Boral's companies and employees must observe both the letter and the spirit of the law, adhere to high standards of business conduct and comply with best practice.

Boral's management guidelines include the Code of Business Conduct and other guidelines and policies that set out legal and ethical standards for employees. As part of performance management, employees are assessed against the Boral Values of Integrity, Excellence, Collaboration and Endurance.

The Code and related guidelines and policies guide the Directors, the CEO & Managing Director, the Chief Financial Officer, the Company Secretary and other key executives as to the practices necessary to maintain confidence in the Company's integrity, and as to the responsibility and accountability of individuals for reporting, and investigating reports of, unethical practices. The Code also guides compliance with legal and other obligations to stakeholders.

Employees are provided with regular training sessions about expected standards of behaviour, the Boral Values and compliance with the Code of Business Conduct. Compliance with the Code is monitored by senior management, and the Board is notified of material breaches. The Board reviews the Code periodically, and the next review is scheduled for FY2020.

Boral's Code of Business Conduct is available on Boral's website.

REPORTING MISCONDUCT

There are procedures providing employees with alternative means to usual management communication lines through which to raise concerns relating to suspected illegal or unethical conduct, including an external telephone service that enables reports to be made anonymously, a facility known as Faircall. The Company believes that whistleblowing can be an appropriate means to protect Boral and individuals, and to ensure that operations are conducted ethically and within the law.

At least twice a year, the Audit & Risk Committee receives a confidential report about the number, nature and status of Faircall reports received. All Directors have access to this report.

Material breaches of the Code of Business Conduct and other Boral policies including the anti-corruption and bribery policy (contained in the Code) are reported to the Board and/or Audit & Risk Committee as appropriate. All material conduct issues are reported to the Board, whether they are financial or non-financial in nature.

DIVERSITY AT BORAL

Diversity at Boral is led by the CEO & Managing Director, with the support of the Board overseeing the strategy and plan initiatives and progress on diversity objectives.

Management, supported and assisted by the Boral Diversity Council, is responsible for implementing initiatives throughout the businesses to achieve the Group's diversity objectives, and more generally to reinforce Boral's commitment to fostering an inclusive and supportive workplace in accordance with the principles outlined in the Diversity Policy.

Boral is committed to fostering an inclusive workplace that embraces diversity and recognises that a diverse workplace can:

- produce better business outcomes by leveraging the unique experiences of people with diverse backgrounds, and
- improve employee engagement and retention by fostering a culture that promotes personal achievement, and is based on fair and equitable treatment of all employees, irrespective of their individual backgrounds.

We believe that a diverse workforce is fundamental to implementing the strategy for the growth and success of the business.

Diversity at Boral is underpinned by the following principles:

- recruiting and promoting on merit
- remunerating on a non-discriminatory basis
- ensuring that development activities are available to all on a non-discriminatory basis, and
- striving to increase the proportion of women in the organisation, particularly in executive and senior management roles.

Diversity – Measurable objectives for FY2019

Boral's diversity plan has six strategic elements against which the Board has set measurable objectives for FY2019, as outlined below:

Strategic Element and Objective		Status	Key Outcomes
1	**Leadership**		
1.1	Leadership engagement: engage senior leaders to take carriage of deploying diversity communication and education	Completed	• Two additional senior and operational leader unconscious knowledge awareness sessions were completed, including piloting an on-line platform for unconscious bias leadership learning.
		Completed	• Diversity targets adopted by Boral Australia. Senior leaders to have at least one diversity target in zero|one|ten personal objective plans.

Strategic Element and Objective	Status	Key Outcomes
2 Communication and Education		
2.1 Communication: develop communications engagement framework and packages to raise knowledge and understanding of diversity	Completed	• Launched communications including brochures, booklets and videos from employees and senior leaders on what diversity and inclusion mean to them. • Extensive video library including messages from Mike Kane, Wayne Manners and others to educate and promote diversity and inclusion. • 47% of managers and supervisors in Boral Australia participated in an unconscious knowledge and awareness session in FY2019 against the target of 50%.
	In progress	• Diversity Alumni sponsored and promoted “Diversity Conversations”; a series of one hour conversations with employees to progress discussion and conversations on diversity.
2.2 Education: develop diversity educational framework to provide management with capability to lead and manage diversity and diverse teams	Completed	• 680 front-line leaders completed the Zero|One|Ten Leader Foundations program, which includes modules on diversity, inclusion and unconscious bias.
	Ongoing	• Participation of women in leadership development programs in FY2019 as 21% of all participants, slightly down from 26% in FY2018. • Deploying online learning platform (Cognicity) for unconscious bias training for all employees from FY2020 onwards.
2.3 Networking: establish Women in Leadership Forum series to provide networking opportunities for key leaders, with an emphasis on women leaders across Boral	Completed	• Diversity in Leadership Forum series attended by 29 participants in FY2019, with 46% of the participants being women in leadership roles. Forums provide opportunities for women leaders to develop networks, discuss gender issues in leadership, and consult with key leaders on issues of gender and diversity in their businesses. Forum series is sponsored by the CEO & Managing Director and is chaired by the Chair of the Boral Diversity Council. • Since FY2014, 160 employees have participated in a Forum and 76% of participants were women in leadership roles. This group forms the Diversity in Leadership Alumni which provide feedback on initiatives including the on-line learning platform on unconscious bias.
	Ongoing	• Forum Alumni provides networking, advocacy and other opportunities to contribute to diversity matters in Boral. • The Forum series is an ongoing initiative, with two Forums scheduled for each year. Target of 80% female participants. In FY2019, 38% of participants were male.
2.4 Track and report: develop key performance indicators to measure, track and report on change and progress	Completed	• Diversity Dashboard being used to track, measure and report on progress with the diversity plan. • Objectives developed by Boral Australia’s leadership team FY2019 reviewed to assess effectiveness on reporting on progression of diversity and inclusion and representation of women in leadership roles.
	Ongoing	• Ongoing reporting and analysis by gender, pay levels, selection, retention and promotion, with results provided through the Diversity Dashboard to the Diversity Council for planning and program development.
2.5 Benchmark: adopt external metric to measure and benchmark effectiveness of diversity strategy	Ongoing	• Long-term partnership with the Diversity Council of Australia continuing to identify best practice and benchmark the effectiveness of Boral’s diversity strategy and plan against external organisations. • Boral is a member of the Australian Veteran’s Employment Coalition, working to support and progress defence force personnel transition to civilian employment. In FY2019 Boral won the Prime Ministers Veterans Employer of the Year – Large Employer Category for work on veterans employment.

Strategic Element and Objective		Status	Key Outcomes
3	**System and Process Design**		
3.1	Search and selection: embed diversity principles in standardised recruitment	Ongoing	• Against a target of 50%, in FY2019, 30% of our graduate intake were women in professional and engineering disciplines. Of the graduates recruited to commence in FY2020, 75% were women engineers, reflecting senior leadership's commitment and focus to exceed the 50% target. • 23% of new hires in manager roles were women, and 31% of recruitment into professional roles were women.
		In progress	• Targets for Boral Australia for FY2019 to improve recruitment and retention of women include: 30% of candidates for manager; 40% for professional; and 10% for machinery operator/driver/technician/trade roles; and an increase in the conversion rate of female candidates to placement by 5%. Against placement targets Boral achieved a 7% improvement into manager, 6% improvement into professional and 17% improvement into machinery operator/driver/technician/trade roles. • To increase the number of female candidates applying for roles, Boral is piloting Work180, a global advocate for working women, providing job applicants with a transparent directory of endorsed employers who support diversity, inclusion and equality. • A pilot program is in progress, supported by traineeships, alumni and recruitment processes to increase the number of former defence force personnel joining Boral in front-line roles, with a focus on drivers. • Survey and focus groups to be run with women across a wide range of roles in Boral to understand their experiences and inform an approach to retention for women to commence in FY2020.
3.2	Flexibility and flexible work practices: develop and implement policy, guidelines and education program to improve flexibility and flexible work outcomes	Completed	• Workplace Flexibility Guidebook launched across Boral Australia focused on supporting employees and managers with flexible work.
		Ongoing	• Since launching the Workplace Flexibility initiative, 81% of employees who applied for an arrangement to work flexibly had their requested arrangement approved without change. • Online learning module released to support Flexibility Guidebook deployment in FY2020. • Tracking and reporting of working flexibly arrangement to measure effectiveness of policy and Workplace Flexibility Guidebook.
		In progress	• Metrics and reporting being developed to measure use of Guidebook and on-line learning module.
4	**Gender Equality and Equity**		
4.1	Analysis: complete an analysis of Boral pay equity at least annually to monitor pay rates and identify issues	Ongoing	• Ratio of female-to-male average base salary is 1.00:1.00, continuing to focus on pay equity outcomes on a total compensation basis. • Annual external industry benchmarking of pay equity and comprehensive gender remuneration gap analysis completed.
5	**Generational Diversity**		
5.1	Investigate: work/life needs of different generations to understand need to develop programs to lift capability of managers to effectively lead multi-generational teams	In progress	• Transition to retirement program piloted in FY2019, with feedback to inform inititatives in FY2020

	Strategic Element and Objective	Status	Key Outcomes
6	**Indigenous Relations**		
6.1	Indigenous Employment: through Indigenous Employment strategy, increase the representation of Indigenous employees in Boral's workforce	Ongoing	• Retention of Indigenous employees employed through Indigenous employment initiatives such as the FY2011 Indigenous Relations and Employment Plan continues to be a focus.
6.2	Reflect Reconciliation Action Plan: progress the actionable commitments set out in the Plan	Completed	• Formal endorsement of Respect Reconciliation Action Plan by Reconciliation Australia.
		In progress	• Working group established under the leadership of the Diversity & Inclusion Council to work with leaders on achieving the actionable commitments set out in the Plan. • Working group to develop dashboard to measure and report on progress on actionable commitments.

Proportion of female and male employees at Boral

The table below is a detailed representation of women and men working in Boral[1] as at 30 June 2019:

	Female		Male	
Role	**Number**	**Percentage**	**Number**	**Percentage**
Board	3	43	4	57
Executive management[2]	27	17	129	83
Middle management[3]	114	13	742	87
Other roles[4]	2,225	20	8,679	80
Total	2,366	20	9,550	80

1. Includes all full-time, part-time and casual employees of Boral and its wholly owned subsidiaries, but excludes employees in joint ventures and contractors.
2. Executive management includes leadership positions four reporting levels from the CEO & Managing Director.
3. Middle management includes management and leadership positions five and more reporting levels from the CEO & Managing Director, excluding supervisor and team leader positions.
4. Other roles includes key functional support roles such as finance, legal, human resources, technical, support services and frontline employees.

In accordance with the requirements of the *Workplace Gender Equality Act 2012* (Cth), Boral submitted its Workplace Gender Equality Public Report with the Workplace Gender Equality Agency. The Report can be viewed at wgea.gov.au and on Boral's website.

For more information regarding people and diversity, see page 25 in the Sustainability Overview.

Boral's Diversity Policy is available on Boral's website.

DEALINGS IN BORAL SHARES

Under Boral's Share Trading Policy, trading in Boral shares by Directors, senior executives and other designated employees and their close associates is restricted to the following trading windows:

- the 30 day period commencing at 10.00am (Sydney time) on the day after the release of Boral's half year results announcement to the ASX
- the 30 day period commencing at 10.00am (Sydney time) on the day after the release of Boral's full year results
- the 30 day period commencing at 10.00am (Sydney time) on the day after the Annual General Meeting, and
- any additional period designated by the Board (or its delegate) from time to time (for example, during a period of enhanced disclosure).

The Policy precludes executives from entering into any hedge or derivative transactions relating to options or share rights granted to them as long-term incentives, regardless of whether or not the options or share rights have vested.

Breaches of the Policy are treated seriously and may lead to disciplinary action being taken against the executive, including dismissal.

Trading in Boral shares at any time is subject to the overriding prohibition on trading while in possession of inside information.

Boral's Share Trading Policy is available on Boral's website.

DIRECTORS' SHAREHOLDINGS

Under Boral's Constitution, Directors must hold a minimum of 1,000 ordinary shares in the Company.

To align the interests of non-executive Directors with the interests of our shareholders, the Board established minimum shareholding guidelines which encourage non-executive Directors to accumulate over time a holding of ordinary shares in the Company equivalent in approximate value to the gross annual base fee paid to each non-executive Director.

Under the guidelines, the minimum shareholding may be held directly or indirectly by a Director, and may be accumulated over a period of up to five years from the later of 1 July 2014 or the date of appointment.

The timeframe to allow Directors to build their minimum shareholding is a necessary reflection of the fact that Directors are very limited in the opportunities they have to acquire shares, given their exposure to price sensitive information from time to time regarding the Company.

Progress is monitored on an ongoing basis, and while at different points in time through FY2019 Boral's non-executive Directors met and exceeded these guidelines, if reviewed based on a closing share price at 30 June 2019 some holdings were slightly below the guideline due to the lower share price.

Details of Directors' shareholdings in the Company are set out on page 58 of this Annual Report.

CONTINUOUS DISCLOSURE

The Company appreciates the importance of timely and adequate disclosure to the market. It is committed to making timely and balanced disclosure of all material matters, and maintaining effective communication with its shareholders and investors so as to give them ready access to balanced and understandable information.

The Company has in place mechanisms designed to ensure compliance with all relevant disclosure laws and ASX Listing Rule requirements under the Continuous Disclosure Policy adopted by the Board. These mechanisms also ensure accountability at a senior executive level for that compliance.

The CEO & Managing Director, the Chief Financial Officer and the Company Secretary are responsible for determining whether or not information is required to be disclosed to the ASX. Announcements relating to significant matters, such as results, guidance to the market, major acquisitions or divestments, or other corporate matters which involve significant financial or reputational risk, are referred to the Board for approval, unless to do so is impractical in the circumstances (having regard to Boral's continuous disclosure obligations). In such cases, approval can be given by any two of the following officers: the CEO & Managing Director, the Chairman of the Board and the Chairman of the Audit & Risk Committee. The Company Secretary will endeavour to notify all other Directors of the possible disclosure considerations and invite them to participate in any discussions and disclosure decisions where possible. Directors are provided with copies of all announcements made pursuant to Boral's continuous disclosure obligations promptly after they have been made.

Boral's Continuous Disclosure Policy is available on Boral's website.

COMMUNICATIONS WITH SHAREHOLDERS

The Company's policy is to promote effective two-way communication with shareholders and other investors so they understand Boral's business, governance, financial performance and prospects, as well as how to assess relevant information about Boral and its corporate activities.

Investor relations	Boral has a dedicated investor relations team that facilitates ongoing engagement with institutional shareholders, retail investor groups, analysts and proxy advisors. To encourage two-way communication, the Company's investor relations team and share registry can be contacted directly by shareholders by telephone or electronically via email. The links to these contacts are available on the Boral website at www.boral.com/corporate
Annual reporting	Shareholders may elect to receive annual reports electronically or to receive notifications via email when reports are available online. Hard copy annual reports are provided to those shareholders who elect to receive them. While companies are not required to send annual reports to shareholders other than those who have elected to receive them, any shareholder who has not made an election is sent an easy-to-read summary of the Annual Report, called the Boral Review.
Company announcements	All formal reporting and Company announcements made to the ASX are published on Boral's website after confirmation of lodgement has been received from the ASX. These documents are also available for download by mobile devices from Boral's Investor Relations (IR) app, which is available for no cost from the App Store or Google Play. Furthermore, Boral has an email list of investors, analysts and other interested parties who are sent relevant announcements via email alert after those announcements have been lodged with the ASX. Announcements are also sent to major media outlets and newswire services for broader dissemination.
General meetings	Boral encourages shareholders to attend and participate in all general meetings including annual general meetings. Shareholders are entitled to ask questions about the management of the Company and of the auditor as to its conduct of the audit and preparation of its reports. Notices of Meeting are accompanied by explanatory notes to provide shareholders with information to enable them to decide whether to attend and how to vote upon the business of the meeting. Full copies of Notices of Meeting and explanatory notes are posted on Boral's website. If shareholders are unable to attend general meetings, they may vote by appointing a proxy using the form attached to the Notice of Meeting or an online facility.
Annual General Meeting	Shareholders are invited, at the time of receiving the Notice of Meeting, to put forward questions they would like addressed at the AGM. At the AGM, shareholders have a reasonable opportunity to ask the external auditor questions in relation to the conduct of the audit, the preparation and content of the Auditor's Report, the accounting policies adopted by the Company in relation to the preparation of the financial statements of the Company, and the independence of the external auditor in relation to the conduct of the audit.

Boral's policy on communications with shareholders is available on Boral's website.

CONCLUSION

While the Board is satisfied with its level of compliance with governance requirements, it recognises that practices and procedures can always be improved. Accordingly, the corporate governance framework of the Company will be kept under review to take account of changing standards and regulations.

Directors' Report

The Directors of Boral Limited ("Company") report on the consolidated entity, being the Company and its controlled entities ("Group" or "Boral") for the financial year ended 30 June 2019.

(1) REVIEW AND RESULTS OF OPERATIONS

Information on the operations and financial position of Boral is set out in our operating and financial review (OFR), which comprises the Chairman's review, the Message from Mike Kane, CEO & Managing Director, the Group President Ventures & CFO's review and Divisional performance, on pages 6–19 of the Annual Report accompanying the Directors' Report.

(2) STATE OF AFFAIRS

The OFR sets out a number of matters that have had a significant effect on the Group's state of affairs during the year, including:

- the Group reported a net profit after tax of $272 million after recognising a net significant item loss of $168 million as detailed in note 2.6 to the financial statements.

(3) PRINCIPAL ACTIVITIES AND CHANGES

Boral's principal activities are the manufacture and supply of building and construction materials in Australia, the USA and Asia. There were no significant changes in the nature of those activities during the year.

(4) EVENTS AFTER END OF FINANCIAL YEAR

Note 8.2 of the financial statements sets out the events which occurred subsequent to year-end. Other than the matters disclosed, there are no matters or circumstances that have arisen since the end of the year that have significantly affected, or may significantly affect:

(a) Boral's operations in future financial years
(b) the results of those operations in future financial years, or
(c) Boral's state of affairs in future financial years.

(5) LIKELY DEVELOPMENTS, BUSINESS STRATEGIES, PROSPECTS AND RISKS

Likely developments, business strategies and prospects

The OFR refers to likely developments in Boral's operations in future financial years and the expected results of those operations. Other than the information set out in the OFR, information regarding other likely future developments in Boral's operations and the expected results of those operations has not been included in the Directors' Report.

The OFR sets out information on Boral's business strategies and prospects for future financial years. This information has been provided to enable shareholders to make an informed assessment of our business strategies and future prospects.

While the Company continues to meet its obligations in respect of continuous disclosure, we have not included information where it would be likely to result in unreasonable prejudice to Boral. This includes information that is commercially sensitive, is confidential or could give a third party a commercial advantage (for example, details of our internal budgets and forecasts).

Risks

The achievement of Boral's future prospects may be adversely impacted by several risks, some of which are beyond our control. An overview of the material business risks facing the Group and our approach to managing those risks is set out below.

Additional information regarding Boral's material business risks and climate-related risks is included in the OFR, the Risks and Responses section (pages 20–21) and Sustainability Overview section (pages 22–37) of this Annual Report. The Group's broader risk identification and management framework is also set out in the Corporate Governance Statement on pages 40–54 of this Annual Report.

Industry and market risks

As Boral operates mainly in residential, non-residential and infrastructure construction markets, its financial performance is closely tied to the performance of those markets. The housing, industrial, commercial and infrastructure construction markets are cyclical and affected by various factors beyond the Group's control, including:

- geopolitical effects and the performance of national economies in the countries in which Boral operates
- monetary policies in the countries in which Boral operates (such as a change in interest rates)
- the allocation and timing of government funding for public infrastructure and other building programs
- the level of demand for building products and construction materials and services generally, and
- the availability and cost of labour, raw materials and transport services, as well as the price and availability of fuel and energy.

To manage these risks, we have implemented key initiatives to reduce costs, improve operating efficiencies and encourage sustainable performance within the Group. These initiatives include the implementation of organisational restructuring, geographic diversification and the allocation of capital expenditure to those businesses with the potential to deliver strong earnings growth. Boral also manages short-term fluctuations in fuel and energy costs through the use of hedging instruments and electricity demand management.

Competition risks

Boral operates in competitive markets, against domestic suppliers and in some cases, imported product suppliers. The competitive environment can be significantly affected by local market forces, such as new market entrants, production capacity utilisation, economic conditions and product demand. Such competition may lead to product price volatility risk. Boral has in place various strategies to manage these risks, including the commercial excellence and customer centricity program, seeking to sustain and improve margins by reducing costs, optimising capacity in line with projected demand, and increasing the size and share of our higher-margin businesses. We are also exploring options for future technology innovation in order to diversify our product range and develop new products in our core markets.

Health, safety and environment risks

Boral is subject to a broad range of health, safety and environmental laws, regulations and standards in the jurisdictions in which it operates, which could give rise to losses and liabilities. Due to the operating scale of the construction and building materials industry, there is a risk of incidents occurring that may cause injury to Boral's staff or contractors, or damage to the environment. Boral operates a fleet of over 2,700 on-road heavy vehicles, exposing it to a risk of traffic accidents. Any such events may result in additional costs and fines, and may adversely affect Boral's reputation.

To manage these risks, Boral applies strict operating standards, policies, procedures and training to ensure compliance with all applicable health, safety and environmental laws. We are focused on achieving better safety outcomes across the Group as part of our broader strategy to deliver world-class safety performance. The Group also has established reserves for known environmental liabilities, including quarry remediation. Further details regarding our approach to managing health, safety and environment risks are contained in the OFR and in the Sustainability Overview on pages 22–37 of this Annual Report.

Business interruption risks

Due to the high fixed-cost nature of the construction and building materials industry, interruptions in production capabilities and lower capacity utilisation at key manufacturing and processing facilities may have an adverse effect on the productivity and results of the Group's operations. The Group's manufacturing processes and related services are dependent upon critical plant, which may occasionally be unavailable or damaged as a result of unanticipated failures, outages or force majeure events. In addition, Boral's overall maintenance strategies and programs are designed to mitigate such incidents.

Furthermore, from time to time, there may be shortages of raw material which are critical to Boral's ability to manufacture certain products and to meet market demand, as a result of force majeure type events.

To mitigate against potential losses from such risks, Boral has instigated a systematic risk management program which actively manages and mitigates risks from a local site operating level through to Group incorporating both management intervention and business continuity planning. Boral has business continuity and emergency response plans in place, and regular simulated crisis response training is undertaken at a Group level. Boral also covers certain major risk exposures through its comprehensive Group insurance program, which provides cover for damage to facilities and associated business interruption, as well as product performance.

Boral's manufacturing assets, as well as its financial and commercial systems, are dependent on information technology systems, capabilities and assets, which as with any organisation can be vulnerable to cyber security risks. In response, Boral has coordinated cyber security response plans across each of its Divisions which are aligned with the globally recognised National Institute of Standards and Technology (NIST) security framework. Divisional cyber security managers are also responsible for developing and implementing security improvement plans to mitigate cyber threats. In addition, Boral has rolled-out information security awareness training to all employees, invested in market-leading firewall defense and enhanced external monitoring and reporting capabilities to protect it against targeted and randomised intrusion attempts.

Weather is an inherent risk for the construction materials and building products industries. Periods of extreme weather can impact Boral's ability to supply products to the market and also limit customers' ability to construct, thereby reducing demand. While these delays are generally short term in nature Boral has the ability to flex its production schedules to reduce the cost impacts of these events. Boral also has weather monitoring processes in place to identify where and when these extreme weather events may impact the business and initiate planning processes early, including utilising the broader portfolio of sites and capabilities to support continuity of supply.

Major projects are a large part of Boral's annual revenue stream, primarily in Australia. Given that Boral is predominantly a sub-contractor to these projects, it is directly impacted by delays in the delivery schedules or changes to the project scope of works. In order to mitigate against this risk, Boral has a diversified base of major projects underway across its regional businesses at any one time. Boral's dedicated Project Management Office also ensures that it is able to maintain best practice project management processes and technical expertise to meet and exceed customer schedules and programs of work.

Foreign exchange risks

Boral has significant operations in Australia, the USA and Asia and is also dependent on imported products and supply of plant and equipment. The Group is therefore exposed to the macro-economic conditions in those regions and to movements in various foreign currencies (in particular, to movements in the Australian and US dollar exchange rates). As part of its approach to managing these risks, Boral's US net assets are closely matched with its US dollar-denominated debt in order to hedge against fluctuations in the US dollar. The Group also utilises forward exchange contracts for material product and equipment supply in order to manage against short-to-medium-term currency fluctuations.

(6) ENVIRONMENTAL PERFORMANCE

Details of Boral's performance in relation to environmental regulation are set out on pages 29–34 of the Sustainability Overview in this Annual Report.

(7) OTHER INFORMATION

Other than information in the Annual Report, there is no information that shareholders of the Company would reasonably require to make an informed assessment of:

(a) the operations of Boral
(b) the financial position of Boral, and
(c) Boral's business strategies and its prospects for future financial years.

(8) DIVIDENDS PAID OR RESOLVED TO BE PAID

Dividends paid to shareholders during the year were:

	Total dividend ($m)
the final dividend of 14.0 cents per ordinary share (50% franked at the 30% corporate tax rate) for the year ended 30 June 2018 was paid on 2 October 2018	164.1
the interim dividend of 13.0 cents per ordinary share (50% franked at the 30% corporate tax rate) for the year ended 30 June 2019 was paid on 15 March 2019	152.4

The Directors have resolved to pay a final dividend of 13.5 cents per ordinary share (50% franked) for FY2019. The dividend is expected to be paid on 1 October 2019.

(9) NAMES OF DIRECTORS

The names of persons who have been Directors of the Company during or since the end of the year are:

Kathryn Fagg
Mike Kane
Peter Alexander (appointment effective 1 September 2018)
Catherine Brenner (retired at Boral's AGM 30 October 2018)
Eileen Doyle
John Marlay
Karen Moses
Paul Rayner

With the exception of Peter Alexander, who was appointed effective 1 September 2018, and Catherine Brenner who retired at Boral's AGM on 30 October 2018, all Directors have been Directors of the Company at all times during and since the end of the year.

(10) OPTIONS

Boral has no outstanding options granted over unissued shares of the Company, no options that lapsed during the year and no shares of the Company that were issued during the year as a result of the exercise of options. The last outstanding options expired 6 November 2014.

(11) INDEMNITIES AND INSURANCE FOR OFFICERS AND AUDITORS

During or since the end of the year, Boral has not given any indemnity to a current or former officer or auditor against a liability or made any agreement under which an officer or auditor may be given any indemnity of the kind covered by subsection 199A(2) or (3) of the *Corporations Act 2001* (Cth) (*Corporations Act*).

During the year, Boral paid premiums in respect of Directors' and Officers' Liability and Legal Expenses insurance contracts for the year ended 30 June 2019 and, since the end of the year, Boral has paid, or agreed to pay, premiums in respect of such contracts for the year ending 30 June 2020. The insurance contracts insure against certain liability (subject to exclusions) in respect of persons who are or have been Directors or officers of the Company and its controlled entities. A condition of the contracts is that the nature of the liability indemnified and the premium payable not be disclosed.

(12) DIRECTORS' QUALIFICATIONS, EXPERIENCE, SPECIAL RESPONSIBILITIES AND DIRECTORSHIPS OF OTHER LISTED COMPANIES IN THE LAST THREE FINANCIAL YEARS

Each Director's qualifications, experience and special responsibilities are set out on page 39 of the Annual Report.

Details for each Director of all directorships of other listed companies held at any time in the three years before the end of the financial year and the period for which such directorships have been held are:

Kathryn Fagg

Djerriwarrh Investments Limited from May 2014 (current)
Incitec Pivot Limited from April 2014 (current)

Mike Kane

Sims Metal Management Limited from March 2019 (current)

Peter Alexander

No other directorships to be disclosed

Eileen Doyle

Oil Search Limited from February 2016 (current)
GPT Group from March 2010 to May 2019

John Marlay

Incitec Pivot Limited from December 2006 to December 2016

Karen Moses

Orica Limited from July 2016 (current)
Charter Hall Group from September 2016 (current)

Paul Rayner

Qantas Airways Limited from July 2008 (current)
Treasury Wine Estates Limited from May 2011 (current)

(13) MEETINGS OF DIRECTORS

The number of Meetings of the Board of Directors and each Board Committee held during the year and each Director's attendance at those Meetings are set out below.

	Board of Directors		Audit & Risk Committee		Remuneration & Nomination Committee		Health, Safety & Environment Committee	
	Meetings held while a Director	**Meetings attended**	**Meetings held while a member**	**Meetings attended**	**Meetings held while a member**	**Meetings attended**	**Meetings held while a member**	**Meetings attended**
Peter Alexander	11	10	–	–	3	3	–	–
Catherine Brenner	3	3	–	–	1	1	–	–
Eileen Doyle	12	12	4	4	–	–	4	4
Kathryn Fagg	12	12	–	–	4	4	1	1
Mike Kane	12	12	–	–	–	–	–	–
John Marlay	12	12	–	–	4	4	4	4
Karen Moses	12	12	4	4	–	–	4	4
Paul Rayner	12	12	4	4	–	–	–	–

The Chairman and the CEO & Managing Director attend all Board and Committee Meetings.

(14) COMPANY SECRETARY

Dominic Millgate was appointed Company Secretary of the Company in July 2013, after holding the position of Assistant Company Secretary since November 2010. He has previously been legal counsel and company secretary for listed entities in Australia and Singapore, and has held legal roles in London and Sydney. He is a Fellow of the Governance Institute of Australia and holds a Master of Laws from the University of New South Wales, a finance degree from the University of New England and a law degree from the University of Sydney.

(15) DIRECTORS' SHAREHOLDINGS

Set out below are details of each Director's relevant interests in the shares and other securities of the Company as at the date of this Report.

	Shares	**Non-executive Directors' Share Plan**[a]
Peter Alexander	59,571	–
Eileen Doyle	45,248	–
Kathryn Fagg	83,562	–
Mike Kane[b]	1,239,961	–
John Marlay	39,310	–
Karen Moses	31,757	–
Paul Rayner	121,055	2,597

The shares are held in the name of the Director except in the case of:

- Peter Alexander: 58,571 shares are held by Peter C Alexander & Arati A Alexander ATF The Peter C Alexander Revocable Trust
- Eileen Doyle: 43,324 shares are held by Mr SE Doyle and Dr EJ Doyle for the S&E Doyle Super Fund A/C
- Kathryn Fagg: 82,000 shares are held by Kathryn Fagg & Kevin Altermatt on behalf of the K2 Super Fund
- John Marlay: 33,461 shares are held by Bond Street Custodians Limited on behalf of The Marlay Superannuation Fund
- Karen Moses: 30,757 shares are held by Aventeos Investments Limited on behalf of KRN Pty Limited ATF KRN Family Discretionary Trust, and
- Paul Rayner: 39,135 shares are held by Yarradale Investments Pty Limited and 79,969 shares are held by Invia Custodian Pty Limited for and on behalf of Bigpar Pty Ltd (the trustee of the PaulJul Super Fund).

Shares or other securities with rights of conversion to equity in the Company or in a related body corporate are not otherwise held by any Director of the Company:

a Shares in the Company allocated to the Director's account in the Non-executive Directors' Share Plan. Directors will only be entitled to a transfer of the shares in accordance with the terms and conditions of the Plan. No shares were allocated to non-executive Directors during FY2019.

b Mike Kane holds Share Acquisition Rights (SARs) under Boral's Equity Incentive Plan, details of which are set out in the Remuneration Report.

(16) NO OFFICERS ARE FORMER AUDITORS

No officer of the Company has been a partner in an audit firm, or a Director of an audit company, that is an auditor of the Company during the year or was such a partner or Director at a time when the audit firm or the audit company undertook an audit of the Company.

(17) NON-AUDIT SERVICES

Amounts paid or payable to Boral's auditor, KPMG, for non-audit services provided during the year by KPMG totalled $1,425,000. These services consisted of:

Taxation compliance services in Australia	$402,000
Advisory and assurance-related services in Australia	$198,000
Taxation compliance services in jurisdictions other than Australia	$210,000
Advisory and assurance-related services in jurisdictions other than Australia	$615,000

In accordance with advice from the Company's Audit & Risk Committee, Directors are satisfied that the provision of the above non-audit services during the year by the auditor is compatible with the general standard of independence for auditors imposed by the *Corporations Act*.

Also in accordance with advice from the Audit & Risk Committee, Directors are satisfied that the provision of those non-audit services during the year by the auditor did not compromise the auditor independence requirements of the *Corporations Act* because:

- Directors are not aware of any reason to question the auditor's independence declaration under section 307C of the *Corporations Act*
- the nature of the non-audit services provided is not inconsistent with the requirements of the *Corporations Act*, and
- provision of the non-audit services is consistent with the processes in place for the Audit & Risk Committee to monitor the independence of the auditor.

(18) AUDITOR'S INDEPENDENCE DECLARATION

The auditor's independence declaration made under section 307C of the *Corporations Act* is set out on page 60 of the Annual Report and forms part of this Report.

(19) REMUNERATION REPORT

The Remuneration Report is set out on pages 61–82 of this Annual Report and forms part of this Report.

(20) PROCEEDINGS ON BEHALF OF THE COMPANY

No application under section 237 of the *Corporations Act* has been made in respect of the Company and there are no proceedings that a person has brought or intervened in on behalf of the Company under that section.

(21) ROUNDING OF AMOUNTS

Unless otherwise expressly stated, amounts have been rounded off to the nearest whole number of millions of dollars and one place of decimals representing hundreds of thousands of dollars in accordance with ASIC Corporations Instrument 2016/191, dated 24 March 2016.

Signed in accordance with a resolution of the Directors.

KJ Fagg

Kathryn Fagg
Director

MKane

Mike Kane
Director
Sydney, 26 August 2019

Lead Auditor's Independence Declaration

under Section 307C of the Corporations Act 2001

To: the Directors of Boral Limited

I declare that, to the best of my knowledge and belief, in relation to the audit for the financial year ended 30 June 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.

KPMG

KPMG

Kevin Leighton
Partner
Sydney, 26 August 2019

2019 Remuneration Report

Message from the Chairman of the Remuneration & Nomination Committee

Dear shareholders,

On behalf of the Remuneration & Nomination Committee (Committee) and the Board, I am pleased to present Boral's 2019 Remuneration Report (Report).

An important role of the Committee and the Board is to appoint the CEO and effectively manage succession. In February 2019, we announced changes to our senior executive team to broaden leadership roles and responsibilities. These changes, which are outlined on page 63, will better position Boral around executive capability today and in the future.

While Mike Kane has the full support of the Board and we expect him to remain in the role as CEO for around two more years, internal development of executives is critically important to ensure that when the time comes we have good internal candidates to consider for succession into the most senior roles, including the role of CEO. The new and expanded roles support our senior executive development program and recognise the skills, capabilities and track record of key executives to deliver results and value for our shareholders. Adjustments to KMP remuneration were made in FY2019 to reflect the changes in roles and responsibilities.

We remain committed to Boral having remuneration arrangements that take into account the expectations of our stakeholders and align with good practices in Australia. As such, we continue to actively engage with our shareholders and their proxy advisers. This has helped us to understand shareholder views and priorities, and to improve our remuneration practices and reporting.

Section 2 of our Report covers the key areas where feedback has been received, including information to improve the clarity and transparency of our remuneration practices. These include:

1. Boral's Long-Term Incentive (LTI) Return on Funds Employed (ROFE) performance hurdle
2. Safety and remuneration
3. Foreign exchange translation impacts on CEO remuneration paid in US dollars
4. Property earnings in Short-Term Incentives (STI).

It is important to us to have good alignment between executive pay and shareholder value, and we know this is also important to our shareholders.

We believe that an executive's base salary should not be excessive but it should be fair and competitive so that we attract and retain great people. Executives should meet Boral's expected standards in order to be paid that salary, which includes leading a safety culture based on Zero Harm, having a customer-focused and engaged workforce, delivering our sustainability objectives, progressing our business strategy and delivering financial results.

We believe that incentives should be paid for strong financial performance taking into account market cycles and budgets. Executives should be rewarded for achieving and exceeding robust financial targets.

In FY2019, Boral delivered solid financial outcomes given some challenging external impacts including macro-economic conditions. Our financial results however, were below where we expected them to be at the start of the year when our budgets and targets were set. Our people worked hard to offset the impacts of lower than expected volumes and were able to make up considerable ground through improvement initiatives and cost reductions. Despite this, across most of our businesses, we did not meet our targeted EBIT outcomes and most executives, including our CEO and Group President Ventures & CFO, received zero short-term incentive payments for FY2019.

Long-term incentive hurdles, based on Total Shareholder Returns (TSR) and Return on Funds Employed (ROFE), were also not met this year, with Boral experiencing share price pressures alongside most other stocks in the materials sector in Australia and beyond. While we did not meet LTI hurdles in FY2019, our incentive plans are aimed at supporting delivery of our long-term vision for Boral and our growth plans, including synergies from the Headwaters acquisition, and our recently announced expanded USG Boral Asia Joint Venture.

The remuneration outcomes for FY2019, clearly demonstrate alignment between executive pay and shareholder value.

Yours sincerely

John Marlay, Chairman, Remuneration & Nomination Committee

Contents

Section 1:	**Who is covered by this Report**	**63**
Section 2:	**Evolving our remuneration approach**	**63**
Section 3:	**FY2019 performance and actual pay received**	**68**
Section 4:	**Remuneration framework for FY2019**	**72**
Section 5:	**Remuneration governance**	**75**
Section 6:	**Non-executive Directors’ remuneration**	**77**
Section 7:	**Statutory remuneration disclosures**	**78**
Section 8:	**Glossary of key terms for the Remuneration Report**	**82**

Section 1: Who is covered by this Report

The Directors of Boral Limited present the Remuneration Report (the Report) for the Company and its controlled entities for the year ended 30 June 2019 (FY2019). This Report forms part of the Directors' Report and has been audited in accordance with section 300A of the *Corporations Act 2001*. The Report sets out remuneration information for the Company's Key Management Personnel (KMP).

The table below details the KMP for FY2019.

Name	Position
Senior Executives	
Mike Kane	Chief Executive Officer & Managing Director (CEO)
Joseph Goss	Divisional Chief Executive, Boral Australia (ceased as KMP effective 28 February 2019)
Ross Harper	Group President, Operations
David Mariner	President & CEO, Boral North America
Wayne Manners	President & CEO, Boral Australia (appointed as KMP effective 1 March 2019)
Rosaline Ng	Group President Ventures & CFO
Non-executive Directors	
Kathryn Fagg	Chairman and non-executive Director
Peter Alexander	Non-executive Director (appointment effective 1 September 2018)
Catherine Brenner	Non-executive Director (retired as a Director at Boral's AGM, effective 30 October 2018)
Eileen Doyle	Non-executive Director
John Marlay	Non-executive Director
Karen Moses	Non-executive Director
Paul Rayner	Non-executive Director

Section 2: Evolving our remuneration approach

Alignment to Boral's strategy

Boral's key strategic objective is to deliver superior shareholder returns through the cycle. To achieve this, our senior executives are focused on clear strategic priorities for each division, which were underpinned by the following objectives in FY2019:

- deliver Zero Harm, performance excellence and improvement initiatives
- deliver the year two synergies from the integration of the Headwaters business into Boral North America
- maintain and strengthen Boral's leading position in Australia
- progressing strategic growth opportunities to create value and leveraging innovation-based growth in USG Boral, and
- deliver strong cash flows and maintain a prudent balance sheet to support growth and deliver value.

Boral's executive remuneration policy is intended to focus executives on business plan delivery and in doing so create shareholder value. Executives are incentivised to achieve financial objectives through short- and long-term incentives, and they are motivated to achieve safety, environmental and other objectives because it is a well understood requirement of maintaining a job at Boral.

Changes to our executive team

Effective 1 March 2019, changes were made to the senior executive team to broaden leadership roles and responsibilities as the Company looks to the future.

- Ros Ng, took on the expanded role of Group President Ventures & CFO. In addition to Group finance, corporate development, Strategy and M&A she has broader responsibility for the USG Boral and Meridian Brick joint ventures. In this role, Ros works closely with the joint venture CEOs to deliver the strategy and results.
- Ross Harper, formerly Executive General Manager Cement, was appointed Group President, Operations, responsible for Boral Australia and Boral North America as well as Group Health, Safety & Environment and Innovation.
- Wayne Manners, formerly Executive General Manager, Western Australia, Building Products & Major Projects, was appointed President & CEO, Boral Australia.

Joseph Goss, formerly Divisional Chief Executive, Boral Australia moved to a senior advisory role reporting to the CEO from 1 March 2019.

Mike Kane's expected tenure as Boral's CEO remains unchanged. In March 2019, we said we expect Mike to remain as our CEO for a further two to three years.

Executive remuneration policy

The Committee supports the Board to assess whether adjustments to remuneration policy are required to take into account the changing nature of our business and the environment in which we operate, which includes the expectations of Boral's stakeholders and market practice. In ensuring current and future business needs can be met the Committee has focused its efforts on:

- Making sure our approach to remuneration is suited to a business that is heavily impacted by different construction markets and cycles in different geographies
- Attracting and retaining the right talent in different geographies and businesses, recognising that Boral is an Australian headquartered company, and
- Enabling the transfer of key talent quickly and easily between businesses and regions.

The Committee has continued to listen to shareholder feedback, which in recent years has been focused on:

- improving the clarity and transparency of remuneration disclosures, and
- STI and LTI plans that continue to recognise and achieve an appropriate balance for both executives and shareholders.

Prior year decisions impacting from FY2019

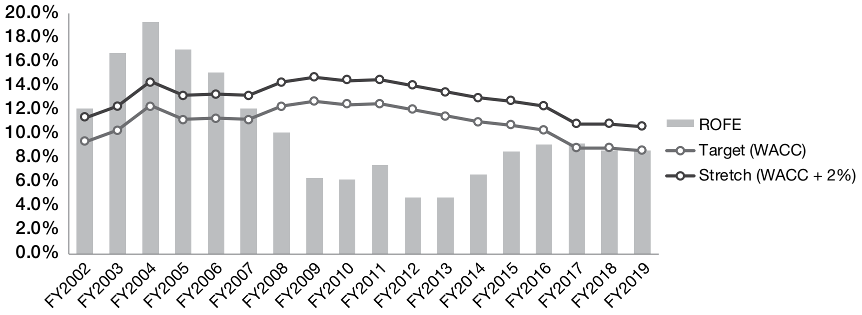
<table>
<tr><th>Issues and decision</th><th colspan="2">Comments</th></tr>
<tr><td rowspan="4">LTI Performance Hurdle
Decision to retain ROFE as an appropriate LTI measure, with a new target-setting approach adopted for FY2019 grants onwards.
ROFE targets are now set relative to the weighted average cost of capital (WACC) and the target vesting range has broadened. This directly incentivises executives to deliver returns exceeding the WACC through market cycles.
ROFE targets for grants prior to FY2019 were not adjusted.
Relative TSR measured against the S&P/ASX100 Index was retained.</td><td colspan="2">As indicated in the FY2018 Remuneration Report, Boral reviewed whether ROFE continued to be the most appropriate measure and its alignment to the future needs of the business. The Board concluded that ROFE remained an appropriate measure, although ROFE targets could be more explicitly aligned with Boral's objective to deliver returns that exceed the weighted average cost of capital (WACC). WACC is the level of return required to add investor value, taking into account the risk associated with the investment.
The former approach to setting ROFE targets, and the new approach applied to FY2019 LTI grants and onwards are summarised below:</td></tr>
<tr><td>FY2018 approach:</td><td>FY2019 approach:</td></tr>
<tr><td>ROFE targets set against an absolute measure</td><td>ROFE targets determined relative to WACC</td></tr>
<tr><td>Historically, the Board set absolute ROFE targets with reference to Boral's forecast long-term financials. This approach had a number of limitations:
• forecast and actual ROFE performance fluctuates materially given the cyclical nature of business conditions
• targets did not explicitly factor in Boral's WACC
• any significant portfolio changes increased the difficulty of accurate forecasting, and
• the narrow vesting range of 0.5% between target and stretch, combined with the cyclical nature of the business, increased the chance of 'all or nothing' vesting.</td><td>To address limitations of the FY2018 approach, ROFE targets are now set relative to Boral's WACC for the relevant testing period and a broader vesting range has been introduced which is strongly skewed to outperformance. These adjustments:
• provide a less volatile approach for measuring ROFE performance
• continue to measure ROFE performance as EBIT (before significant items) on average funds employed
• transparently align with Boral's stated objective of exceeding WACC through the cycle, and
• focus executives on delivering returns which exceed WACC, with the broader vesting range providing increased incentive to outperform.</td></tr>
</table>

Prior year decisions impacting from FY2019 (continued)

Issues and decisions | **Comments**

LTI Performance Hurdle (continued)

The chart below illustrates how the new approach would have applied to the 17 years preceding the change and the one year following the change based on FY2019 performance. Over this period, reported ROFE would have exceeded WACC seven times (39% of the time) and would have exceeded the stretch target five times (28% of the time).



Note: The chart above has not been adjusted retrospectively. Historic ROFE calculations include unadjusted post-tax joint venture (JV) earnings. FY2019 figures are based on FY2019 results only rather than a three-year average, and include pre-tax JV earnings.

Broader vesting range from FY2019

The vesting range was expanded from 0.5% to 2.0%, with the new range emphasising performance above WACC. The vesting range and payout percentages from FY2019 are below.

ROFE	Payout (% of potential award)
Below WACC	Nil
At WACC (target)	50%
Between WACC and WACC plus 2.0%	Vesting on a straight-line basis
At or above WACC plus 2.0% (stretch)	100%

These hurdles are intended to drive sustainable value creation for shareholders and attract and retain high performing executives. The hurdles will continue to ensure executives are only rewarded for delivery of returns above Boral's WACC, recognising that WACC itself does change to reflect internal and external circumstances, such as the long-term risk free rate.

Any awards that do not vest in accordance with the vesting schedule will lapse and there will be no re-testing.

WACC and ROFE calculation from FY2019 LTI Grant

As joint ventures (JVs) remain an attractive business model for Boral, the share of EBIT (before significant items) from our JVs (rather than post-tax JV earnings) is now included in the pre-tax ROFE calculation, consistent with the treatment for Boral's wholly owned businesses.

WACC is calculated by Boral on a pre-tax basis, providing a direct comparison with the pre-tax ROFE measure, using the average annual WACC over the three year period from 1 July 2019 (for the FY2020 grant). Previous ROFE targets and calculations for grants prior to FY2019 are not affected.

The WACC and ROFE calculation is overseen by the Audit & Risk Committee, supporting the Remuneration & Nomination Committee and the Board. It is also reviewed and validated by an independent external advisor. The calculated WACC for each year and the Company's ROFE performance will be disclosed retrospectively in Boral's Remuneration Report. See Section 4 for further details.

Prior year decisions impacting from FY2019 (continued)

Issues and decisions | **Comments**

Safety & Remuneration

Managing safety well is a fundamental part of everyone's role at Boral.

At Boral, safety is considered so fundamentally important that there is a strong belief that safety should not be financially rewarded and therefore should not be a component of remuneration incentives. This is an important and powerful aspect of Boral's culture. After considering the cultural aspects and performance outcomes, the Board remains of the view that this is the right approach for Boral.

Managing safety well is considered a fundamental part of everyone's role at Boral and is taken into consideration in performance reviews and performance management. The Board continues to examine Boral's track record in taking appropriate responsive action, including terminating employment for poor safety management and safety breaches. In FY2019, 30 employees in various roles across Australia and North America had their employment terminated because of a breach of safety standards and protocols, including poor management of safety. The combination of strengthened safety culture and performance management is considered the right approach for Boral.

Targeted Retention Incentive

No retention incentives were granted to executives in FY2019.

The retention incentive awarded to executives in September 2015 vested in September 2018.

The one-off retention incentive awarded to eight key executives in September 2015 contributed to maintaining stable leadership and continuity in delivering business transformation initiatives. It was intended to minimise the risk of further targeted approaches from competitors and to retain our key talent for potential succession opportunities across a number of senior roles.

All employees awarded a Targeted Retention Incentive were successfully retained, enabling the Board to progress CEO succession development.

The targeted retention incentives awarded in September 2015 vested in September 2018.

No additional executive retention incentives have been awarded since the September 2015 allocation and none will be awarded in FY2020.

CEO Remuneration

The CEO's Base Cash Salary (BCS) is paid in US dollars and does not benefit from any A$/US$ currency fluctuations.

A$ BCS and FAR equivalent are used in the Remuneration Report for reporting purposes only.

From 1 July 2017, the CEO's remuneration arrangements were restructured to reflect him spending approximately half of his time in the USA, after the completion of the Headwaters acquisition. Under the new arrangements, the CEO's remuneration is paid in US dollars as Base Cash Salary (BCS) with STI and LTI opportunity calculated as a percentage of BCS. Outlined below is the outcome of those changes on the CEO's remuneration from 1 July 2017:

BCS	STI as % of BCS		LTI (% of BCS under **face value** approach)
	Target	Maximum	
US$1,299,674*	110%	154%	220%

*A$1,722,563 converted based on the Reserve Bank of Australia daily A$/US$ exchange rate, averaged over the 12-month period to 30 June 2017, being 0.7545.

Adjustments to the CEO's remuneration are calculated on his US dollar BCS. His US dollar remuneration is converted to Australian dollars for reporting and accounting purposes based on the A$/US$ exchange rate, averaged over the 12 months to 30 June for the reporting period. The effect of the change in A$/US$ exchange rates since 1 July 2017 on reporting of the CEO's remuneration is shown in the table below:

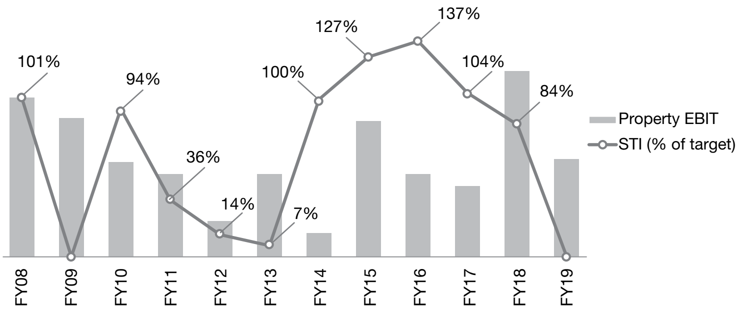
		1 July 2017	30 June 2018	30 June 2019
		A$0.7545*	A$0.7735*	A$0.7145*
	US$	A$	A$	A$
1 July 2017	1,299,674	1,722,563	1,680,251	
1 September 2018**	1,338,664	1,774,240	–	1,873,568

*The A$/US$ exchange rate averaged over the 12 months for the reporting period to 30 June.
**1 September 2018 was the effective date of the salary increase.

On 1 July 2017, the A$ value of the CEO's BCS was reported as A$1,722,563. The US$ value of the CEO's BCS did not change in FY2018. However, for reporting purposes his BCS was A$1,680,251 because of the change in the A$/US$ exchange rate from 1 July 2017 to 30 June 2018.

In FY2019, the CEO was awarded a 3% increase, effective 1 September 2018, to his US$ BCS to US$1,338,664. The exchange rate used to convert the CEO's US$ BCS to A$ is 8% less than the A$/US$ exchange rate used to convert his US$ BCS in FY2018. The effect of this change in foreign exchange translation between the Australian dollar and US dollar is that it appears the CEO's BCS has increased by more than 3%, which is not the case.

FY2019 review areas and decisions

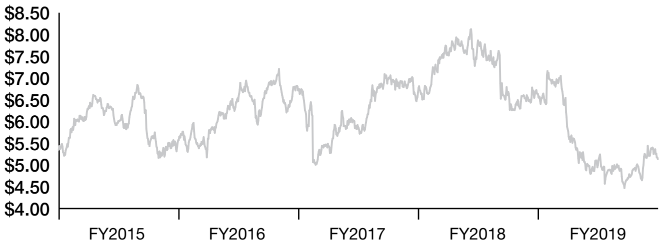
Issues and decisions	Comments
Culture, governance and remuneration	While Boral recognises that our business is not directly involved in financial services, the findings and recommendations of several inquiries into corporate governance and practices, including the Hayne Royal Commission report released in February 2019, provide opportunities to ensure our practices continue to meet internal and external expectations. Boral is looking more closely at what aspects of our organisational culture can reinforce strong governance and accountability. This includes taking a holistic approach to the employee lifecycle, which includes culture, leadership, safety, competency, performance and pay.
Property earnings Property is an ongoing contributor to Boral's earnings results and its performance is recognised in Boral incentives.	The Property business unit was established in 2001 to optimise returns from property transactions. Since that time, the Property business has on average contributed $33m EBIT per annum. Following feedback at the 2018 AGM, the Board reviewed the appropriateness of including property earnings in incentive plan calculations. While the Board recognises that property earnings can be lumpy from year to year, the fact is that property earnings are ongoing and management has to work hard to deliver those earnings for our shareholders. On the basis of its review, the Board affirmed it remains appropriate for Boral to include property in Boral's incentive plan calculations. Analysis of historical outcomes showed that property is a regular contributor to EBIT outcomes. The Board continues to review targets and outcomes from the Property business as part of its annual process. **Property EBIT and percentage STI paid** 

Section 3: FY2019 performance and actual pay received

During FY2019, construction activity and demand for building products was lower than expected by market forecasters and by Boral. In Australia, housing starts were 15% lower than the prior year and volumes were impacted by unplanned delays and disruptions to several major infrastructure projects. In North America, housing starts declined by 2% and activity was impacted by extreme wet weather over an extended period in several of Boral's key markets. While Boral's business delivered solid gains through cost reduction programs, price and other business improvement initiatives, to help offset the lower than expected volumes, the FY2019 results were below budget which is reflected in the level of STI achieved.

Financial performance	FY2015	FY2016	FY2017[2]	FY2018	FY2019
Earnings per share[1,3] (cents)	29.7	33.3	33.7	40.4	37.5
Dividends per share (cents)	18.0	22.5	24.0	26.5	26.5
Return on equity[1] (%)	7.1	7.6	6.3	8.3	7.5

Boral share price



Boral's performance and STI awards

EBIT performance

The use of EBIT effectively aligns rewards for Senior Executives with Boral's focus on delivering strong earnings through the business cycle, recognising the importance of ensuring that the level of payments received reflects performance achieved. Year-on-year, EBIT targets for the STI have been set at challenging levels against our budget.

For FY2019, Boral reported EBIT[1] of $660 million, which was $28 million or 4% lower than the prior year. This reduction in EBIT reflects lower property earnings and lower volumes in Australia and USG Boral, and is partially offset by growth and synergies in North America.

On average, less than one percent of maximum STI opportunity was paid out to Senior Executives for FY2019 performance, which is equivalent to 1.1% of target STI on average. This compares to 84.4% of target STI and 52.3% of maximum STI, paid out for FY2018 performance.

STI payments over the past 10 years demonstrate the cyclical nature of our industry and the variability of STI payments. Over the last 10 years (FY2010 to FY2019), Boral's STI has paid out at an average 70.4% of target. This includes three years where no STI was paid to the CEO: FY2012, FY2013 and FY2019.

Senior Executive historical STI % of target outcomes

Year	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	Average
(% of target)	93.8%	36.4%	14.0%	6.9%	100.4%	126.7%	136.5%	103.7%	84.4%	1.1%	*70.4%*

STI

Further details in Section 4

STI awards in FY2019 were close to zero, reflecting the 4% decrease in Group EBIT before significant items, and equating to an achievement of 87% of the EBIT target set by the Board at a Group level for STI purposes. Divisional EBIT increased by 27% for Boral North America, and decreased by 11% for Boral Australia and 13% for USG Boral.

The Group President, Operations received an STI of $33,466, representing 7% of his target STI and 4% of his maximum STI, with 80% of this amount paid in cash and 20% deferred into equity for two years. This STI outcome for the Group President, Operations was for the business unit portion of his pro-rated STI for the period 1 July 2018 to 28 February 2019, when he was Executive General Manager, Cement.

All other Senior Executives, including the CEO, received zero STI payments for FY2019.

---

1. Excludes significant items.
2. In FY2017, earnings per share and return on equity reflect additional shares on issue following the capital raising in December 2016 but only eight weeks of Headwaters post-acquisition earnings contribution.
3. Earnings per share is adjusted to reflect the bonus element in the renounceable entitlement offer which occurred during November and December 2016.

Boral's performance and LTI awards

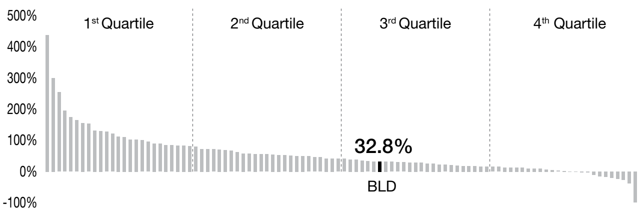
Total Shareholder Returns performance in FY2019

Boral's relative TSR performance declined in FY2019. Taking into account share price and dividends paid, Boral delivered a TSR of -13.4% for shareholders between 1 July 2018 and 30 June 2019. This TSR ranked Boral below the median (18th percentile) of ASX 100 companies for FY2019.

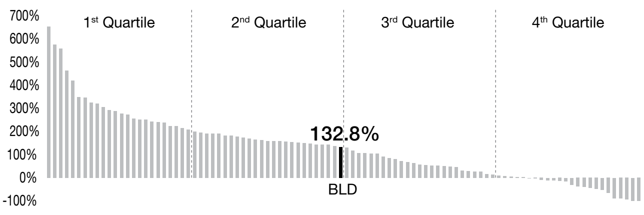
Total Shareholder Returns performance over three years and seven years

Over the three year period from September 2015 to September 2018, Boral's TSR of 32.8% was at the 43rd percentile of the Company's TSR comparator group, resulting in the 2015 LTI grant lapsing in full. Over the period from September 2011[1] to September 2018 (being the third testing date for the 2011 LTI grant), Boral's TSR of 132.8% was at the 51st percentile. Given this was below the 59th percentile performance achieved in 2016, this resulted in the remainder of the 2011 LTI grant lapsing in full.

TSR for Boral vs ASX 100 companies: Sept 2015 to Sept 2018



TSR for Boral vs ASX 100 companies: Sep 2011 to Sep 2018



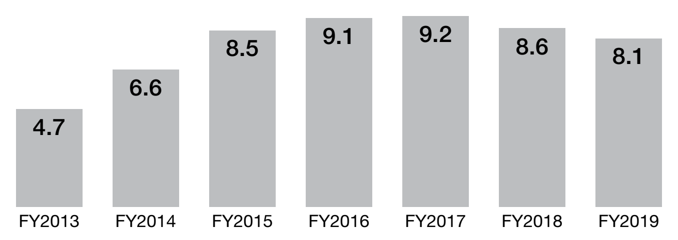
Return on Funds Employed performance

The use of ROFE is designed to test the efficiency and profitability of the Company's capital investments. It links executive reward with the achievement of improved ROFE performance and a long-term goal of ROFE exceeding the cost of capital through the cycle.

Boral's 8.6% ROFE in FY2018 was below the 11.5% to 12.0% vesting range for the 2015 LTI grant and none of the ROFE tranche vested.

Boral's ROFE performance of 8.1% in FY2019, as measured by EBIT[2] return on average funds employed, declined from previous years, reflecting lower earnings from Boral Australia (including Property) and USG Boral, only partially offset by higher earnings from Boral North America. The decline in ROFE also reflects the adverse impact of divested businesses (US Block and Denver Construction Materials) which were sold early in the year. The opening funds employed includes divested businesses, but their earnings contribution was negligible.

EBIT return on average funds employed (ROFE)[2], %



---

1. The 2011 LTI grant was the last year of retesting grants over a seven year period.
2. ROFE for remuneration purposes is EBIT (excluding significant items) return on average funds employed. Funds employed is calculated as the average of funds employed at the start and end of the year, except for FY2018, which was calculated on a monthly average funds employed basis, recognising the impact of the Headwaters acquisition part way through the year.

LTI *Further details in Section 4*	**2015 LTI** Vesting for the 2015 LTI was based on performance against the relative TSR hurdle (two-thirds of the grant) and the ROFE hurdle (one-third of the grant). Relative TSR was at the 43rd percentile of the ASX 100 comparator group, below the vesting target. The ROFE target was not met. Based on these outcomes, all awards lapsed. **Legacy plans** Until 2013, LTI awards were tested at different times over a seven year period based on relative TSR performance. The 2011 LTI was the last LTI grant that was subject to multiple testing. The 2011 LTI had its final test date on 1 September 2018. The target required for additional vesting was not met with all outstanding awards lapsed.

Fixed annual remuneration (FAR) outcomes

The key remuneration outcomes for Boral's Senior Executives in FY2019 are outlined below.

Component	Outcomes
FAR (or BCS for US employees) *Further details in Section 4*	Increases in FAR/BCS were considered by the Board with reference to role responsibilities, including expanded responsibilities and accountabilities, experience of individuals, Boral's need to retain Senior Executives to support succession planning, minimising the risk of competitors targeting executives and positioning remuneration against the market. They were also made in conjunction with a restructure of the executive team. In FY2019, the Board approved the following adjustments to Senior Executive FAR/BCS: • CEO received an increase equivalent to 3% of BCS, reflective of market benchmarking undertaken against Boral comparators • Group President Ventures & CFO received a 9.9% increase to her FAR, reflecting the significant increase in job size, responsibilities and role complexity, including assuming additional responsibility for the results of the USG Boral and Meridian Brick joint ventures, in addition to Group finance, strategy and mergers & acquisitions • President and CEO, Boral North America received a 3% increase to his BCS, reflective of market benchmarking undertaken against Boral comparators and market movements for Senior Executive roles • former Divisional Chief Executive, Boral Australia received a 2.5% increase to his FAR, reflective of market benchmarking undertaken against Boral comparators and market movements for Senior Executive roles, and • Group President, Operations received a 36.2% increase to his FAR, reflecting his promotion to a significantly expanded role in terms of geographical scope, strategic impact, job size, complexity and additional operational leadership responsibilities. The President & CEO, Boral Australia commenced in his role and became a KMP on 1 March 2019. His FAR was reflective of comparable senior executive roles and market benchmarking against Boral comparators.

Actual remuneration for FY2019

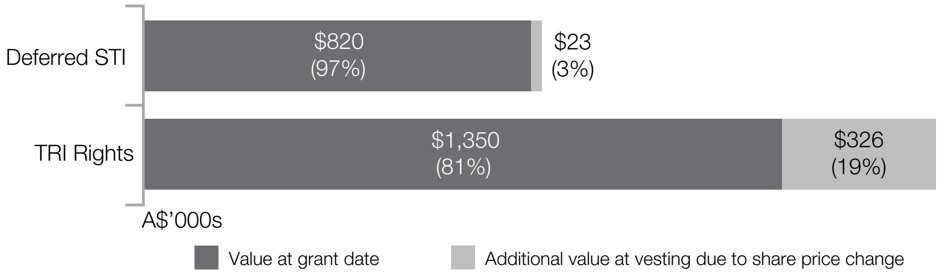
The remuneration outcomes table below has been prepared to provide shareholders with a view of remuneration that was actually paid to Senior Executives for FY2019. The Board believes that presenting information this way provides shareholders with increased clarity and transparency. Remuneration details prepared in accordance with statutory obligations and accounting standards are contained in Section 7 of this Report.

FY2019 remuneration cash outcomes table

	Cash payments and other benefits received							Vesting of prior year "at risk" equity awards		
A$'000s	Fixed rem[a]	STI (cash)[b]	Super/ pension payments	Expat & other allowances[c]	Other non-cash[d]	FBT	Total payments	Vesting of STI deferral earned in 2016[e]	Vesting of 2011 & 2015 LTI Grants[f]	Vesting of 2015 TRI Rights[g]
Mike Kane	1,842.8	–	308.9	–	100.5	–	2,252.2	428.9	–	–
Joseph Goss	679.2	–	–	103.5	17.9	106.2	906.8	145.4	–	496.5
Ross Harper	679.8	26.8	27.3	–	7.2	4.5	745.6	78.5	–	349.5
Wayne Manners	225.0	–	8.3	8.7	3.1	3.0	248.1	–	–	–
David Mariner	755.4	–	155.8	–	57.0	–	968.2	63.5	–	365.1
Ros Ng	925.9	–	27.8	–	42.8	19.0	1,015.5	127.2	–	465.5
US-based Senior Executives[h]										
US$'000										
Mike Kane	1,316.7	–	220.7	–	71.8	–	1,609.2	306.5	–	–
David Mariner	539.7	–	111.3	–	40.8	–	691.8	45.4	–	260.8

A portion of actual remuneration received in FY2019 relates to the vesting of deferred STI and vesting of the Targeted Retention Incentive. By providing these awards as equity, outcomes for Senior Executives were aligned to the outcomes for shareholders over the vesting period.

Boral's share price increased by 2.9% from September 2016 to September 2018. The following graph shows the difference between grant and vesting value of the deferred STI award. It also shows the difference between grant and vesting value of the TRI rights granted to eight senior executives in 2015, excluding the CEO.



Ref	Item	Notes relating to the FY2019 remuneration cash outcomes table
a.	Fixed remuneration	Fixed remuneration is cash salary paid to the Senior Executive for their period as a KMP. For Joseph Goss, this is for the period to 28 February 2019, and for Wayne Manners, it is for the period from 1 March 2019.
b.	STI (cash)	The value of STI represents 80% of the total STI with the remaining 20% deferred into equity for two years.
c.	Expat & other allowances	Expatriate allowances, travel allowances, other non-cash benefits and associated fringe benefits tax (FBT) are not taken into account for the purposes of calculating an executive's STI or LTI opportunity.
d.	Other non-cash	Other non-cash is comprised of non-monetary benefits, including medical, life and disability insurance, vehicle costs and parking. These amounts are not taken into account for the purposes of calculating an executive's STI or LTI opportunity.
e.	STI deferral	The value for earned deferred STI granted in September 2016 which vested on 1 September 2018, calculated using the volume weighted average price (VWAP) of Boral ordinary shares in the five trading days up to 1 September 2018, being $6.9291, multiplied by the number of rights which vested.
f.	LTI	LTI performance targets were not met for the 2011 and 2015 LTI grants which resulted in these awards lapsing in full.
g.	TRI Rights	The value for Targeted Retention Incentive (TRI) Rights provided as a one-off retention award in September 2015 which vested on 1 September 2018. The value of these rights was calculated using the VWAP of Boral ordinary shares in the five trading days up to 1 September 2018, being $6.9291, multiplied by the number of rights which vested.
h	US-based Senior Executives	Remuneration for US-based Senior Executives is converted from US$ to A$ for reporting and accounting purposes based on the A$/US$ exchange rate, averaged over the 12 months to 30 June for the reporting period.

Section 4: Remuneration framework for FY2019

Remuneration strategy

Boral's remuneration strategy and framework provides the foundation for how remuneration is determined and paid. The chart below summarises Boral's remuneration strategy for FY2019.

REMUNERATION STRATEGY

Align reward to business strategy and shareholder value creation
Attract and retain high-performing employees with market competitive and flexible reward

▼

REMUNERATION PRINCIPLES

ALIGNED TO SHAREHOLDERS	**MARKET COMPETITIVE**	**LINKED TO BUSINESS CONDITIONS**
Short and long-term incentives are based on performance measures designed to drive sustainable value creation for shareholders	High-performing employees with ability to deliver required financial and non-financial outcomes are attracted and retained with fixed remuneration that reflects role seniority and complexity, and variable reward opportunities that reflect performance	At-risk reward outcomes are reflective of financial performance objectives

The strategy has guided the way remuneration has been set for FY2019, as outlined in the following pages.

Remuneration framework components

Component	Delivery	Year 1	Year 2	Year 3
FAR	Base salary, non-cash benefits (including any fringe benefits tax) and superannuation paid during the financial year			
STI	Annual 'at-risk' incentive in which 80% of the STI is delivered in cash, 20% is deferred in Performance Rights	Deferred STI vests after 2 years		
LTI	Equity awards that are subject to the satisfaction of long-term performance conditions	Two-thirds of the LTI vests after 3 years based on TSR performance compared to a selected group of comparator companies		
	100% is delivered as Performance Rights	One-third of the LTI vests after 3 years based on achieving ROFE targets set by the Board		

Remuneration framework details

Remuneration strategy	Description

FAR / BCS

Attract and retain high-calibre employees with market competitive and flexible reward.

Boral benchmarks the remuneration of our executives against comparator companies of a similar size (referencing market capitalisation and revenue, as applicable) and within similar industries (focusing on industrial and materials sector entities). Comparator companies used in the benchmarking are described in Section 8 of this Report.

Considerations in setting FAR / BCS:

- Position responsibilities and financial impact
- Individual's knowledge, skills and experience, and
- Market practice for companies of similar size and complexity to Boral.

2019 Outcomes

Based on benchmarking outcomes, the CEO received a 3% adjustment to his Base Cash Salary from 1 September 2018. Other Senior Executives not subject to significant role changes received FAR increases of between 2.5% and 3.0% from 1 September 2018. Senior Executives who assumed substantively larger roles received adjustments as described on page 70, which reflect changed position scope, succession development, incumbents' capability growth, market movements and benchmarking outcomes.

STI

STI rewards for achievement of financial performance over one year.

STI hurdles

Performance at the end of the financial year is measured against pre-determined EBIT targets established as part of the Group's annual budget process. STI awards have threshold, target and maximum opportunities that are differentiated based on Group and/or divisional results. No STI awards are made if relevant EBIT performance hurdles are not met.

EBIT targets are considered to be commercial-in-confidence and are therefore not disclosed in the interests of shareholders.

Single financial measure

Boral utilises a single performance hurdle to create a clear line of sight for Senior Executives and transparency for shareholders as to how STI awards are determined.

The Board retains discretion to adjust STI outcomes up or down to ensure consistency with the Company's remuneration philosophy, to prevent any inappropriate reward outcomes including in the event of a seriously negative safety issue, and maintain alignment with the shareholder experience before the final award is determined.

STI deferral

Deferring 20% of the awarded STI over two years is considered necessary by the Board to promote sustainability of annual performance over the medium term, provide executives with additional share price exposure and facilitate the Board's ability to exercise malus or clawback provisions, should this be required.

Target and maximum STI opportunities as a percentage of BCS for the CEO and President & CEO, Boral North America and FAR for other Senior Executives are outlined below:

Position	Target	Maximum
CEO	110%	154%
Senior Executives	60%	100%

Boral used a single financial hurdle for STI awards in FY2019, being EBIT (excluding significant items):

- CEO, Group President Ventures & CFO and Group President, Operations: 100% Group EBIT, and
- Other Senior Executives: 50% Group EBIT and 50% Divisional or Business EBIT.

The use of EBIT effectively aligns rewards for Senior Executives with Boral's focus on delivering strong earnings through the business cycle.

Significant items are generally excluded on the basis STI outcomes should reflect performance during the relevant period and should not be skewed upwards (or downwards) due to one-off investments or decisions in prior performance periods.

The Board, supported by the Remuneration & Nomination Committee and the Audit & Risk Committee, reviews the treatment and classification of significant items for remuneration purposes, when reviewing the appropriateness of reward outcomes.

2019 Outcomes

An STI of $33,466 (made up of a cash payment of $26,773 and the remainder deferred into equity for 2 years) was achieved by the Group President, Operations based on performance over FY2019. The Group President, Operations' STI payment represented 7% of his target STI and 4% of his maximum STI. This outcome represented the business unit portion of his pro-rated STI for the period 1 July 2018 to 28 February 2019, being the period when he was the Executive General Manager, Cement.

The CEO and all other Senior Executives, received no STI payments for FY2019. This outcome reflected below-threshold EBIT results for Boral Group and its divisions. Further information on the financial performance of the divisions is found on pages 15–16 for Boral Australia and 17–18 for Boral North America.

Remuneration strategy

LTI

LTI links long-term executive rewards with the sustained creation of shareholder value through allocation of equity awards subject to long-term performance conditions.

TSR

TSR measures the compound growth in the Company's TSR over the performance measurement period compared to the TSR performance over the same period of a comparator group.

The Board believes that a relative TSR hurdle measured against constituents of an ASX index ensures alignment between comparative shareholder return and reward for the executive, and provides reasonable alignment with diversified portfolio investors.

In considering selection of the TSR comparator group, the Board has determined there to be an insufficient number of direct ASX company comparators to produce a meaningful bespoke peer group.

ROFE

ROFE tests the efficiency and profitability of the Company's capital investments and is determined by the Board based on EBIT (before significant items) in the year of testing as a percentage of average funds employed (where funds employed is the sum of net assets and net debt).

The ROFE performance hurdle is intended to reward achievement linked to improving the Company's ROFE performance through the cycle.

Since the introduction of ROFE in FY2013, our long-term goal has been to exceed the WACC over the whole of the construction cycle, even though at some points in the cycle returns may be lower than WACC. ROFE targets for annual LTI awards have been set progressively with a view to achieving this objective.

Since FY2013, Boral's ROFE has generally increased alongside a decreasing WACC. While the FY2019 ROFE result is lower than FY2018, Boral Australia delivered a divisional ROFE which substantially exceeded its cost of capital.

Description

The CEO and Senior Executives are eligible to participate in the LTI at the following opportunity levels:

Position	Maximum opportunity (face value)
CEO	220% of Base Cash Salary
Senior Executives	100% of FAR / BCS

The FY2019 LTI awards were measured against two performance hurdles:

	Relative TSR	ROFE
Hurdle	Relative TSR measured against the S&P/ASX 100 Index	EBIT in year of testing as a percentage of average funds employed
Portion	Two-thirds	One-third
Period	1 September 2018 to 1 September 2021	Year ending 30 June 2021

The TSR vesting schedule to be applied for the FY2019 LTI grant is:

If at the end of the period the TSR of the Company is:	Proportion vesting:
Below the 50th percentile	0%
At 50th percentile	50%
Between the 50th and 75th percentile	Pro-rata vesting from 50% to 100%
Reaches or exceeds 75th percentile	100%

The ROFE vesting schedule to be applied for the FY2019 LTI grant is:

If the Company's ROFE performance for FY2021 is:	Proportion vesting:
Below WACC	0%
At WACC (target)	50%
Between WACC and WACC plus 2.0%	Vesting on a straight line basis
At or above WACC plus 2.0% (stretch)	100%

2019 Outcomes

In September 2018, the 2015 LTI did not vest. TSR was at the 43rd percentile which was short of the minimum required for vesting (50th percentile). Actual ROFE of 8.6% for FY2018 was below the 2015 LTI ROFE target for FY2018 of 11.5%.

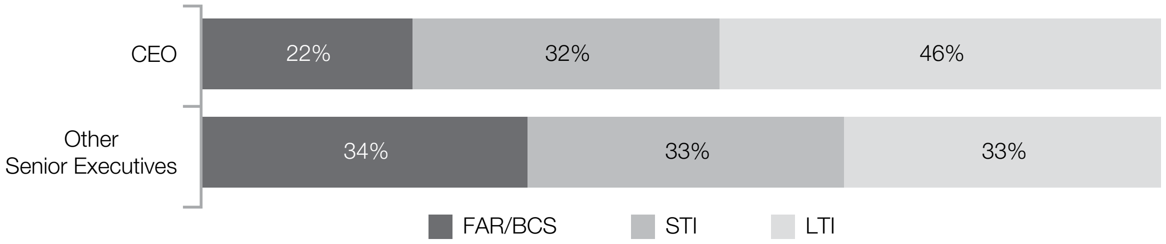
While LTI grants will only be measured using the new FY2019 approach (ROFE targets determined relative to WACC) in three years for the FY2019 grants, Boral's FY2019 WACC on a ROFE equivalent basis was ~8.6%. This figure represents the first year of the 3 year average pre-tax WACC that will be used to test the FY2019 grants in FY2021. Boral's ROFE performance adjusting for JV equity earnings for FY2019 was ~8.6%.

Legacy plans

Until 2013, LTI awards were tested at different times over a seven year period based on relative TSR performance. The 2011 LTI was tested during FY2019 and all outstanding equity lapsed on its third and final test date on 1 September 2018 as the hurdle was not met.

Total Remuneration

Boral's remuneration mix is set to balance the need to attract and retain high calibre talent, with the ability to vary reward with performance. Total maximum remuneration mix for FY2019 is shown below, reflecting the remuneration mix should all performance hurdles at maximum be met in full.



Section 5: Remuneration governance

Roles and responsibilities

The table below outlines the roles and responsibilities of the Board, the Committee and management in relation to Board and KMP remuneration.

The Board	The Committee	Management
• Approving remuneration arrangements for the CEO, other Senior Executives and non-executive Directors • Monitoring the performance of Senior Executives	• Recommending remuneration and incentive policies and practices • Recommending remuneration arrangements for the CEO • Recommending remuneration arrangements for KMP (excl. CEO)	• Prepares recommendations and provides supporting information for the Committee's consideration • Implements approved incentive policies and practices

Open lines of communication exist between all of Boral's Board Committees. For example, in FY2019 the Committee was supported by the:

- Audit & Risk Committee in reviewing the calculation of ROFE relative to WACC, and reviewing financial results, and
- Health, Safety & Environment Committee in reviewing safety, as discussed earlier in the Report.

These open lines of communication are intended to prevent any 'gaps' in risk oversight and to maintain a broader picture of Boral's risk profile as it relates to remuneration governance. In addition to the overlapping membership of the Board Committees, the Board Chairman and the CEO attend all Board and Committee meetings and provide a link between each Committee's oversight responsibilities.

Further detail on the responsibilities of the Committee are outlined in its Charter, which is reviewed annually by the Board. A copy of the Charter is available at the Corporate Governance section of Boral's website https://www.boral.com/about-boral/corporate-governance.

How decisions are made

The Committee makes recommendations for approval by the full Board on remuneration arrangements for non-executive Directors, the CEO, other Senior Executives and other executives. When decisions are made, consideration is applied to the Boral strategy, remuneration strategy, alignment with shareholder interests and market practice.

Board discretion

The Board maintains discretion to adjust remuneration outcomes for Senior Executives to ensure outcomes appropriately reflect company performance and the shareholder experience over the relevant performance period.

Component	Board discretion	Determinations made in FY2019
STI	The Board retains discretion to adjust STI outcomes up or down to ensure consistency with the Company's remuneration philosophy, to prevent any inappropriate reward outcomes including in the event of a seriously negative safety issue, and maintain alignment with the shareholder experience before the final award is determined. The Remuneration & Nomination Committee assists the Board on these matters, supported also by the Audit & Risk Committee and Health, Safety & Environment Committee, including in respect of financial performance, safety performance and the treatment and classification of significant items, considered in the context of reviewing the appropriateness of reward outcomes. The Board also has the discretion to exercise malus or clawback provisions in circumstances where an employee has acted fraudulently or dishonestly, has breached their obligations to the Company, in the event that there is a material misstatement or omission in Boral's financial statements, or if the Company is required or entitled to reclaim any overpaid incentive or other amount from an employee.	The Board did not have cause during FY2019 to apply its discretion. In FY2018, based on a thorough review and full consideration of the tragic circumstances of the September 2017 supplier fatality, the Board determined not to reduce FY2018 executive remuneration. Further information is available on page 62 of the 2018 Annual Report.
LTI	The Board retains discretion to make LTI adjustments as considered necessary to ensure rewards reflect performance in a manner which is consistent with shareholder expectations and the intent and purpose of the relevant targets. The Board also has the discretion to partially reduce or forfeit an LTI award where an employee has their employment terminated for cause, acts fraudulently or dishonestly, or breaches their obligations to the Company. The Company has a further discretion to apply clawback provisions in the event that there is a material misstatement or omission in Boral's financial statements, or if the Company is required or entitled to reclaim any overpaid incentive or other amount from an employee.	

Minimum shareholding requirements

To further align the interests of the Company's Senior Executives with the interests of shareholders, the Board established minimum shareholding requirements effective from 1 July 2013 for the CEO and all other Senior Executives.

Senior Executives are required to accumulate a minimum shareholding in the Company over a period of up to five years from the later of 1 July 2013 or their date of appointment as a KMP:

Position	Minimum shareholding	Status
CEO	100% of BCS	As at 30 June 2019, the CEO well exceeds the requirement
Senior Executives	50% of FAR / BCS	As at 30 June 2019, the majority of Senior Executives achieved the requirement*

*Progress is monitored on an ongoing basis, and while at different points through FY2019 all of Boral's Senior Executives met and exceeded these guidelines, if reviewed following the organisational changes announced in March 2019 and based on the closing share price at 30 June 2019, some holdings were below the guideline due to an increased requirement and the lower share price.

The Company's guidelines for non-executive Directors' minimum shareholdings are set out in the Corporate Governance Statement on page 53 of this Annual Report.

External advice on remuneration

The Committee seeks information and advice regarding remuneration directly from external remuneration consultants Ernst & Young (EY), who are independent of the Company's management.

During FY2019, these consultants provided general information and support only. No advice was provided that contained "remuneration recommendations" relating to the remuneration of KMP.

The Board has adopted a protocol governing the engagement of remuneration consultants and the provision of remuneration recommendations. The purpose of this protocol is to ensure that recommendations provided by consultants are made free from undue influence by the Senior Executives to whom the recommendations relate.

The protocol provides that before Boral enters into a contract to engage a consultant to provide remuneration recommendations, the proposed consultant must be approved by the Committee or the non-executive Directors. The remuneration consultant must report directly to the Committee or the non-executive Directors. If a consultant makes a recommendation concerning the remuneration of a Senior Executive, the recommendation must be provided directly to the Committee or the non-executive Directors. This arrangement was reviewed in FY2019 by the Committee and no changes were considered necessary.

Senior Executive contracts

An overview of key terms of employment for Senior Executives is provided below:

Contract term	CEO	Other Senior Executives
Contract type	Permanent	Permanent
Notice period by Boral	12 months	6 months
Notice period by employee	6 months	6 months
Termination without cause		
Termination payment	Up to 12 months' BCS	Up to 12 months' FAR/BCS
STI	Unless otherwise determined by the Board, no entitlement to STI for the year of termination.	
LTI	Treatment of LTI awards are dealt with under the LTI plan rules and the specific terms of grant. In general, unless otherwise determined by the Board, LTI awards will remain on foot (with a pro rata scale-back based on the proportion of the performance period elapsed at the cessation date) to be tested against the relevant performance conditions at the vesting date.	
Resignation or termination with cause	Unless otherwise determined by the Board: • no termination payment • no entitlement to STI • forfeiture of all deferred STI, and • all unvested LTI awards will lapse.	
Dealing restrictions	Boral's Share Trading Policy prohibits executives from entering into hedge and other derivative transactions in relation to rights granted under the LTI plan. Shares allocated to participants upon vesting of their LTIs may only be dealt with in accordance with the Share Trading Policy. Any contravention of the Policy would result in disciplinary action.	

Section 6: Non-executive Directors' remuneration

The non-executive Directors receive fixed fees only, which includes base fees and Board Committee fees. These are structured on a total fee basis and paid in the form of cash and superannuation contributions. The non-executive Directors do not receive any at-risk remuneration or other performance-related incentives, such as options or rights to shares, and no retirement benefits are provided to non-executive Directors other than superannuation contributions. The Board Chairman, while attending all Board and Committee meetings, does not receive any Committee fees in addition to their Board Chairman fees.

Non-executive Director fee levels for FY2019 were as follows:

	2019		2018	
Fees (A$)	**Chair**	**Member**	**Chair**	**Member**
Board	**465,600**	**155,000**	454,200	151,200
Audit & Risk	**42,300**	**21,600**	41,300	21,100
Remuneration & Nomination	**31,800**	**15,900**	31,000	15,500
Health, Safety & Environment	**31,800**	**15,900**	31,000	15,500

The total annual non-executive Director remuneration for the current Board of six non-executive Directors for FY2019 was $1,464,600 including superannuation. This was within the current aggregate fee limit of $2,000,000 per annum, which was approved at the Company's Annual General Meeting in November 2016.

A comprehensive review of the level of fees paid to Boral's non-executive Directors was undertaken during the year, and included a review of market benchmarking information prepared by EY, Boral's external remuneration consultant. The review considered the elements of size and complexity of the business, time commitments and fees paid for non-executive Directors of companies of a comparable size. As a result of the market review, with effect from 1 July 2019, fees for non-executive Directors were increased by 2.0%, including fees for the Board Chairman, each Committee Chairman, base fees, and Committee member fees.

Section 7: Statutory remuneration disclosures

The following Senior Executive remuneration table has been prepared in accordance with the accounting standards and has been audited. The values in the table below align with the amounts expensed in Boral's financial statements. Additional information has been included for Mike Kane and David Mariner, who are paid in US$. The impact of currency movements in FY2019 when their US$ remuneration is converted to A$ may create the impression of significant increases in cash salary, which was not the case.

Senior Executive remuneration table

		Short-term			Post-employment	Share-based payments[a]			Other	Total	At-risk remuneration	
A$'000s	Year	Cash salary[b]	Short-term incentive[c]	Non-monetary benefits[d]	Super-annuation/ pension[e]	Rights	Deferred equity	Retention awards (Sept 15)[f]	Long service leave accrual	Total	% of remuneration related to performance	% of target STI paid
Senior Executives												
Mike Kane	**2019**	**1,842.8**[b]	**–**	**100.5**	**308.9**	**1,315.5**	**224.5**	–	**49.8**	**3,842.0**	**40.1%**	**0.0%**
	2018	1,654.4	1,108.0	162.6	301.8	1,302.3	363.5	–	20.4	4,913.0	56.5%	74.9%
Joseph Goss[1]	**2019**	**632.2**	**–**	**227.7**	–	**231.5**	**56.8**	**–**	**13.3**	**1,161.5**	**24.8%**	**0.0%**
	2018	1,026.8	579.8	315.9	–	336.9	132.4	133.3	18.0	2,543.1	41.3%	120.8%
Ross Harper	**2019**	**693.2**	**26.8**	**11.7**	**27.3**	**153.1**	**47.2**	**–**	**63.6**	**1,022.9**	**22.2%**	**6.6%**
	2018	580.8	340.8	8.4	36.3	144.6	70.5	93.8	10.8	1,286.0	43.2%	113.8%
Wayne Manners[2]	**2019**	**243.5**	**–**	**14.8**	**8.3**	**32.7**	**9.1**	**–**	**15.1**	**323.5**	**12.9%**	**0.0%**
	2018	–	–	–	–	–	–	–	–	–	–	–
David Mariner	**2019**	**755.4**	**–**	**57.0**	**155.8**	**242.7**	**24.2**	**–**	**–**	**1,235.1**	**21.6%**	**0.0%**
	2018	679.5	125.7	52.8	131.7	203.9	44.8	98.0	–	1,336.4	28.0%	37.5%
Rosaline Ng	**2019**	**929.6**	**–**	**61.8**	**27.8**	**318.4**	**62.0**	**–**	**38.5**	**1,438.1**	**26.5%**	**0.0%**
	2018	869.8	327.3	63.4	27.3	306.2	103.2	125.0	12.9	1,835.1	40.1%	74.9%
Total	**2019**	**5,096.7**	**26.8**	**473.5**	**528.1**	**2,293.9**	**423.8**	**–**	**180.3**	**9,023.1**	**30.4%**	**1.1%**
	2018	4,811.3	2,481.6	603.1	497.1	2,293.9	714.4	450.1	62.1	11,913.6	46.1%	84.4%
US-Based Senior Executives[3]												
US$'000s												
Mike Kane	**2019**	**1,316.7**	**–**	**71.8**	**220.7**	**939.9**	**160.4**	**–**	**35.5**	**2,745.0**	**40.1%**	**0.0%**
	2018	1,279.7	857.0	125.8	233.5	1,007.3	281.2	–	15.8	3,800.3	56.5%	74.9%
David Mariner	**2019**	**539.7**	**–**	**40.8**	**111.3**	**173.4**	**17.3**	**–**	**–**	**882.5**	**21.6%**	**0.0%**
	2018	525.6	97.3	40.8	101.9	157.7	34.6	75.8	–	1,033.7	28.0%	37.5%

Ref	Item	Notes relating to the Senior Executive remuneration table
a.	Fair market value	The fair market value of rights is calculated at the date of grant using the Monte Carlo simulation analysis. For the grants prior to FY2013, the value is allocated to each reporting period evenly over the period of five years from the grant date. For the grants issued from FY2014, the value is allocated evenly over the period of three years from the grant date. The value disclosed above is the portion of the fair market value of the rights for each relevant reporting period, including the value of deferred equity.
b.	Cash salary	Cash salary includes all fixed salary and accrued annual leave. As noted in Section 2, the change in Mike Kane's cash salary is the result of change in the value of the A$/US$ foreign exchange used to convert his US dollar base cash salary to Australian dollars. In FY2018 his cash salary was converted based on A$/US$ exchange rate averaged over the 12-month period to 30 June 2018 of $0.7735. For FY2019, the rate used to convert his cash salary was $0.7145, or 8% less than the rate applied in FY2018.
c.	Short-term incentive	STI values for KMP represent 80% of total STI with the remaining 20% to be deferred into equity and expensed over three years in accordance with the Deferred STI plan introduced from FY2014. The deferred component is included in the "Deferred equity" column.
d.	Non-monetary benefits	Non-monetary benefits include parking, medical, life and disability insurance, home leave, housing allowances, travel allowances, vehicle costs and applicable fringe benefits tax payable by the Company upon providing these benefits.
e.	Superannuation / Pension	Under the terms of his expatriate agreement, superannuation contributions have not been made in FY2019 for Joseph Goss.
f.	Retention awards (Sept 15)	These values relate to awards made in September 2015, which are expensed over the three years to FY2019. No retention awards were made in FY2019.

1. Joseph Goss ceased to be a KMP effective 28 February 2019.
2. Wayne Manners became a KMP effective 1 March 2019.
3. Share-based payments are converted at the average exchange rates for the respective years, being $0.7145 for FY2019 and $0.7735 for FY2018.

Equity grants and movement during the year

The following table provides details of rights granted during the year under the Boral Equity Incentive Plan, as well as the movement during the year in rights granted under the plan in previous financial years.

	Equity Type	Balance as at 30 June 2018	Other balances[a]	Granted during the year as remuneration[b]	Value of Grant[c]	Exercised/ Vested during the year	Value of Rights Vested[d]	Lapsed/ Cancelled during the year[e]	Balance as at 30 June 2019
		No.	No.	No.	$	No.	$	No.	No.
Mike Kane	LTI Rights	1,722,128	–	549,487	2,412,247	–	–	(638,803)	**1,632,812**
	Deferred STI Rights	120,638	–	39,977	277,005	(61,902)	428,925	–	**98,713**
Joseph Goss[1]	LTI Rights	421,757	–	147,927	649,400	–	–	(135,560)	**434,124**
	Deferred STI Rights	37,425	–	20,921	144,964	(20,979)	145,366	–	**37,367**
	TRI Rights[f]	71,649	–	–	–	(71,649)	496,463	–	**–**
Ross Harper	LTI Rights	202,409	–	64,615	283,659	–	–	(78,230)	**188,794**
	Deferred STI Rights	18,713	–	12,296	85,200	(11,330)	78,507	–	**19,679**
	TRI Rights[f]	50,435	–	–	–	(50,435)	349,469	–	**–**
Wayne Manners[1]	LTI Rights	–	122,270	–	–	–	–	–	**122,270**
	Deferred STI Rights	–	11,886	–	–	–	–	–	**11,886**
David Mariner	LTI Rights	287,074	–	103,930	456,252	–	–	(79,612)	**311,392**
	Deferred STI Rights	15,250	–	4,537	31,437	(9,170)	63,540	–	**10,617**
	TRI Rights[f]	52,684	–	–	–	(52,684)	365,053	–	**–**
Rosaline Ng	LTI Rights	398,466	–	135,271	593,839	–	–	(139,762)	**393,975**
	Deferred STI Rights	33,783	–	11,810	81,833	(18,363)	127,239	–	**27,230**
	TRI Rights[f]	67,187	–	–	–	(67,187)	465,545	–	**–**

Notes relating to the Equity grants table are outlined below:

Ref	Item	Explanation
a.	Other balances	Rights held by Wayne Manners at the time of his appointment as a KMP on 1 March 2019.
b.	Rights granted during the year as remuneration	All rights were granted to Senior Executives effective 1 September 2018.
c.	Value of grant	The fair market value of LTI Rights granted on 1 September 2018, calculated using a Monte Carlo simulation analysis, is $3.52 per right for two-thirds of the grant relating to the TSR measure and $6.13 per right for one-third of the grant relating to the ROFE hurdle. The fair market value of the Deferred STI Rights is $6.9291 per right, reflecting a face value at time of grant calculated by taking the volume weighted average price (VWAP) of Boral shares on the ASX during the five-day trading period up to but not including 1 September 2018.
d.	Value of rights vested	Calculated per right as the market price of Boral shares on the date of vesting. No exercise price is payable in respect of rights that vest.
e.	Lapsed rights	Rights that lapsed during the year were granted to Senior Executives under the 2011 LTI Grant (the remaining unvested portion of this grant lapsed) and the 2015 LTI Grant (100% lapsed).
f.	TRI Rights	Targeted Retention Incentive Rights provided as a one-off retention award in September 2015, which vested on 1 September 2018.

---

1. Joseph Goss ceased to be a KMP effective 28 February 2019. Wayne Manners became a KMP effective 1 March 2019.

Senior Executive equity rights balances

The number of rights included in the balance at 30 June 2019 for the Senior Executives is set out below:

		Year of grant			
		2016	2017	2018	Balance as at 30 June 2019
Senior Executives					
Mike Kane	LTI Rights	522,096	561,229	549,487	**1,632,812**
	Deferred STI Rights	–	58,736	39,977	**98,713**
Joseph Goss[1]	LTI Rights	138,101	148,096	147,927	**434,124**
	Deferred STI Rights	–	16,446	20,921	**37,367**
Ross Harper	LTI Rights	59,490	64,689	64,615	**188,794**
	Deferred STI Rights	–	7,383	12,296	**19,679**
Wayne Manners[1]	LTI Rights	38,544	40,300	43,426	**122,270**
	Deferred STI Rights	–	4,455	7,431	**11,886**
David Mariner	LTI Rights	101,312	106,150	103,930	**311,392**
	Deferred STI Rights	–	6,080	4,537	**10,617**
Rosaline Ng	LTI Rights	123,937	134,767	135,271	**393,975**
	Deferred STI Rights	–	15,420	11,810	**27,230**

Non-executive Directors' total remuneration

The remuneration of the non-executive Directors is set out in the following table.

	2019				2018		
A$'000s	Short-Term Board and Committee Fees	Travel Allowances	Post-employment superannuation	Total Fees	Short-Term Board and Committee Fees	Post-employment superannuation	Total Fees
Kathryn Fagg, Chairman	**445.1**	**–**	**20.5**	**465.6**	180.5	17.2	197.7
Peter Alexander	**142.4**	**5.0**	**–**	**147.4**	–	–	–
Catherine Brenner	**51.5**	**–**	**4.8**	**56.3**	155.8	14.8	170.6
Eileen Doyle	**190.3**	**–**	**18.0**	**208.3**	185.7	17.6	203.3
John Marlay	**180.3**	**–**	**17.1**	**197.4**	166.4	15.8	182.2
Karen Moses	**175.8**	**–**	**16.6**	**192.4**	171.5	16.3	187.8
Paul Rayner	**180.2**	**–**	**17.0**	**197.2**	175.8	16.7	192.5
Total	**1,365.6**	**5.0**	**94.0**	**1,464.6**	1,035.7	98.4	1,134.1

Fees for Catherine Brenner are for part of the year from 1 July 2018 to the Annual General Meeting held on 30 October 2018, at which time Catherine retired by rotation and decided not to stand for re-election. Fees for Peter Alexander are from his appointment date as a non-executive Director, effective 1 September 2018. Fees for Kathryn Fagg reflect her appointment as Chairman effective 1 July 2018.

---

1. Joseph Goss ceased to be a KMP effective 28 February 2019. Wayne Manners became a KMP effective 1 March 2019.

Senior Executive and non-executive Director transactions

Movements in shares

The number of shares held in Boral Limited during the financial year by each Senior Executive and non-executive Director of Boral Limited, including their personally related entities, are set out below:

		Balance at the beginning of the year	Received during the year on the exercise of rights	Pro-rata entitlement purchased in equity raising	Other changes during the year	Balance at the end of the year
		Number	Number	Number	Number	Number
Senior Executives						
Mike Kane	**2019**	**1,207,153**	**61,902**	**–**	**(29,094)**	**1,239,961**
	2018	946,073	492,620	–	(231,540)	1,207,153
Joseph Goss[1]	**2019**	**173,391**	**92,628**	**–**	**(46,314)**	**219,705**
	2018	74,224	99,167	–	–	173,391
Ross Harper	**2019**	**54,510**	**61,765**	**–**	**(50,435)**	**65,840**
	2018	44,510	55,131	–	(45,131)	54,510
Wayne Manners[1]	**2019**	**117,154**	**–**	**–**	**–**	**117,154**
	2018	–	–	–	–	–
David Mariner	**2019**	**95,557**	**61,854**	**–**	**(61,854)**	**95,557**
	2018	95,557	56,332	–	(56,332)	95,557
Rosaline Ng	**2019**	**92,831**	**85,550**	**–**	**(58,381)**	**120,000**
	2018	68,717	116,107	–	(91,993)	92,831

		Balance at the beginning of the year	Received during the year on the exercise of rights	Other changes during the year	Balance at the end of the year
		Number	Number	Number	Number
Non-executive Directors					
Kathryn Fagg, Chairman	**2019**	**38,562**	**–**	**45,000**	**83,562**
	2018	38,562	–	–	38,562
Peter Alexander	**2019**	**–**	**–**	**59,571**	**59,571**
	2018	–	–	–	–
Catherine Brenner	**2019**	**48,405**	**–**	**–**	**48,405**
	2018	48,405	–	–	48,405
Eileen Doyle	**2019**	**45,248**	**–**	**–**	**45,248**
	2018	39,948	–	5,300	45,248
John Marlay	**2019**	**39,310**	**–**	**–**	**39,310**
	2018	39,310	–	–	39,310
Karen Moses	**2019**	**31,757**	**–**	**–**	**31,757**
	2018	21,757	–	10,000	31,757
Paul Rayner	**2019**	**123,652**	**–**	**-**	**123,652**
	2018	103,152	–	20,500	123,652

Loans

There were no loans made or outstanding to Senior Executives or non-executive Directors during FY2019.

---

[1] Joseph Goss ceased to be a KMP effective 28 February 2019. Wayne Manners became a KMP effective 1 March 2019.

Other transactions

Transactions entered into during the year with non-executive Directors or Senior Executives of Boral Limited and the Group are within normal employee, customer or supplier relationships on terms and conditions no more favourable than dealings in the same circumstances on an arm's length basis and include:

- the receipt of dividends from Boral Limited
- participation in the Boral LTI plan
- terms and conditions of employment
- reimbursement of expenses, and
- purchases of goods and services.

A number of Directors of the Company hold directorships in other entities. Several of these entities transacted with the Group on terms and conditions no more favourable than those available on an arm's length basis.

Section 8: Glossary of key terms for the Remuneration Report

Term	Description
BCS	Base Cash Salary (BCS) is a remuneration term applicable to Boral employees in the USA. It describes base salary only, excluding pension contributions and other non-monetary benefits.
Committee	The Remuneration & Nomination Committee.
Comparator companies	Two comparator groups are used for market benchmarking: • Market capitalisation and revenue: S&P/ASX 200 (ASX 200) companies within 50% to 200% of Boral's market capitalisation and 50% to 200% of Boral's revenue (ranges expanded to 33% to 300% where sample sizes are small). • Market capitalisation, revenue and industry: ASX 200 companies within the market capitalisation and revenue comparator group within the 'Industrials' or 'Materials' Global Industry Classification Standard (GICS).
Face value of LTI performance rights	The face value of LTI performance rights is determined from the Volume Weighted Average Price (VWAP) of Boral shares on the ASX during the 5 day trading period up to but not including 1 September.
Fair market value of LTI performance rights	The fair market value of LTI performance rights is determined from the face value of a Boral share on 1 September, discounted for a number of factors that impact the value of a TSR tested right, such as the possibility the TSR performance hurdle will not be met. Other factors taken into account when determining the discount from face value include the time to vesting, expected volatility of the share price and the dividends expected to be paid in relation to the shares. This approach is in line with the methodology used for valuing TSR tested rights for accounting purposes. The fair value is determined by an independent valuer (being PwC).
FAR	Fixed Annual Remuneration (FAR) includes base salary, non-cash benefits such as provision of a vehicle (including any fringe benefits tax) and superannuation contributions.
KMP	The Key Management Personnel of the Company. Defined as the people accountable for planning, directing and controlling the affairs of the Company and its controlled entities. Includes each of the: • non-executive Directors, and • Senior Executives.
Performance right	Upon vesting, each performance right entitles the executive to one ordinary share.
Relative TSR	Relative Total Shareholder Return (TSR) measures the compound growth in the Company's TSR over the performance measurement period compared with the TSR performance over the same period of a comparator group. TSR represents the change in capital value of a listed entity's share price over a three year performance period, plus reinvested dividends, expressed as a percentage of the opening value.
ROFE	Return on Funds Employed (ROFE) tests the efficiency and profitability of the Company's capital investments and is determined by the Board based on EBIT (before significant items) in the year of testing as a percentage of average funds employed (where funds employed is the sum of net assets and net debt).
Senior Executives	The CEO & Managing Director as well as other current and former members of the senior executive team who are KMP of the Company. The broader management group (who also participate in the various reward programs) are referred to as "executives".
WACC	Weighted Average Cost of Capital (WACC) reflects the aggregate cost of the Company's debt and equity. For the purposes of Boral's LTI plans, WACC is calculated on a pre-tax basis so that it can be compared to ROFE on an equivalent basis.

Contents

Boral Limited and Controlled Entities

INCOME STATEMENT **84**
STATEMENT OF COMPREHENSIVE INCOME **85**
BALANCE SHEET **86**
STATEMENT OF CHANGES IN EQUITY **87**
STATEMENT OF CASH FLOWS **88**
NOTES TO THE FINANCIAL STATEMENTS
Section 1: About this report 89
Section 2: Business performance
  2.1 Segments 92
  2.2 Profit for the period 97
  2.3 Results of equity accounted investments 98
  2.4 Dividends 99
  2.5 Earnings per share 100
  2.6 Significant items 101
  2.7 Notes to Statement of Cash Flows 103
Section 3: Operating assets and liabilities
  3.1 Receivables 104
  3.2 Inventories 105
  3.3 Property, plant and equipment 106
  3.4 Intangible assets 108
  3.5 Carrying value assessment 110
  3.6 Provisions 111
  3.7 Contract liabilities 112
Section 4: Capital and financial structure
  4.1 Loans and borrowings 113
  4.2 Financial risk management 115
  4.3 Issued capital 125
  4.4 Reserves 125
Section 5: Taxation
  5.1 Income tax expense 126
  5.2 Deferred tax assets and liabilities 128
Section 6: Group structure
  6.1 Discontinued operations 130
  6.2 Equity accounted investments 132
  6.3 Acquisitions 134
  6.4 Controlled entities 135
Section 7: Employee benefits
  7.1 Employee liabilities 139
  7.2 Employee benefits expense 139
  7.3 Share-based payments 139
  7.4 Key management personnel disclosures 141
Section 8: Other notes
  8.1 Contingent liabilities 142
  8.2 Subsequent events 142
  8.3 Commitments 143
  8.4 Auditors' remuneration 144
  8.5 Related party disclosures 144
  8.6 Parent entity disclosures 145
  8.7 Deed of cross guarantee 146
STATUTORY STATEMENTS 148

The presentation of before significant items measures of EBITDA, EBITA, EBIT and net profit after tax are non-IFRS measures used to provide a greater understanding of the underlying performance of the Group. This information has been extracted or derived from the financial statements. Significant items are detailed in note 2.6 to the financial statements and relate to income and expenses that are associated with significant business restructuring, impairment or individual transactions.

Income Statement

Boral Limited and Controlled Entities

For the year ended 30 June	Note	2019 $m	Restated[1] 2018 $m
Continuing operations			
Revenue	2.2	**5,800.6**	5,579.3
Cost of sales		**(3,845.6)**	(3,701.3)
Selling and distribution expenses		**(1,006.5)**	(941.3)
Administrative expenses		**(398.5)**	(428.2)
		(5,250.6)	(5,070.8)
Other income	2.2	**36.5**	65.5
Other expenses	2.2	**(61.5)**	(97.7)
Results of equity accounted investments	2.3	**(127.7)**	85.6
Profit before net interest expense and income tax		**397.3**	561.9
Interest income	2.2	**2.3**	1.8
Interest expense	2.2	**(105.4)**	(105.6)
Net interest expense		**(103.1)**	(103.8)
Profit before income tax		**294.2**	458.1
Income tax expense	5.1	**(79.6)**	(34.0)
Profit from continuing operations		**214.6**	424.1
Discontinued operations			
Profit from discontinued operations (net of income tax)	6.1	**57.8**	16.9
Net profit		**272.4**	441.0
Basic earnings per share	2.5	**23.2c**	37.6c
Diluted earnings per share	2.5	**23.2c**	37.4c
Continuing operations			
Basic earnings per share	2.5	**18.3c**	36.2c
Diluted earnings per share	2.5	**18.2c**	36.0c

[1] Refer note 1D for further details.

The Income Statement should be read in conjunction with the accompanying notes, which form an integral part of the financial statements.

Statement of Comprehensive Income

Boral Limited and Controlled Entities

For the year ended 30 June	Note	2019 $m	2018 $m
Net profit		**272.4**	441.0
Other comprehensive income			
Items that may be reclassified subsequently to Income Statement:			
Net exchange differences from translation of foreign operations taken to equity		**166.3**	115.5
Foreign currency translation reserve transferred to net profit on disposal of controlled entities	4.4	**(10.8)**	-
Fair value adjustment on cash flow hedges		**(15.9)**	10.5
Income tax on items that may be reclassified subsequently to Income Statement		**32.6**	22.5
Total comprehensive income		**444.6**	589.5

The Statement of Comprehensive Income should be read in conjunction with the accompanying notes, which form an integral part of the financial statements.

Balance Sheet

Boral Limited and Controlled Entities

As at 30 June	Note	2019 $m	2018 $m
CURRENT ASSETS			
Cash and cash equivalents	2.7	**207.2**	74.3
Receivables	3.1	**877.4**	879.7
Inventories	3.2	**683.8**	613.8
Financial assets		**3.8**	11.2
Other assets		**39.6**	38.1
Assets classified as held for sale		**-**	121.2
TOTAL CURRENT ASSETS		**1,811.8**	1,738.3
NON-CURRENT ASSETS			
Receivables	3.1	**27.8**	35.1
Inventories	3.2	**11.4**	11.4
Investments accounted for using the equity method	6.2	**1,292.0**	1,411.3
Financial assets		**41.6**	32.8
Property, plant and equipment	3.3	**2,880.4**	2,782.1
Intangible assets	3.4	**3,372.8**	3,395.1
Deferred tax assets	5.2	**78.7**	69.6
Other assets		**27.2**	34.6
TOTAL NON-CURRENT ASSETS		**7,731.9**	7,772.0
TOTAL ASSETS		**9,543.7**	9,510.3
CURRENT LIABILITIES			
Trade creditors		**832.6**	752.0
Loans and borrowings	4.1	**339.7**	19.2
Financial liabilities		**23.8**	8.6
Current tax liabilities		**29.0**	20.0
Employee benefit liabilities	7.1	**118.7**	129.6
Provisions	3.6	**48.4**	55.1
Liabilities classified as held for sale		**-**	10.7
TOTAL CURRENT LIABILITIES		**1,392.2**	995.2
NON-CURRENT LIABILITIES			
Loans and borrowings	4.1	**2,060.8**	2,507.6
Financial liabilities		**-**	26.9
Deferred tax liabilities	5.2	**50.8**	39.5
Employee benefit liabilities	7.1	**46.1**	40.6
Provisions	3.6	**118.6**	147.9
Other liabilities		**16.3**	21.8
TOTAL NON-CURRENT LIABILITIES		**2,292.6**	2,784.3
TOTAL LIABILITIES		**3,684.8**	3,779.5
NET ASSETS		**5,858.9**	5,730.8
EQUITY			
Issued capital	4.3	**4,265.1**	4,265.1
Reserves	4.4	**330.0**	155.8
Retained earnings		**1,263.8**	1,309.9
TOTAL EQUITY		**5,858.9**	5,730.8

The Balance Sheet should be read in conjunction with the accompanying notes, which form an integral part of the financial statements.

Statement of Changes in Equity

Boral Limited and Controlled Entities

For the year ended 30 June 2019	**Issued capital $m**	**Reserves $m**	**Retained earnings $m**	**Total equity $m**
Balance at 30 June 2018	**4,265.1**	**155.8**	**1,309.9**	**5,730.8**
Transition impact from implementation of AASB 15	**-**	**-**	**(2.0)**	**(2.0)**
Balance at 1 July 2018	**4,265.1**	**155.8**	**1,307.9**	**5,728.8**
Net profit	**-**	**-**	**272.4**	**272.4**
Other comprehensive income				
Translation of net assets of overseas entities	**-**	**258.8**	**-**	**258.8**
Translation of long-term borrowings and foreign currency forward contracts	**-**	**(92.5)**	**-**	**(92.5)**
Foreign currency translation reserve transferred to net profit on disposal of controlled entities	**-**	**(10.8)**	**-**	**(10.8)**
Fair value adjustment on cash flow hedges	**-**	**(15.9)**	**-**	**(15.9)**
Income tax relating to other comprehensive income	**-**	**32.6**	**-**	**32.6**
Total comprehensive income	**-**	**172.2**	**272.4**	**444.6**
Transactions with owners in their capacity as owners				
Share acquisition rights vested	**-**	**(7.5)**	**-**	**(7.5)**
Dividends paid	**-**	**-**	**(316.5)**	**(316.5)**
Share-based payments	**-**	**9.5**	**-**	**9.5**
Total transactions with owners in their capacity as owners	**-**	**2.0**	**(316.5)**	**(314.5)**
Balance at 30 June 2019	**4,265.1**	**330.0**	**1,263.8**	**5,858.9**

For the year ended 30 June 2018	**Issued capital $m**	**Reserves $m**	**Retained earnings $m**	**Total equity $m**
Balance at 1 July 2017	4,265.1	19.3	1,156.1	5,440.5
Net profit	-	-	441.0	441.0
Other comprehensive income				
Translation of net assets of overseas entities	-	201.2	-	201.2
Translation of long-term borrowings and foreign currency forward contracts	-	(85.7)	-	(85.7)
Fair value adjustment on cash flow hedges	-	10.5	-	10.5
Income tax relating to other comprehensive income	-	22.5	-	22.5
Total comprehensive income	-	148.5	441.0	589.5
Transactions with owners in their capacity as owners				
Share acquisition rights vested	-	(22.4)	-	(22.4)
Dividends paid	-	-	(287.2)	(287.2)
Share-based payments	-	10.4	-	10.4
Total transactions with owners in their capacity as owners	-	(12.0)	(287.2)	(299.2)
Balance at 30 June 2018	4,265.1	155.8	1,309.9	5,730.8

The Statement of Changes in Equity should be read in conjunction with the accompanying notes, which form an integral part of the financial statements.

Statement of Cash Flows

Boral Limited and Controlled Entities

For the year ended 30 June	Note	2019 $m	2018 $m
CASH FLOWS FROM OPERATING ACTIVITIES			
Receipts from customers		**6,243.3**	6,209.0
Payments to suppliers and employees		**(5,333.8)**	(5,399.1)
		909.5	809.9
Dividends received		**55.0**	68.4
Interest received		**1.9**	1.8
Borrowing costs paid		**(100.2)**	(97.7)
Income taxes paid		**(50.6)**	(86.0)
Restructure, acquisition and integration costs paid	2.7	**(54.0)**	(118.4)
Net cash provided by operating activities	2.7	**761.6**	578.0
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchase of property, plant and equipment		**(447.1)**	(421.5)
Purchase of intangibles		**(6.3)**	(3.8)
Purchase of controlled entities and businesses		**(10.9)**	-
Repayment of loans (to)/by associates		**7.6**	(1.6)
Proceeds on disposal of non-current assets		**38.4**	74.7
Proceeds on disposal of controlled entities and associates (net of transaction costs)		**375.8**	7.6
Net cash used in investing activities		**(42.5)**	(344.6)
CASH FLOWS FROM FINANCING ACTIVITIES			
Dividends paid		**(316.5)**	(287.2)
Proceeds from borrowings		**-**	1,664.2
Repayment of borrowings		**(272.6)**	(1,775.2)
Net cash used in financing activities		**(589.1)**	(398.2)
NET CHANGE IN CASH AND CASH EQUIVALENTS		**130.0**	(164.8)
Cash and cash equivalents at the beginning of the year		**74.3**	237.8
Effects of exchange rate fluctuations on the balances of cash and cash equivalents held in foreign currencies		**2.9**	1.3
Cash and cash equivalents at the end of the year	2.7	**207.2**	74.3

The Statement of Cash Flows should be read in conjunction with the accompanying notes, which form an integral part of the financial statements.

Notes to the Financial Statements

Boral Limited and Controlled Entities

Section 1: About this report

Statement of compliance

These financial statements represent the consolidated results of Boral Limited (ABN 13 008 421 761), a for-profit company limited by shares, incorporated and domiciled in Australia whose shares are publicly traded on the Australian Securities Exchange. The consolidated financial statements comprise Boral Limited (the "Company") and its controlled entities (the "Group"). 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 (IFRS) adopted by the International Accounting Standards Board (IASB).

The nature of the operations and principal activities of the Group are described in note 2.1.

The financial statements were authorised for issue by the Board of Directors on 26 August 2019.

Basis of preparation

The financial statements have been prepared on a historical cost basis, except for the revaluation of certain financial instruments. Cost is based on the fair values of the consideration given in exchange for assets. All amounts are presented in Australian dollars, unless otherwise noted.

The accounting policies and methods of computation in the preparation of the financial statements are consistent with those adopted and disclosed in Boral's Annual Report for the financial year ended 30 June 2018, except in relation to the relevant amendments and their effects on the current period or prior periods as described in note 1C "Changes in accounting policies".

Accounting estimates and judgements

Preparation of the financial statements requires management to make judgements, estimates and assumptions about future events. Information on material estimates and judgements considered when applying the accounting policies can be found in the following notes:

Accounting estimates and judgements	Note	Page
Receivables	3.1	104
Property, plant and equipment	3.3	106
Intangible assets	3.4	108
Carrying value assessment	3.5	110
Provisions	3.6	111
Income tax expense	5.1	126
Deferred tax assets and liabilities	5.2	128
Acquisitions	6.3	134
Share-based payments	7.3	139

Rounding of amounts

Unless otherwise expressly stated, amounts have been rounded off to the nearest whole number of millions of dollars and one place of decimals representing hundreds of thousands of dollars in accordance with ASIC Corporations Instrument 2016/191, dated 24 March 2016. Amounts shown as "-" represent zero amounts and amounts less than $50,000 which have been rounded down.

Materiality

Information is only being included in the financial report to the extent it has been considered material and relevant to the understanding of the financial statements. Factors that influence if a disclosure is considered material and relevant, include whether:

- the dollar amount is significant in size and/or nature;
- the Group's results cannot be understood without the specific disclosure;
- it is critical to allow a user to understand the impact of significant changes in the Group's business during the period; and
- it relates to an aspect of the Group's operations that is important to its future performance.

Significant accounting policies

Accounting policies are selected and applied in a manner that ensures that the resulting financial information satisfies the concepts of relevance and reliability, thereby ensuring that the substance of the underlying transactions or other events is reported. Other significant accounting policies are contained in the notes to the consolidated financial statements to which they relate.

A. Principles of consolidation

The financial report incorporates the financial statements of the Company and entities controlled by the Group and its subsidiaries. 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 involvement and power over the entity.

The financial report includes the information and results of each entity from the date on which the Company obtains control, until the time the Company ceases to control the entity.

In preparing the financial report, all intercompany balances, transactions, and unrealised profits arising within the Group, are eliminated in full.

B. Foreign currencies

Transactions, assets and liabilities denominated in foreign currencies are translated into Australian dollars at reporting date using the following applicable exchange rates:

Foreign currency amount	Applicable exchange rate
Transactions	Date of transaction
Monetary assets and liabilities	Reporting date
Non-monetary assets and liabilities carried at fair value	Date fair value is determined

B. Foreign currencies (continued)

Foreign exchange gains and losses resulting from translation are recognised in the Income Statement, except for qualifying cash flow hedges which are deferred to equity.

On consolidation, the assets, liabilities, income and expenses of foreign operations are translated into Australian dollars using the following applicable exchange rates:

Foreign currency amount	Applicable exchange rate
Income and expenses	Average exchange rate
Assets and liabilities	Reporting date
Equity	Historical date
Reserves	Reporting date

Foreign exchange differences resulting from translation of long-term borrowings, foreign currency forward contracts and net assets of overseas entities are initially recognised in the foreign currency translation reserve and subsequently transferred to profit or loss on disposal of the foreign operation.

C. Changes in accounting policies

The Group has adopted all new and amended Australian Accounting Standards and Australian Accounting Standards Board (AASB) interpretations that are mandatory for the current reporting period and relevant to the Group.

Adoption of these standards has not resulted in any material changes to the Group's financial statements.

Effective 1 July 2018, the Group adopted AASB 15 *Revenue from Contracts with Customers*. The Group elected to use the cumulative effect method on the initial application of the standard, and therefore has not applied the requirements of AASB 15 to the comparative period presented in the financial statements. The net transition impact was recorded as a reduction in retained earnings of $2.0 million, and is disclosed in the Statement of Changes in Equity.

The implementation of this standard did not have a significant impact on the revenue recognition practice of the Group and its consolidated financial statements. Further information is provided below with respect to the impact of Boral's accounting for revenue under AASB 15.

Sale of goods

In the comparative period, for the sale of goods (such as quarry product, concrete, cement, fly ash, roofing and building products), revenue is recognised when the goods are delivered to the customer, which is taken to be the point in time at which the customer accepts the goods and the related risks and rewards of ownership transfer. Revenue is recognised at this point provided that the revenue and costs can be measured reliably, the recovery of the consideration is probable and there is no continuing management involvement with the goods.

Under AASB 15, revenue is recognised at the point in time the customer obtains control of the goods, which is typically at the time of delivery to the customer.

Contracting businesses

In the comparative period, contract revenue includes the initial amount agreed in the contract plus any variations in contract work, claims and incentive payments, to the extent that it is highly probable that a significant reversal of the revenue will not occur. This probability assessment is based on contract terms, historical experience and in certain cases the views of subject area specialists. When a claim or variation is recognised, the measure of contract progress or contract price is revised and the cumulative contract position is reassessed at each reporting date. Under AASB 15, revenue from contracting businesses, such as asphalt and concrete placing, is included in sale of goods and is recognised progressively over the period of time the performance obligation is fulfilled and the customer obtains the control of the goods being provided in the contract, with the Group having a right to payment for performance to date.

The Group predominantly uses the output method based on volumes delivered to determine the amount of revenue to recognise in a given period.

When estimating the transaction price, variable consideration is considered, which typically relates to claims or variations submitted in connection with the performance of a contract. Assumptions are made in order to determine the amount of variable consideration that can be recognised, including consideration of whether the variable consideration is constrained. Claims and variations are included to the extent they are approved, or if not approved, are estimated whilst also considering the constraint requirement.

Rendering of services

The Group is involved in a range of service contracts, predominantly in the Fly Ash business in North America. In the comparative period, if the services under a single arrangement are rendered in different reporting periods, then the consideration is allocated on a relative fair value basis between the different services. Revenue was recognised using the stage-of-completion method.

Under AASB 15, revenue from the rendering of services is allocated across each service or performance obligation based on their stand-alone selling price, and recognised as the service or performance obligation is performed.

Sale of land

In the comparative period, income from the sale of land is recognised when contracts are exchanged, an appropriate non-refundable deposit is received and material conditions contained in the contract are met.

Under AASB 15, revenue from the sale of land is recognised at the point in time the customer obtains control of the land. This is typically at the point in time the customer obtains unrestricted access to the land which was sold. The revenue is measured at the transaction price agreed under the contract and classified as other income.

Bundling of performance obligations

Contracts with customers, particularly in concrete and asphalt, may contain revenue items for ancillary services such as mobilisation and demobilisation of plant, concrete testing, and other related services. These services are typically combined into the core performance obligation of delivering concrete, or the supply and lay of asphalt. On occasion, ancillary services may be deemed to have a stand-alone value to the customer, and are accounted for as a separate performance obligation under AASB15.

D. Comparative figures

Where applicable, certain comparative figures have been reclassified to align with current year presentation, as a result of the implementation of AASB 15 and the sale of US Block.

E. New accounting standards and interpretations not yet adopted

A number of new standards are effective for annual periods beginning after 1 July 2019 with early adoption permitted. However, the Group has not early adopted the new or amended standards in preparing these financial statements.

AASB 16 *Leases*: This standard provides a new lessee accounting model, which will require Boral's operating leases with a term of more than 12 months, unless the underlying asset is of low value, to be recognised on the Balance Sheet as "right to use (ROU) assets" and "lease liabilities". The depreciation of the ROU asset and interest on the lease liability will replace the existing straight lining of rent expense practice.

The Group will apply the modified retrospective approach to existing operating leases on transition with the lease liability measured as the present value of future lease payments at the adoption date, being 1 July 2019. The ROU asset will be measured as if AASB 16 had been applied from the commencement of the lease with any difference between the ROU asset and lease liability recognised as an adjustment to opening retained earnings with no restatement of comparative information in the financial statements.

The Group has updated all of the relevant internal policies and implemented appropriate system solutions to ensure ongoing compliance with AASB 16. The Group has completed an impact assessment of AASB 16 on the Balance Sheet and estimates that the transition adjustment will increase assets (specifically ROU assets) by $360 to $400 million and liabilities by $380 to $420 million (including lease and dismantling liabilities) with the net effect, adjusted for deferred tax, recognised against retained earnings.

Section 2: Business performance

This section provides the information that is most relevant to understanding the financial performance of the Group during the financial year and, where relevant, the accounting policies applied and the critical judgements and estimates made.

2.1 Segments

An operating segment is a component of an entity that engages in business activities from which it may earn revenue and incur expenses, whose operating results are regularly reviewed by the Group's chief operating decision-maker in order to effectively allocate Group resources and assess performance.

The Group has identified its operating segments based on the internal reports that are reviewed and used by the CEO and Managing Director in assessing performance and in determining the allocation of resources. The operating segments are identified by the Group based on consideration of the nature of the services provided as well as the geographical region. Discrete financial information about each of these operating businesses is reported to the CEO and Managing Director on a recurring basis.

The following summary describes the operations of the Group's reportable segments:

Boral Australia	Construction Materials & Cement (comprising quarries, concrete, asphalt, transport, landfill, property, cement and concrete placing) and Building Products (comprising West Coast bricks, roofing and masonry, and timber products).
USG Boral	50/50 joint venture between USG Corporation and Boral Limited responsible for the manufacture and sale of plasterboard and associated products.
Boral North America	Fly ash, stone, roofing, light building products, windows and 50% share of the Meridian Brick joint venture.
Discontinued Operations	Denver Construction Materials and US Block.
Unallocated	Non-trading operations and unallocated corporate costs.

The major end-use markets for Boral's products include residential and non-residential construction and the engineering and infrastructure markets.

Inter-segment pricing is determined on an arm's length basis.

The Group has a large number of customers to which it provides products, with no single customer responsible for more than 10% of the Group's revenue.

Segment results, assets and liabilities include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

Reconciliations of reportable segment revenues and profits	Note	2019 $m	Restated[1] 2018 $m
External revenue		**5,862.7**	5,869.0
Less: Revenue from discontinued operations	6.1	**(62.1)**	(289.7)
Revenue from continuing operations		**5,800.6**	5,579.3
Profit before tax			
Profit before net interest expense and income tax from reportable segments		**466.9**	586.8
Less: Profit before net interest expense and income tax from discontinued operations	6.1	**(69.6)**	(24.9)
Profit before net interest expense and income tax from continuing operations		**397.3**	561.9
Net interest expense from continuing operations	2.2	**(103.1)**	(103.8)
Profit before tax from continuing operations		**294.2**	458.1

1. Refer Note 1D for further details.

2.1 Segments (continued)

(a) Reportable segments

	Boral Australia		USG Boral		Boral North America		Discontinued Operations		Unallocated		Total	
						Restated[1]		Restated[1]				
	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
External Revenue	**3,571.9**	3,589.8	**-**	-	**2,228.7**	1,989.5	**62.1**	289.7	**-**	-	**5,862.7**	5,869.0
Profit/(loss) before depreciation, amortisation, interest, income tax expense and significant items (EBITDA)	**593.4**	633.6	**56.7**	63.1	**415.4**	348.9	**4.2**	41.5	**(32.3)**	(31.1)	**1,037.4**	1,056.0
Depreciation and amortisation, excluding amortisation of acquired intangibles	**(209.5)**	(200.2)	**-**	-	**(104.3)**	(95.2)	**(1.9)**	(11.4)	**(0.7)**	(0.6)	**(316.4)**	(307.4)
Profit/(loss) before amortisation of acquired intangibles, interest, income tax expense and significant items (EBITA)	**383.9**	433.4	**56.7**	63.1	**311.1**	253.7	**2.3**	30.1	**(33.0)**	(31.7)	**721.0**	748.6
Amortisation of acquired intangibles	**-**	-	**-**	-	**(59.1)**	(55.0)	**(2.3)**	(5.2)	**-**	-	**(61.4)**	(60.2)
Profit/(loss) before interest, income tax and significant items (EBIT)	**383.9**	433.4	**56.7**	63.1	**252.0**	198.7	**-**	24.9	**(33.0)**	(31.7)	**659.6**	688.4
Significant items before income tax expense	**(25.7)**	(23.8)	**(5.2)**	(1.0)	**(228.4)**	(76.8)	**69.6**	-	**(3.0)**	-	**(192.7)**	(101.6)
Profit/(loss) before interest and income tax expense	**358.2**	409.6	**51.5**	62.1	**23.6**	121.9	**69.6**	24.9	**(36.0)**	(31.7)	**466.9**	586.8
Equity accounted income before significant items	**25.8**	28.8	**56.7**	63.1	**(9.4)**	(1.7)	**-**	-	**-**	-	**73.1**	90.2
Significant items	**-**	-	**(5.2)**	(1.0)	**(195.6)**	(3.6)	**-**	-	**-**	-	**(200.8)**	(4.6)
Equity accounted income after significant items	**25.8**	28.8	**51.5**	62.1	**(205.0)**	(5.3)	**-**	-	**-**	-	**(127.7)**	85.6

1. Refer Note 1D for further details.

Section 2: Business performance (continued)

2.1 Segments (continued)

(a) Reportable segments

	Boral Australia		USG Boral		Boral North America		Discontinued Operations		Unallocated		Total	
	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	Restated[1] 2018 $m	2019 $m	Restated[1] 2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
External revenue by product												
Concrete	**1,441.7**	1,506.4	**-**	-	**-**	-	**-**	89.6	**-**	-	**1,441.7**	1,596.0
Asphalt	**764.3**	801.5	**-**	-	**-**	-	**-**	-	**-**	-	**764.3**	801.5
Fly ash	**-**	-	**-**	-	**730.3**	675.6	**-**	-	**-**	-	**730.3**	675.6
Roofing	**92.8**	92.0	**-**	-	**513.5**	413.7	**-**	-	**-**	-	**606.3**	505.7
Quarry products	**439.1**	403.7	**-**	-	**-**	-	**-**	48.3	**-**	-	**439.1**	452.0
Light building products	**-**	-	**-**	-	**387.6**	356.5	**-**	-	**-**	-	**387.6**	356.5
Stone	**-**	-	**-**	-	**376.6**	346.4	**-**	-	**-**	-	**376.6**	346.4
Cement	**323.4**	301.9	**-**	-	**-**	-	**-**	-	**-**	-	**323.4**	301.9
Windows	**-**	-	**-**	-	**220.7**	193.3	**-**	-	**-**	-	**220.7**	193.3
Concrete Placing	**216.3**	178.6	**-**	-	**-**	-	**-**	-	**-**	-	**216.3**	178.6
Other	**294.3**	305.7	**-**	-	**-**	4.0	**62.1**	151.8	**-**	-	**356.4**	461.5
	3,571.9	3,589.8	**-**	-	**2,228.7**	1,989.5	**62.1**	289.7	**-**	-	**5,862.7**	5,869.0

---

1. Refer Note 1D for further details.

2.1 Segments (continued)

(a) Reportable segments

	Boral Australia		USG Boral		Boral North America		Discontinued Operations		Unallocated		Total	
						Restated[1]		Restated[1]				
	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
Segment assets (excluding equity accounted investments)	**3,263.2**	3,159.6	**-**	-	**4,686.5**	4,481.5	**-**	293.8	**16.1**	20.2	**7,965.8**	7,955.1
Equity accounted investments	**22.3**	23.0	**1,041.1**	977.7	**228.6**	410.6	**-**	-	**-**	-	**1,292.0**	1,411.3
	3,285.5	3,182.6	**1,041.1**	977.7	**4,915.1**	4,892.1	**-**	293.8	**16.1**	20.2	**9,257.8**	9,366.4
Cash and cash equivalents											**207.2**	74.3
Deferred tax assets											**78.7**	69.6
Total assets	**3,285.5**	3,182.6	**1,041.1**	977.7	**4,915.1**	4,892.1	**-**	293.8	**16.1**	20.2	**9,543.7**	9,510.3
Segment liabilities	**748.6**	700.8	**-**	-	**380.6**	378.6	**-**	19.1	**75.3**	94.7	**1,204.5**	1,193.2
Loans and borrowings											**2,400.5**	2,526.8
Tax liabilities											**79.8**	59.5
Total liabilities	**748.6**	700.8	**-**	-	**380.6**	378.6	**-**	19.1	**75.3**	94.7	**3,684.8**	3,779.5
Acquisition of segment assets[2]	**291.0**	283.7	**-**	-	**158.7**	132.9	**2.1**	8.2	**1.6**	0.5	**453.4**	425.3

[1] Refer Note 1D for further details.

[2] Excludes amounts attributable to the acquisition of controlled entities and businesses.

2.1 Segments (continued)

(b) Geographic location

In presenting information on a geographical basis, assets are based on the geographical location of the assets.

NON-CURRENT ASSETS	2019 $m	2018 $m
Australia	**2,606.5**	2,531.0
Asia	**729.0**	670.0
North America	**4,187.1**	4,323.6
Other	**89.0**	145.0
	7,611.6	7,669.6
Tax assets	**78.7**	69.6
Financial assets	**41.6**	32.8
	7,731.9	7,772.0

2.2 Profit for the period

(a) Revenue

Sales revenue is revenue earned from the provision of products or services, net of returns, discounts and allowances.

Revenue from the sale of goods is recognised at the point in time the customer obtains control of the goods, which is typically at the time of delivery to the customer.

Revenue from contracting businesses is included in sale of goods and is recognised progressively over the period of time the performance obligation is fulfilled and the customer obtains the control of the goods being provided in the contract, with the Group having a right to payment for performance to date. The Group predominantly uses the output method, which typically matches delivery to the customer, to determine the amount of revenue to recognise in a given period.

Revenue from the rendering of services is allocated across each service or performance obligation based on their stand-alone selling price, and recognised as the service or performance obligation is performed.

For the year ended 30 June	2019 $m	Restated[1] 2018 $m
Revenue from continuing operations		
Sale of goods	**5,559.8**	5,312.5
Rendering of services	**240.8**	266.8
Revenue from continuing operations	**5,800.6**	5,579.3

1. Refer Note 1D for further details.

(b) Other income and expenses

Other income is recognised on a systematic basis over the periods necessary to match it with the related costs for which it is intended to compensate. If the costs have already been incurred, the amount is recognised in the period the entitlement is confirmed.

Revenue from the sale of land is recognised at the point in time the customer obtains control of the land and is measured at the transaction price agreed under the contract.

Other income and expenses also include significant items recorded in the period. These items relate to significant transactions which are disclosed separately in order to better explain financial performance. Further information is included in note 2.6.

For the year ended 30 June	Note	2019 $m	2018 $m
Other income from continuing operations			
Net profit on sale of assets		**21.6**	58.1
Net foreign exchange gain		**7.2**	-
Other income		**7.7**	7.4
Other income from continuing operations		**36.5**	65.5
Other expenses from continuing operations			
Significant items	2.6	**(61.5)**	(97.0)
Net foreign exchange loss		**-**	(0.7)
Other expenses from continuing operations		**(61.5)**	(97.7)

2.2 Profit for the period (continued)

(c) Net interest expense

Net interest expense comprises mainly of interest expense on borrowings and amortisation of ancillary costs incurred in connection with the arrangement of borrowings. They are recognised in profit or loss when they are incurred, except to the extent the expenses are directly attributable to the acquisition, construction or production of a qualifying asset. Such interest expense is capitalised as part of the cost of the asset up to the time it is ready for its intended use and is then amortised over the expected useful economic life.

For the year ended 30 June	2019 $m	2018 $m
Interest income received or receivable from:		
Other parties (cash at bank and bank short-term deposits)	**1.9**	1.5
Unwinding of discount	**0.4**	0.3
	2.3	1.8
Interest expense paid or payable to:		
Other parties (bank overdrafts, bank loans and other loans)[1]	**(101.2)**	(101.7)
Finance charges on capitalised leases	**(0.4)**	(0.5)
Unwinding of discount	**(3.8)**	(3.4)
	(105.4)	(105.6)
Net interest expense from continuing operations	**(103.1)**	(103.8)

[1] In 2019, interest of $4.2 million (2018: $6.5 million) was paid to other parties and capitalised in respect of qualifying assets. The capitalisation rate used was 5.4% (2018: 5.4%).

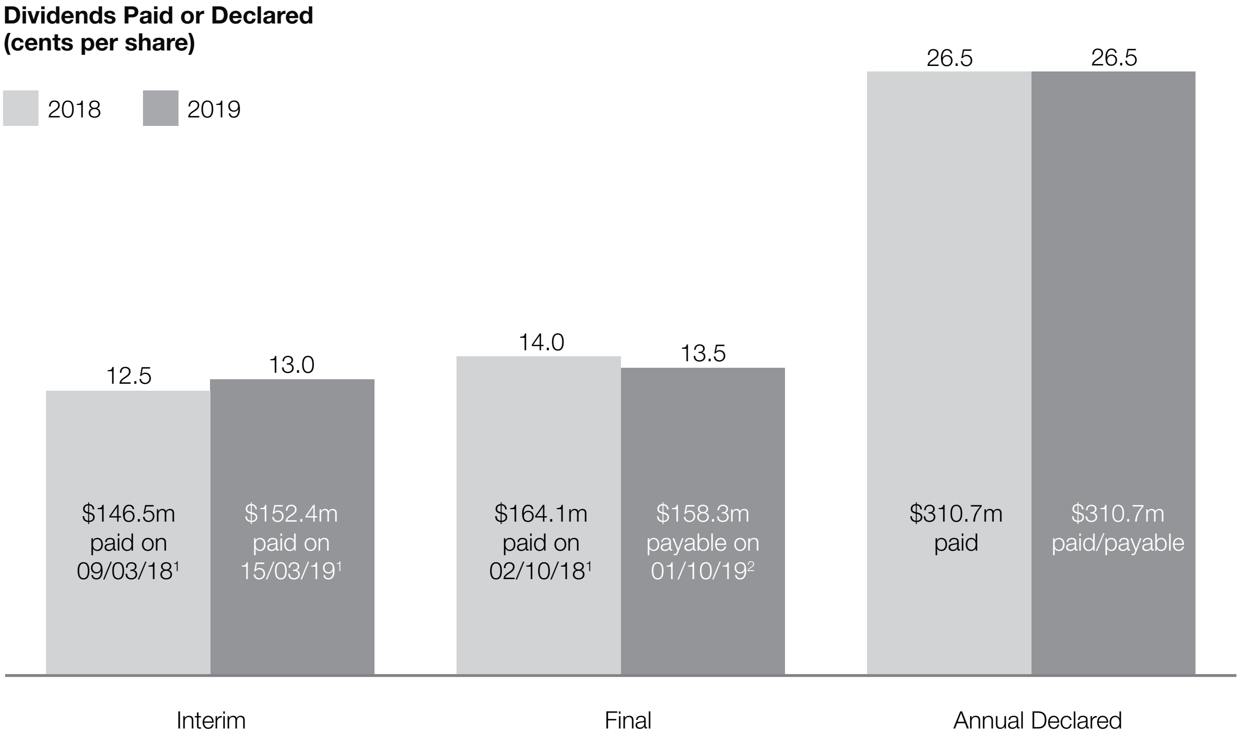
2.3 Results of equity accounted investments

The Group's share of the results of equity accounted investments is reported in the Income Statement. The results of equity accounted investments are summarised below:

	Note	2019 $m	2018 $m
Summarised Income Statement at 100%			
Revenue		**2,457.1**	2,407.6
Profit before income tax		**216.7**	274.4
Income tax expense		**(65.5)**	(86.4)
Non-controlling interest		**(3.8)**	(5.7)
Net profit before significant items		**147.4**	182.3
Significant items net of tax		**(401.6)**	(9.2)
Net profit/(loss)		**(254.2)**	173.1
The Group's share based on % ownership:			
Net profit before significant items		**73.1**	90.2
Significant items net of tax	2.6	**(200.8)**	(4.6)
Net profit/(loss)		**(127.7)**	85.6

Further information regarding equity accounted investments is provided in note 6.2.

2.4 Dividends



1. Declared, paid and 50% franked.
2. Estimated final dividend payable, 50% franked, subject to variations in number of shares up to record date. The financial effect of the final dividend for the year ended 30 June 2019 has not been brought to account in the financial statements for the year, but will be recognised in subsequent financial reports.

Dividend franking account

The balance of the franking account of Boral Limited as at 30 June 2019 is $33.0 million (2018: $32.2 million) after adjusting for franking credits/(debits) that will arise from:

- the payment/refund of the amount of the current tax liability
- the receipt of dividends recognised as receivables at year end, and

before taking into account the franking credits associated with payment of the final dividend declared subsequent to year end.

The impact on the franking account of the dividend recommended by the Directors since year end, but not recognised as a liability at year end, will be a reduction in the franking account of $33.9 million (2018: $35.2 million).

Dividend Reinvestment Plan

The Group's Dividend Reinvestment Plan, which was suspended following the interim dividend paid on 24 March 2014, will remain suspended until further notice.

2.5 Earnings per share

Basic earnings per share

Basic earnings per share (EPS) is calculated by dividing the net profit by the weighted average number of ordinary shares of Boral Limited, adjusted for any bonus issue.

Diluted earnings per share

Diluted EPS is calculated by dividing the net profit by the weighted average number of ordinary shares, after adjustment for the effects of all dilutive potential ordinary shares and bonus issue.

Options outstanding under the Executive Share Option Plan and Share Performance Rights have been classified as potential ordinary shares and are included in diluted earnings per share only.

	2019	2018
Weighted average number of ordinary shares used as the denominator		
Number for basic earnings per share	**1,172,331,924**	1,172,331,924
Effect of potential ordinary shares	**3,699,914**	5,462,105
Number for diluted earnings per share	**1,176,031,838**	1,177,794,029

	Continuing operations 2019 $m	Discontinued operations 2019 $m	Total 2019 $m	Restated[1] Continuing operations 2018 $m	Restated[1] Discontinued operations 2018 $m	Total 2018 $m
Earnings reconciliation						
Net profit excluding significant items	**440.1**	**-**	**440.1**	456.3	16.9	473.2
Net significant items (refer note 2.6)	**(225.5)**	**57.8**	**(167.7)**	(32.2)	-	(32.2)
Net profit	**214.6**	**57.8**	**272.4**	424.1	16.9	441.0
Basic earnings per share	**18.3c**	**4.9c**	**23.2c**	36.2c	1.4c	37.6c
Diluted earnings per share[2]	**18.2c**	**4.9c**	**23.2c**	36.0c	1.4c	37.4c
Basic earnings per share (excluding significant items)[2]	**37.5c**	**0.0c**	**37.5c**	38.9c	1.4c	40.4c
Diluted earnings per share (excluding significant items)[2]	**37.4c**	**0.0c**	**37.4c**	38.7c	1.4c	40.2c

1. Refer Note 1D for further details.
2. Numbers may not add due to rounding.

The average market value of the Company's shares for the purpose of calculating the dilutive effect of share options and performance rights was based on quoted market prices for the period that the options were outstanding.

2.6 Significant items

Net profit includes the following significant items, which relate to material transactions that are disclosed separately in order to better explain financial performance. Management considers significant items when assessing performance of the Group, and in order to provide a meaningful and consistent representation of the underlying performance of each operating segment and the Boral Group.

Significant items is not a defined performance measure in IFRS and the Company's definition of significant items may not be comparable with similarly titled performance measures and disclosures by other entities.

2019 Significant items

	Note	Sale of business (i) $m	Restructure costs (ii) $m	Integration costs (iii) $m	Joint venture matters (iv) $m	Asset impairment (v) $m	Total $m
Continuing operations							
Other expenses	2.2	**-**	**(25.7)**	**(32.8)**	**(3.0)**	**-**	**(61.5)**
Share of equity accounted income	2.3	**-**	**-**	**-**	**(5.2)**	**(195.6)**	**(200.8)**
Loss before interest and tax		**-**	**(25.7)**	**(32.8)**	**(8.2)**	**(195.6)**	**(262.3)**
Income tax benefit		**-**	**8.0**	**6.7**	**-**	**22.1**	**36.8**
Net significant items from continuing operations		**-**	**(17.7)**	**(26.1)**	**(8.2)**	**(173.5)**	**(225.5)**
Discontinued operations							
Profit before interest and tax	6.1	**69.6**	**-**	**-**	**-**	**-**	**69.6**
Income tax expense		**(11.8)**	**-**	**-**	**-**	**-**	**(11.8)**
Net significant items from discontinued operations		**57.8**	**-**	**-**	**-**	**-**	**57.8**
Summary of significant items							
Profit/(loss) before interest and tax		**69.6**	**(25.7)**	**(32.8)**	**(8.2)**	**(195.6)**	**(192.7)**
Income tax (expense)/benefit		**(11.8)**	**8.0**	**6.7**	**-**	**22.1**	**25.0**
Net significant items		**57.8**	**(17.7)**	**(26.1)**	**(8.2)**	**(173.5)**	**(167.7)**

(i) Sale of business

In July 2018, the Group sold the Denver Construction Materials business for cash proceeds of $173.2 million, and generated a profit before tax of $66.1 million.

In November 2018, the Group sold the Block business for cash proceeds of $210.6 million, and generated a profit before tax of $3.5 million.

(ii) Restructure costs

During the period, $25.7 million of restructuring related costs have been incurred to align the Australian business with current market conditions.

(iii) Integration costs

During the period, A$32.8 million of costs have been incurred on the integration of Headwaters business into the Boral North America business, which forms part of the integration costs of US$90 million – US$100 million expected. The costs during the period predominantly relate to redundancies, consultant fees supporting the integration, integration of IT systems and closure costs arising from rationalisation of Stone plants.

(iv) Joint venture matters

This relates to joint venture matters in USG Boral. This includes $4.0 million of legal and consulting costs ($3.0 million incurred by Boral Limited) related to negotiating and agreeing a new ownership and operating structure as a result of Knauf's acquisition of USG, $3.4 million of restructuring costs incurred as a result of the significant downturn in Korea and the housing decline in Australia and $0.8 million of costs resulting from an ownership reorganisation in Thailand.

(v) Asset impairment

The significant decline in the Canadian housing market and intensity deterioration in the US bricks market triggered an impairment of the investment in the Meridian Brick joint venture. A value in use methodology was used to determine the recoverable amount of the investment, leading to an impairment of $195.6 million. The $22.1 million tax benefit is recognised directly by Boral North America due to the Meridian joint venture ownership structure.

2.6 Significant items (continued)

2018 Significant items

	Note	Headwaters integration costs (i) $m	Waurn Ponds rehabilitation and closure costs (ii) $m	Reassessment of US tax balances (iii) $m	Joint venture matters (iv) $m	Total $m
Summary of significant items from continuing operations						
Other expenses	2.2	(73.2)	(23.8)	-	-	(97.0)
Share of equity accounted income	2.3	-	-	-	(4.6)	(4.6)
Loss before interest and tax		(73.2)	(23.8)	-	(4.6)	(101.6)
Income tax benefit		19.0	7.0	42.5	0.9	69.4
Net significant items from continuing operations		(54.2)	(16.8)	42.5	(3.7)	(32.2)

(i) Headwaters integration costs

In the prior year, A$73.2 million of costs were incurred on the integration of the Headwaters business into the Boral North America business, which forms part of the implementation costs of US$90 million – US$100 million expected over financial years 2018 and 2019. The costs predominantly relate to redundancies, employee incentives implemented by Headwaters, consultant fees supporting the integration, integration of IT systems, brand consolidation, rationalisation of products in metal roofing, safety implementation costs and asset impairments upon consolidation of the Boral and Headwaters concrete roofing business.

(ii) Waurn Ponds rehabilitation and closure costs

In the prior year, the organisation progressed its plans on the long term cement position in Victoria, which has led to a reassessment of the expected end use of the Waurn Ponds cement facility, resulting in the recognition of a provision of $23.8 million with respect to rehabilitation of the limestone quarry attached to the facility.

(iii) Reassessment of US tax balances

On 22 December 2017, a tax bill, H.R. 1, was enacted into US law. This triggered a revaluation of the carrying value of tax balances associated with the Boral North America division, primarily as a result of a reduction in the federal tax rate from 35% to 21%.

The reduction in tax rate resulted in a net tax benefit of A$33.7 million, reflecting a net reduction in deferred tax liabilities.

In addition, the Group reassessed its US tax losses, which had not been recognised on the Balance Sheet, as a result of improved earnings following the acquisition of Headwaters Incorporated in May 2017. This reassessment led to a benefit of A$8.8 million being recorded.

The total impact of the above adjustments on income tax expense is a benefit of $42.5 million.

(iv) Joint venture matters

Includes $3.6 million of integration and restructuring costs incurred in Meridian Brick, and a $1.0 million loss associated with asset impairments in USG Boral.

Asset Impairment	2019 $m	2018 $m
Property, plant and equipment	**(3.1)**	(4.8)
Investments accounted for using the equity method	**(195.6)**	-
	(198.7)	(4.8)

2.7 Notes to Statement of Cash Flows

	2019 $m	2018 $m
(i) Reconciliation of cash and cash equivalents:		
Cash includes cash on hand, at bank and short-term deposits, net of outstanding bank overdrafts. Cash as at the end of the year as shown in the Statement of Cash Flows is reconciled to the related items in the Balance Sheet as follows:		
Cash at bank and on hand	**104.9**	57.1
Bank short-term deposits	**102.3**	17.2
	207.2	74.3
The bank short-term deposits mature within 90 days and pay interest at a weighted average interest rate of 1.81% (2018: 2.66%).		
(ii) Reconciliation of net profit to net cash provided by operating activities:		
Net profit	**272.4**	441.0
Adjustments for non-cash items:		
Depreciation and amortisation	**377.8**	367.6
Discount unwinding	**3.4**	3.1
Gain on sale of assets and businesses	**(91.2)**	(58.1)
Impairment of assets, businesses and restructuring costs	**11.6**	31.1
Share-based payment expense	**9.5**	10.4
Non-cash equity (income)/expense	**182.7**	(17.2)
Net cash provided by operating activities before change in assets and liabilities	**766.2**	777.9
Changes in assets and liabilities net of effects from acquisitions/disposals		
Receivables	**(0.5)**	(11.5)
Inventories	**(61.4)**	(27.8)
Payables	**63.8**	(81.8)
Provisions	**(58.3)**	(12.9)
Current and deferred taxes	**40.8**	(44.0)
Other	**11.0**	(21.9)
Net cash provided by operating activities	**761.6**	578.0
(iii) Restructure, acquisition and integration costs:		
During the year, the Group settled costs associated with:		
Acquisition costs	**-**	(54.9)
Integration costs	**(30.3)**	(49.8)
Restructure and business closure costs	**(23.7)**	(13.7)
	(54.0)	(118.4)
(iv) Changes in loans and borrowings arising from financing activities:		
Balance at the beginning of the year	**2,526.8**	2,571.1
Proceeds from borrowings	**-**	1,664.2
Repayment of borrowings	**(272.6)**	(1,775.2)
Changes in fair values	**20.5**	(14.7)
Net foreign currency exchange differences	**125.8**	81.4
Balance at the end of the year	**2,400.5**	2,526.8

Section 3: Operating assets and liabilities

This section provides information relating to the operating assets and liabilities of the Group. Boral is committed to maintaining a strong Balance Sheet through continued focus on cash conversion. The Group's strategy also considers expenditure, growth and acquisition requirements.

3.1 Receivables

Trade and other receivables are initially recognised at fair value plus any directly attributable transaction costs. Subsequent to initial measurement they are measured at amortised cost less any provisions for expected impairment losses or actual impairment losses. Credit losses and recoveries of items previously written off are recognised in profit or loss.

Significant accounting judgements, estimates and assumptions

The Group has considered the collectability and recoverability of trade receivables. An allowance for doubtful debts has been made for the estimated irrecoverable trade receivable amounts arising from the past rendering of services, determined by reference to past default experience along with an expected impairment loss calculation which considers the past events, and exercises judgement over the impact of current and future economic conditions when considering the recoverability of outstanding trade receivable balances at the reporting date. Subsequent changes in economic and market conditions may result in the provision for impairment losses increasing or decreasing in future periods.

	2019 $m	2018 $m
Current		
Trade receivables	**856.4**	875.0
Associated entities	**2.0**	0.8
	858.4	875.8
Less: Allowance for impairment	**(11.8)**	(14.5)
	846.6	861.3
Other receivables	**30.8**	18.4
	877.4	879.7

Included in the following table is an age analysis of the Group's trade receivables, along with impairment provisions against these balances as at 30 June:

	Gross 2019 $m	Impairment 2019 $m	Net 2019 $m	Gross 2018 $m	Impairment 2018 $m	Net 2018 $m
Current	**710.9**	**(1.1)**	**709.8**	754.3	(3.2)	751.1
Overdue 0 – 60 days	**120.6**	**(1.4)**	**119.2**	100.5	(0.6)	99.9
Overdue > 60 days	**24.9**	**(9.3)**	**15.6**	20.2	(10.7)	9.5
Total	**856.4**	**(11.8)**	**844.6**	875.0	(14.5)	860.5

3.1 Receivables (continued)

The movement in the allowance for impairment in respect to trade receivables during the year was as follows:

	2019 $m	2018 $m
Balance at the beginning of the year	**(14.5)**	(18.8)
Amounts written off during the year	**3.3**	4.0
Increase recognised in Income Statement	**(1.1)**	(0.1)
Disposals of entities or operations	**0.4**	-
Transferred to assets held for sale	**-**	0.8
Net foreign currency exchange differences	**0.1**	(0.4)
Balance at the end of the year	**(11.8)**	(14.5)

	2019 $m	2018 $m
Non-current		
Loans to associated entities	**16.1**	19.8
Other receivables	**11.7**	15.3
	27.8	35.1

No amounts owing by associates or included in other receivables were past due as at 30 June 2019 (30 June 2018: nil).

3.2 Inventories

Inventories are valued at the lower of cost and net realisable value. Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution.

For land development projects, cost includes the cost of acquisition, development and holding costs during development. Costs incurred after completion of development are expensed as incurred.

	2019 $m	2018 $m
Current		
Raw materials and consumable stores	**200.3**	174.8
Work in progress	**43.7**	52.1
Finished goods	**439.0**	386.4
Land development projects	**0.8**	0.5
	683.8	613.8
Non-current		
Land development projects	**11.4**	11.4
Land development projects comprises:		
Cost of acquisition	**0.8**	0.5
Development costs capitalised	**11.4**	11.4
	12.2	11.9

3.3 Property, plant and equipment

Owned assets

The value of property, plant and equipment is measured as the cost of the asset, less accumulated depreciation and impairment losses (see note 3.5). The cost of the asset is the consideration paid plus incidental costs directly attributable to the acquisition.

The value of self-constructed assets includes the cost of material and direct labour and any other costs directly attributable to bringing the asset to a working condition for its intended use.

Subsequent costs in relation to replacing a part of property, plant and equipment are capitalised in the carrying amount of the item if it is probable that future economic benefits will flow to Boral and its cost can be measured reliably. All other costs are recognised in the Income Statement as incurred.

Depreciation

Depreciation is calculated to expense the cost of items of property, plant and equipment (excluding freehold land) less their estimated residual values on a straight-line basis over their estimated useful lives.

Depreciation is recognised in the Income Statement from the date of acquisition or, in respect of internally constructed assets, from the time an asset is completed and held ready for use.

Quarry stripping assets are amortised over the expected life of the identified resources using the units of production method.

Depreciation rates and methods, useful lives and residual values are reviewed at each balance sheet date. When changes are made, adjustments are reflected prospectively in current and future financial years only.

The depreciation and amortisation rates used for each class of asset are as follows:

	2019	2018
Buildings	**1 – 10%**	1 – 10%
Mineral reserves and licences	**1 – 5%**	1 – 5%
Plant and equipment	**5 – 33.3%**	5 – 33.3%

Significant accounting judgements, estimates and assumptions

Estimation of useful lives of assets has been based on historical experience. In addition, the condition of assets is assessed at least annually and considered against the remaining useful life. Adjustments to useful lives are made when considered necessary.

3.3 Property, plant and equipment (continued)

Reconciliation of movements in property, plant and equipment

	Land and buildings		Mineral reserves, licences and quarry stripping		Plant and equipment[1]		Total	
	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
Balance at the beginning of the year	**911.3**	867.5	**159.1**	160.9	**1,711.7**	1,695.4	**2,782.1**	2,723.8
Additions	**1.1**	2.8	**-**	3.4	**446.0**	415.3	**447.1**	421.5
Disposals	**(10.4)**	(6.5)	**(0.5)**	-	**(9.8)**	(7.6)	**(20.7)**	(14.1)
Acquisitions of entities or operations	**-**	-	**-**	-	**6.9**	-	**6.9**	-
Disposals of entities or operations	**(18.2)**	-	**(14.6)**	-	**(8.6)**	-	**(41.4)**	-
Transferred (to)/from other property, plant and equipment	**51.4**	93.2	**29.8**	19.4	**(81.2)**	(112.6)	**-**	-
Impairment disclosed as significant items	**-**	(0.5)	**-**	-	**(3.1)**	(4.3)	**(3.1)**	(4.8)
Transfer (to)/from other assets or liabilities	**(2.7)**	1.9	**-**	-	**(8.5)**	18.7	**(11.2)**	20.6
Transferred to assets held for sale	**-**	(33.5)	**-**	(4.6)	**-**	(40.0)	**-**	(78.1)
Depreciation or amortisation expense	**(24.4)**	(20.5)	**(20.1)**	(20.6)	**(269.4)**	(264.1)	**(313.9)**	(305.2)
Net foreign currency exchange differences	**12.0**	6.9	**0.1**	0.6	**22.5**	10.9	**34.6**	18.4
Balance at the end of the year	**920.1**	911.3	**153.8**	159.1	**1,806.5**	1,711.7	**2,880.4**	2,782.1

At cost	**1,154.3**	1,105.6	**336.8**	333.7	**4,588.1**	4,301.9	**6,079.2**	5,741.2
Less: Accumulated depreciation, amortisation and impairment	**(234.2)**	(194.3)	**(183.0)**	(174.6)	**(2,781.6)**	(2,590.2)	**(3,198.8)**	(2,959.1)
Balance at the end of the year	**920.1**	911.3	**153.8**	159.1	**1,806.5**	1,711.7	**2,880.4**	2,782.1

1. Total capital work in progress for the year is $334.2 million (2018: $294.8 million).

Operating leases

Payments made under operating leases are expensed on a straight-line basis over the term of the lease, except where an alternative basis is more representative of the pattern of benefits to be derived from the leased property. Minimum lease payments include fixed rate increases.

Total operating lease rental charges for the year is $123.2 million (2018: $122.6 million).

3.4 Intangible assets

Goodwill

All business combinations are accounted for by applying the acquisition method. Goodwill represents the difference between the cost of the acquisition and the fair value of the net identifiable assets acquired.

Goodwill is stated at cost less any accumulated impairment losses. Goodwill is tested annually for impairment.

Other intangible assets

Other intangible assets, which include trade names, fly ash contracts, customer relationships and patents, are acquired individually or through business combinations and are stated at cost less accumulated amortisation and impairment losses.

Amortisation

Amortisation is calculated to expense the cost of the intangible asset less its estimated residual value on a straight-line basis over its estimated useful life.

The estimated useful lives for each class of intangible asset are as follows:

	Trade names	Fly ash contracts	Customer relationships	Patents	Other
Estimated useful lives – years	2 to Indefinite	19 – 20	14 – 20	6 – 19	3 – 17

Amortisation is recognised in the Income Statement from the date the assets are available for use unless their lives are indefinite.

The total value of indefinite life intangible assets (excluding goodwill) is $131.1 million (2018: $124.4 million). Intangible assets with an indefinite useful life are tested for impairment annually (see note 3.5).

Significant accounting judgements, estimates and assumptions

Judgements are made with respect to identifying, valuing, and estimating useful lives of intangible assets on acquisition of new businesses. Estimation of useful lives of other intangible assets has been based on historical experience with reassessments of remaining useful life performed at least annually. Adjustments to useful lives are made when considered necessary.

	2019 $m	2018 $m
Goodwill	**2,230.2**	2,159.9
Other intangible assets	**1,287.7**	1,334.2
Less: Accumulated amortisation	**(145.1)**	(99.0)
	1,142.6	1,235.2
Total	**3,372.8**	3,395.1
Reconciliation of movements in goodwill		
Balance at the beginning of the year	**2,159.9**	2,097.8
Acquisitions of entities or operations	**4.2**	-
Disposal of entities or operations	**(44.1)**	-
Transferred to assets held for sale	**-**	(16.6)
Net foreign currency exchange differences	**110.2**	78.7
Balance at the end of the year	**2,230.2**	2,159.9

3.4 Intangible assets (continued)

Reconciliation of movements in other intangible assets

As at 30 June 2019	Trade names $m	Fly ash contracts $m	Customer relationships $m	Patents $m	Other $m	Total $m
Balance at the beginning of the year	**141.5**	**469.0**	**608.8**	**4.1**	**11.8**	**1,235.2**
Additions	**-**	**-**	**-**	**-**	**6.3**	**6.3**
Disposals of entities or operations	**-**	**-**	**(95.9)**	**-**	**-**	**(95.9)**
Amortisation expense	**(3.8)**	**(25.8)**	**(31.3)**	**(0.6)**	**(2.4)**	**(63.9)**
Net foreign currency exchange differences	**7.8**	**24.8**	**27.9**	**0.1**	**0.3**	**60.9**
Balance at the end of the year	**145.5**	**468.0**	**509.5**	**3.6**	**16.0**	**1,142.6**

At cost	**155.5**	**524.5**	**563.4**	**8.8**	**35.5**	**1,287.7**
Less: Accumulated amortisation	**(10.0)**	**(56.5)**	**(53.9)**	**(5.2)**	**(19.5)**	**(145.1)**
Balance at the end of the year	**145.5**	**468.0**	**509.5**	**3.6**	**16.0**	**1,142.6**

As at 30 June 2018	Trade names $m	Fly ash contracts $m	Customer relationships $m	Patents $m	Other $m	Total $m
Balance at the beginning of the year	137.8	475.6	618.9	4.5	10.4	1,247.2
Additions	-	-	-	-	3.8	3.8
Amortisation expense	(1.6)	(24.8)	(33.6)	(0.5)	(1.9)	(62.4)
Net foreign currency exchange differences	5.3	18.2	23.5	0.1	(0.5)	46.6
Balance at the end of the year	141.5	469.0	608.8	4.1	11.8	1,235.2

At cost	147.7	497.7	648.3	8.8	31.7	1,334.2
Less: Accumulated amortisation	(6.2)	(28.7)	(39.5)	(4.7)	(19.9)	(99.0)
Balance at the end of the year	141.5	469.0	608.8	4.1	11.8	1,235.2

3.5 Carrying value assessment

The Group annually tests goodwill and other intangible assets with indefinite useful lives for impairment. Other non-financial assets, with the exception of inventories (see note 3.2) and deferred tax assets (see note 5.2), are tested if there is any indication of impairment or if there is any indication that an impairment loss recognised in a prior period may no longer exist or may have decreased.

An asset that does not generate independent cash flows and its individual value in use cannot be estimated is tested for impairment as part of a cash generating unit (CGU).

An impairment loss is recognised in the Income Statement when the carrying amount of an asset or CGU exceeds its recoverable amount. The asset's recoverable amount is estimated based on the higher of its value in use and fair value less costs to sell.

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. An impairment loss in respect of goodwill is not reversed.

Significant accounting judgements, estimates and assumptions

Management is required to make significant estimates and judgements in determining whether the carrying amount of non-financial assets has any indication of impairment, in particular in relation to:

- *the forecasting of future cash flows* – these are based on the Group's latest approved forecasts and reflect expectations of sales growth, operating costs, margin, capital expenditure and cash flows, based on past experience and management's expectation of future market changes, taking into account external forecasts.
- *discount rates applied to those cash flows* – pre-tax discount rates used are determined by current market inputs and adjusted for the risks specific to the asset or CGU.
- *the expected long-term growth rates* – cash flows beyond the forecast period are extrapolated using estimated growth rates. The growth rates are based on the long-term performance of each CGU in their respective market.

Such estimates and judgements are subject to change as a result of changing economic and operational conditions. Actual cash flows may therefore differ from forecasts and could result in changes in the recognition of impairment charges in future periods.

Impairment testing for cash generating units containing goodwill

For the purposes of impairment testing, goodwill is allocated to the Group's CGUs containing goodwill according to business types, geographical span of operations and with reference to the CGUs impacted by the acquisition upon which the goodwill was generated. The allocation of goodwill, and subsequently the impairment testing, reflects the lowest level within the business for which information about goodwill is available and monitored for internal management purposes. The aggregate carrying amounts of goodwill allocated to each CGU or group of CGUs are as follows:

	2019 $m	2018 $m
North America	**2,136.9**	2,071.8
Other[1]	**93.3**	88.1
	2,230.2	2,159.9

[1] Relates to multiple business units, which are not considered to be individually significant.

North America

Goodwill of $2,136.9 million is recorded at 30 June 2019, which arose from the acquisition of Headwaters Incorporated in May 2017. Given the transformative nature of the acquisition on our North American operations, and the number of CGUs impacted by the acquisition, the goodwill is tested annually at an aggregated level incorporating all CGUs within our Boral North America segment, with the exception of our equity accounted investment in the Meridian Brick Joint Venture. This is the lowest level within the business for which information about goodwill is available and monitored for internal management purposes.

The goodwill was tested using a value in use model. Cash flow projections cover a period of four years, with cash flows beyond the projection period extrapolated using growth rates of 2.5%. These growth rates do not exceed the long-term average growth rate for the industries in which the businesses operate. The discount rate applied to pre-tax cash flows was 10.1% (2018: 11.5%).

3.5 Carrying value assessment (continued)

Key assumptions relate to:

- market forecasts, including US housing starts, other US construction markets including non-residential and repair and remodel activity, and US infrastructure activity;
- market share;
- average selling price; and
- achievement of synergy targets.

These assumptions have been determined with reference to current and historical performance and taking into account external forecasts. Market forecasts utilised in the cash flow projections are based on historical experiences and exposures in the relevant business units and independent economists' forecasts.

The recoverable amount of the CGU based on value in use exceeds its carrying value at 30 June 2019. No reasonable changes in the key assumptions on which the estimates have been based for these businesses would cause the carrying amount to exceed the recoverable amount.

Other cash generating units

The recoverable amount of other CGUs containing goodwill has been reviewed and exceed their carrying values as at 30 June 2019. No reasonable changes in the key assumptions on which the estimates have been based for these businesses would cause the carrying amount to exceed the recoverable amount.

3.6 Provisions

A provision is recognised in the Balance Sheet when:

- Boral has a present obligation (legal or constructive) as a result of a past event
- a reliable estimate can be made of the amount of the obligation, 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 risk specific to the liability.

Provision	Description	Significant accounting judgements, estimates and assumptions
Rationalisation and restructuring	Provisions for rationalisation and restructuring are recognised when the Group has a detailed formal plan identifying the business or part of the business concerned, the location and approximate number of employees affected, a detailed estimate of the associated costs, and an appropriate timeline, and the restructuring has either commenced or been publicly announced. Costs related to ongoing activities are not provisioned.	Future costs associated with the restructuring and the expected time period.
Claims	Provisions are raised for liabilities arising from the ordinary course of business, in relation to claims against the Group, including insurance, workers compensation insurance (previously included in other provisions), legal and other claims. Where recoveries are considered virtually certain in respect of such claims, these are included in other receivables.	Likelihood of settling customer and insurance claims.
Restoration and environmental rehabilitation	The restoration and environmental rehabilitation provisions comprise mainly: • make-good provisions included in lease agreements for which the Group has a legal or constructive obligation; • restoration and decommissioning costs associated with environmental risks. At a number of sites, there are restoration and environmental rehabilitation requirements of areas from which natural resources were extracted. The provision includes costs associated with the clean-up of sites the Group owns, or contamination that the Group caused, to enable ongoing use of the land as an industrial property or development to a higher value end use, and costs associated with the decommissioning, removal or repair of sites.	Future costs associated with dismantling and removing assets and restoring sites to their original condition, requiring assumptions on closure dates, application of environmental legislation, available technologies, regulatory requirements, expected future use of the site and consultant cost estimates.

3.6 Provisions (continued)

As at 30 June 2019	Rationalisation and restructuring $m	Claims $m	Restoration and environmental rehabilitation $m	Other $m	Total $m
Reconciliations					
Balance at the beginning of the year	**10.1**	**59.9**	**103.7**	**29.3**	**203.0**
Provisions made/(released) during the year	**7.6**	**5.4**	**(13.3)**	**(3.9)**	**(4.2)**
Unwind of discount	**-**	**-**	**3.8**	**-**	**3.8**
Payments made during the year	**(1.7)**	**(21.6)**	**(8.5)**	**(8.3)**	**(40.1)**
Transferred (to)/from provisions	**-**	**9.2**	**2.6**	**(11.8)**	**-**
Net foreign currency exchange differences	**0.5**	**2.9**	**0.9**	**0.2**	**4.5**
Balance at the end of the year	**16.5**	**55.8**	**89.2**	**5.5**	**167.0**
Current	**16.5**	**14.4**	**15.0**	**2.5**	**48.4**
Non-current	**-**	**41.4**	**74.2**	**3.0**	**118.6**
Total	**16.5**	**55.8**	**89.2**	**5.5**	**167.0**

As at 30 June 2018	Rationalisation and restructuring $m	Claims $m	Restoration and environmental rehabilitation $m	Other $m	Total $m
Reconciliations					
Balance at the beginning of the year	2.1	59.3	85.4	45.9	192.7
Provisions made during the year	7.8	0.2	23.5	3.1	34.6
Unwind of discount	-	-	3.0	0.4	3.4
Payments made during the year	(0.2)	(1.5)	(8.4)	(20.3)	(30.4)
Transferred to liabilities held for sale	-	-	(0.3)	-	(0.3)
Net foreign currency exchange differences	0.4	1.9	0.5	0.2	3.0
Balance at the end of the year	10.1	59.9	103.7	29.3	203.0
Current	10.1	10.3	15.4	19.3	55.1
Non-current	-	49.6	88.3	10.0	147.9
Total	10.1	59.9	103.7	29.3	203.0

3.7 Contract liabilities

In the case of certain contracts, the Group receives payments in advance of the services being rendered, which is recognised as a Contract Liability within Trade Creditors. The Contract Liability balance as at 30 June 2019 is $48.7 million (2018: $34.6 million) with the majority expected to be recognised as Revenue in the next financial year given the nature of the projects.

Section 4: Capital and financial structure

This section provides information relating to the Group's capital structure and its exposure to financial risks, how they affect the Group's financial position and performance, and how the risks are managed.

The capital structure of the Group consists of debt and equity. The Directors determine the appropriate capital structure of Boral, specifically how much is raised from shareholders (equity) and how much is borrowed from financial institutions (debt) in order to finance the current and future activities of the Group. The Directors review the Group's capital structure and dividend policy regularly and do so in the context of the Group's ability to continue as a going concern, to invest in opportunities that grow the business and enhance shareholder value.

This section also provides information around the Group's risk management policies and how Boral uses derivatives to hedge the underlying exposure to changes in interest rates, foreign exchange rate fluctuations and commodity prices.

4.1 Loans and borrowings

Loans and borrowings are recognised initially at fair value less attributable transaction costs. Subsequently, loans and borrowings are stated at amortised cost, with any difference between amortised cost and redemption value being recognised in the Income Statement over the period of the borrowings on an effective interest rate basis.

	2019 $m	2018 $m
Current		
Other loans – unsecured	**336.6**	13.0
Finance lease liabilities	**3.1**	6.2
	339.7	19.2
Non-current		
Other loans – unsecured	**2,057.8**	2,497.0
Finance lease liabilities	**3.0**	10.6
	2,060.8	2,507.6
Total	**2,400.5**	2,526.8

Term and debt repayment schedule

Terms and conditions of outstanding loans were as follows:

				30 June 2019		30 June 2018	
	Currency	Effective interest rate 2019	Calendar year of maturity	Carrying amount $m	Fair value $m	Carrying amount $m	Fair value $m
Current							
US senior notes – private placement – unsecured	USD	7.22%	2020	**108.6**	**112.9**	-	-
CHF notes – unsecured	CHF	2.25%	2020	**219.0**	**223.3**	-	-
Other loans – unsecured	GBP	1.87%	2019 - 2020	**9.0**	**9.0**	13.0	13.0
Finance lease liabilities	AUD/USD	4.60%	2019 - 2020	**3.1**	**3.1**	6.2	6.2
				339.7	**348.3**	19.2	19.2
Non-current							
US senior notes – private placement – unsecured	USD	4.04%	2025 - 2030	**708.1**	**808.2**	771.5	793.0
CHF notes – unsecured	CHF			**-**	**-**	204.3	213.5
US senior notes – 144A/Reg S – unsecured	USD	3.39%	2022 - 2028	**1,349.7**	**1,486.6**	1,261.2	1,253.7
Term credit facility – unsecured	Multi		2021	**-**	**-**	260.0	260.0
Finance lease liabilities	AUD/USD	4.96%	2020 - 2024	**3.0**	**3.0**	10.6	10.6
				2,060.8	**2,297.8**	2,507.6	2,530.8
Total				**2,400.5**	**2,646.1**	2,526.8	2,550.0

4.1 Loans and borrowings (continued)

US SENIOR NOTES – PRIVATE PLACEMENT – UNSECURED

Borrower	Notional amount US$m	Issue date	Interest rate	Maturity date	AUD equivalent $m
Boral Limited	135.0	05/2015	4.01%	05/2025	189.5
Boral Limited	41.0	05/2015	4.16%	05/2027	57.5
Boral Limited	24.0	03/2015	4.31%	03/2030	33.6
Boral Industries Inc.	76.2	04/2008	7.22%	04/2020	108.6
Boral Industries Inc.	225.0	04/2018	4.05%	04/2026	320.6
Boral Industries Inc.	75.0	04/2018	3.66%	04/2026	106.9
Total	**576.2**				**816.7**

CHF NOTES – UNSECURED

Borrower	Notional amount CHF $m	Issue date	Interest rate	Maturity date	AUD equivalent $m
Boral Limited	**150.0**	02/2013	2.25%	02/2020	**219.0**

US SENIOR NOTES – 144A/REG S – UNSECURED

Borrower	Notional amount US$m	Issue date	Interest rate	Maturity date	AUD equivalent $m
Boral Finance Pty Ltd	450.0	11/2017	3.00%	11/2022	638.7
Boral Finance Pty Ltd	500.0	11/2017	3.75%	05/2028	711.0
Total	**950.0**				**1,349.7**

BANK FACILITIES

Acquisition loan facility

The Group entered into a new committed US$1.0 billion syndicated loan facility upon the announcement of the USG acquisition by Knauf, which matures on 28 August 2020. The facility was undrawn as at 30 June 2019.

Term credit facility

The Group has a multi-currency syndicated loan facility with a limit of US$750 million maturing on 1 July 2021. The facility was undrawn as at 30 June 2019.

Bank overdraft, lease liabilities and other

The Group operates unsecured bank overdraft facility arrangements in Australia and the USA that have combined limits of A$20.2 million (2018: A$20.0 million). The facilities within Australia are conducted on a set-off basis. All facilities are subject to annual review where repayment can occur on demand by the lending bank. Finance leases are subject to lease terms of various maturities.

The Group has complied with the borrowing covenants throughout the year ended 30 June 2019.

4.2 Financial risk management

Boral's Treasury function provides funding, risk management and specialist Treasury advice to the Group with the objective of ensuring Boral's strategic and operational objectives are met. The Group's business activities are exposed to a variety of financial risks, including credit, liquidity, foreign currency, interest rate and commodity price risks.

Derivative instruments are used to manage these financial risks. The Group does not use derivative or financial instruments for trading or speculative purposes. The use of financial derivatives is controlled by policies approved by Boral's Board of Directors. The Group documents the relationship between hedging instruments and hedged items, including the risk management objective and strategy for undertaking each transaction.

Derivative financial instruments

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value. Any gains or losses arising from changes in fair value of derivatives, except those that qualify as effective hedges, are immediately recognised in the Income Statement.

Fair value hedge

Fair value hedges are used to hedge exposure to changes in the fair value of recognised assets, liabilities or firm commitments. Changes in the fair value of derivatives, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk, are immediately recognised in the Income Statement.

Cash flow hedge

Cash flow hedges are used to hedge risks associated with highly probable forecast transactions. For cash flow hedges, changes in the fair value of the derivative are recognised in equity in the hedging reserve for the effective portion of the hedge. The gain or loss relating to the ineffective portion of the hedge is recognised immediately in the Income Statement.

Amounts deferred in equity are transferred to the Income Statement in the periods the hedged item is recognised in profit or loss. When the forecast transaction that is hedged results in the recognition of a non-financial asset or liability, the gains and losses previously deferred in equity are transferred to form part of the initial cost and carrying amount of the asset or liability.

If a forecast transaction is no longer expected to occur, the cumulative gain or loss that was deferred in equity is immediately recognised in the Income Statement. If the hedging instrument expires or is sold, terminated, or no longer qualifies for hedge accounting, any gain deferred in equity remains in equity until the forecast transaction occurs.

Hedge of net investment in a foreign operation

The portion of the gain or loss on an instrument used to hedge a net investment in a foreign operation that is determined to be an effective hedge is recognised directly in equity. The ineffective portion is recognised immediately in the Income Statement.

Derivatives disclosed on a gross basis

The Group enters into derivative transactions under International Swaps and Derivatives Association (ISDA) master netting agreements. The ISDA agreements do not meet the criteria for offsetting in the Balance Sheet. Accordingly, derivatives have been disclosed on a gross basis on the Balance Sheet.

CREDIT RISK

Credit risk is the risk of loss if a counterparty fails to fulfil their obligations under a financial instrument contract. The Group is exposed to credit risk arising from financing activities including cash at bank, trade and other receivables and other financial instruments.

Management has a counterparty credit risk policy in place and the exposure to credit risk is monitored on an ongoing basis.

Exposure to credit risk

Credit risk relating to cash at bank and derivative contracts is minimised by using financial counterparties that have a long-term credit rating equal to or greater than BBB+/Baa3 although allowance is given for credit exposures up to A$100.0 million with financial counterparties with a rating below BBB+/Baa3.

No more than 40% of Boral's total credit exposure is to be with any individual eligible counterparty, subject to A$150.0 million total credit exposure.

For information on the management of credit risk relating to trade and other receivables, see note 3.1.

4.2 Financial risk management (continued)

CREDIT RISK (continued)

The following table indicates the Group's maximum credit exposure from non-derivative financial assets.

	Carrying amount 2019 $m	Carrying amount 2018 $m
Non-derivative financial assets		
Loans to and receivables from associates	**18.1**	20.6
Trade and other receivables	**887.1**	894.2
Cash at bank, on hand and bank short-term deposits	**207.2**	74.3
Equity securities	**34.8**	32.3
	1,147.2	1,021.4

The following table indicates the Group's maximum credit exposure for derivative financial assets, the periods in which the cash flows associated with derivative financial assets are expected to occur and the impact on profit or loss:

30 June 2019	Carrying amount $m	Fair value $m	Contractual cash flows $m	6 months or less $m	6-12 months $m	1-2 years $m	2-5 years $m	More than 5 years $m
Derivative financial assets								
Forward exchange contracts[1]	**1.6**	**1.6**	**1.7**	**1.7**	**-**	**-**	**-**	**-**
Interest rate swaps[2]	**6.4**	**6.4**	**7.0**	**(0.2)**	**0.5**	**1.7**	**3.7**	**1.3**
Commodity swaps/options[1]	**2.6**	**2.6**	**2.6**	**1.1**	**0.8**	**0.7**	**-**	**-**
	10.6	**10.6**	**11.3**	**2.6**	**1.3**	**2.4**	**3.7**	**1.3**

30 June 2018	Carrying amount $m	Fair value $m	Contractual cash flows $m	6 months or less $m	6-12 months $m	1-2 years $m	2-5 years $m	More than 5 years $m
Derivative financial assets								
Forward exchange contracts[1]	6.7	6.7	6.9	6.0	0.9	-	-	-
Interest rate swaps[2]	0.4	0.4	0.4	-	-	0.4	-	-
Commodity swaps/options[1]	4.6	4.6	3.5	2.3	1.1	0.1	-	-
	11.7	11.7	10.8	8.3	2.0	0.5	-	-

1. Designated as cash flow hedges.
2. Designated as fair value hedges.

4.2 Financial risk management (continued)

LIQUIDITY RISK

Liquidity risk is the risk that the Group has insufficient funds to meet its financial obligations when they fall due. It is also associated with planning for unforeseen events or business disruptions that may cause pressure on liquidity.

The Group manages liquidity risk by ensuring that:

(a) Boral has a well spread debt facility maturity profile with a target of exceeding 3.5 years;

(b) Current debt less cash deposits, is not to exceed 20% of the sum of Total Debt plus Committed Undrawn Facilities > 1 year;

(c) Committed Undrawn Facilities plus cash exceeds A$500 million.

30 June 2019	Carrying amount $m	Contractual cash flows $m	6 months or less $m	6-12 months $m	1-2 years $m	2-5 years $m	More than 5 years $m
Non-derivative financial liabilities							
US senior notes – private placement – unsecured	**816.7**	**(1,011.5)**	**(11.0)**	**(126.5)**	**(27.7)**	**(83.5)**	**(762.8)**
CHF notes – unsecured	**219.0**	**(222.3)**	**-**	**(222.3)**	**-**	**-**	**-**
US senior notes – 144A/Reg S – unsecured	**1,349.7**	**(1,758.3)**	**(16.2)**	**(24.3)**	**(48.6)**	**(767.9)**	**(901.3)**
Bank Loans – unsecured	**9.0**	**(9.0)**	**(9.0)**	**-**	**-**	**-**	**-**
Finance lease liabilities	**6.1**	**(6.5)**	**(1.6)**	**(1.7)**	**(2.0)**	**(1.2)**	**-**
Trade creditors	**832.6**	**(832.6)**	**(832.6)**	**-**	**-**	**-**	**-**
	3,233.1	**(3,840.2)**	**(870.4)**	**(374.8)**	**(78.3)**	**(852.6)**	**(1,664.1)**
Derivative financial liabilities							
Forward exchange contracts[1]	**0.6**	**(0.6)**	**(0.6)**	**-**	**-**	**-**	**-**
Commodity swaps[1]	**1.5**	**(1.5)**	**(1.5)**	**-**	**-**	**-**	**-**
Cross currency swaps[1,2]	**21.1**	**(22.5)**	**(3.0)**	**(19.5)**	**-**	**-**	**-**
Interest rate swaps[3]	**0.6**	**(0.6)**	**(0.6)**	**-**	**-**	**-**	**-**
	23.8	**(25.2)**	**(5.7)**	**(19.5)**	**-**	**-**	**-**
	3,256.9	**(3,865.4)**	**(876.1)**	**(394.3)**	**(78.3)**	**(852.6)**	**(1,664.1)**

30 June 2018	Carrying amount $m	Contractual cash flows $m	6 months or less $m	6-12 months $m	1-2 years $m	2-5 years $m	More than 5 years $m
Non-derivative financial liabilities							
US senior notes – private placement – unsecured	771.5	(1,009.1)	(10.5)	(17.5)	(138.1)	(83.1)	(759.9)
CHF notes – unsecured	204.3	(212.1)	-	(2.9)	(209.2)	-	-
US senior notes – 144A/Reg S – unsecured	1,261.2	(1,715.0)	(15.4)	(23.0)	(46.2)	(747.1)	(883.3)
Bank Loans – unsecured	273.0	(273.0)	(13.0)	-	-	(260.0)	-
Finance lease liabilities	16.8	(16.8)	(3.1)	(3.1)	(4.9)	(5.5)	(0.2)
Trade creditors	752.0	(752.0)	(752.0)	-	-	-	-
	3,278.8	(3,978.0)	(794.0)	(46.5)	(398.4)	(1,095.7)	(1,643.4)
Derivative financial liabilities							
Forward exchange contracts[1]	0.7	(0.9)	(0.7)	(0.2)	-	-	-
Commodity swaps[1]	0.7	(0.7)	(0.4)	(0.2)	(0.1)	-	-
Cross currency swaps[1,2]	19.3	(22.1)	(2.8)	(4.5)	(14.8)	-	-
Interest rate swaps[3]	14.8	(16.3)	(3.0)	(1.6)	(2.0)	(5.4)	(4.3)
	35.5	(40.0)	(6.9)	(6.5)	(16.9)	(5.4)	(4.3)
	3,314.3	(4,018.0)	(800.9)	(53.0)	(415.3)	(1,101.1)	(1,647.7)

1. Designated as cash flow hedges.
2. Designated as net investment hedges.
3. Designated as fair value hedges.

Section 4: Capital and financial structure (continued)

4.2 Financial risk management (continued)

FOREIGN CURRENCY RISK

The Group is exposed to fluctuations in foreign currency as a result of the purchase of raw materials, interest expenses related to non-Australian dollar borrowings, imported plant and equipment, some export-related receivables and the translation of its investments in overseas assets.

The Group manages this risk by adopting the following policies:

(a) All global operational foreign exchange exposures are regarded as being within discretionary parameters. If hedging is elected, then maximum hedging levels of 75% for Year 1 (months 1 to 12) and 50% for Year 2 (months 13 to 24) apply. The maximum hedging term permitted is two years.

(b) Capital expenditure-related foreign currency exposures greater than A$0.5 million must be 100% hedged at the time of capital expenditure approval.

(c) Net investments, including net intercompany loans, in overseas domiciled investments are hedged, where regulatory conditions and available hedge instruments permit.

The Group uses forward exchange contracts to hedge foreign exchange risk. Most of the forward exchange contracts have maturities of less than one year. Where necessary and in accordance with policy compliance, forward exchange contracts can be rolled over at maturity.

(i) Translation risk

Foreign currency translation risk is the risk that upon consolidation for financial reporting the value of the Group's investment in foreign domiciled entities will fluctuate due to changes in foreign currency rates.

The Group uses foreign currency denominated borrowings and cross currency swaps to hedge the Group's net investment in overseas domiciled assets. The related exchange gains/losses on foreign currency movements are taken to the Foreign Currency Translation Reserve.

The table below shows the Group's net exposure to translation risk. The Group's investment in foreign operations is partially offset against foreign currency borrowings, reducing the Group's overall exposure to translation risk. Amounts below are calculated based on notional amounts:

	USD	CAD	Euro	GBP	Multi[1]
Currency		**Notional A$ equivalent ($m)[2]**			
30 June 2019					
Balance sheet					
Net investment in overseas domiciled entities	**4,100.4**	**62.6**	**1.8**	**6.8**	**729.0**
Cash	**21.7**	**-**	**2.2**	**0.1**	**-**
Foreign currency borrowings	**(1,880.6)**	**-**	**-**	**(9.0)**	**-**
	2,241.5	**62.6**	**4.0**	**(2.1)**	**729.0**

	USD	CAD	Euro	GBP	Multi[1]
Currency		**Notional A$ equivalent ($m)[2]**			
30 June 2018					
Balance sheet					
Net investment in overseas domiciled entities	3,955.5	127.1	1.7	11.0	670.0
Cash	18.6	-	-	-	-
Foreign currency borrowings	(1,785.0)	-	-	(13.0)	-
	2,189.1	127.1	1.7	(2.0)	670.0

1. Exposure relates to investment in USG Boral Building Products Pte Ltd, which is denominated in multiple Asian currencies.
2. The notional amount shows the principal face value for each instrument.

4.2 Financial risk management (continued)

FOREIGN CURRENCY RISK (continued)

(ii) Transaction risk

Foreign currency transaction risk is the risk that the value of financial commitments, recognised monetary assets or liabilities or cash flows will fluctuate due to changes in foreign currency rates.

The Group's foreign currency transaction risk is managed through the use of forward exchange contract derivatives. A forward exchange contract is an agreement between two parties to exchange two currencies at a given exchange rate at some point in the future with the aim of mitigating foreign currency transaction risk.

Based on notional amounts, the forward exchange contracts taken out to hedge foreign exchange transactional risk at balance date were as follows:

	Notional amount AUD[1]		Average exchange rate	
	2019 $m	2018 $m	2019	2018
US dollars				
Buy USD/sell AUD – One year or less	**104.9**	98.6	**0.7110**	0.7860
Sell USD/buy AUD – One year or less	**-**	(85.0)	**-**	0.7397
Euros				
Buy EUR/sell AUD – One year or less	**20.1**	28.2	**0.6115**	0.6375

[1] The notional amount shows the principal face value for each instrument.

The forward exchange contracts are considered to be highly effective hedges as they are matched against underlying foreign currency cash flows such as future interest payments, purchases and sales. There was no significant cash flow hedge ineffectiveness in the current or prior year.

As at balance date, most of the Group's US senior notes interest payables were hedged using forward exchange contracts. The unhedged foreign currency payables and receivables were nil at 30 June 2019 (2018: nil). The related exchange gains/losses on foreign currency movements are taken to the Income Statement.

Sensitivity

At 30 June 2019, had the Australian dollar weakened/strengthened by 10% against the respective foreign currencies where all other variables remain constant, the Group's pre-tax change to earnings would have increased/decreased by $0.4 million in 2019 (2018: unchanged) and equity would have increased/decreased respectively by around equivalent A$191.5 million (2018: equivalent A$229.1 million).

The following significant exchange rates applied during the year:

	Average rate		Reporting date spot rate	
	2019	2018	2019	2018
USD	**0.7145**	0.7735	**0.7018**	0.7394
Euro	**0.6267**	0.6470	**0.6170**	0.6339
GBP	**0.5526**	0.5730	**0.5527**	0.5606
CAD	**0.9450**	0.9840	**0.9183**	0.9725

Section 4: Capital and financial structure (continued)

4.2 Financial risk management (continued)

INTEREST RATE RISK

Interest rate risk is the risk that the Group is impacted by significant changes in interest rates. Borrowings issued at or swapped to floating rates expose the Group to interest rate risk.

Interest rate swaps and cross currency swaps have been transacted to assist with achieving an appropriate mix of fixed and floating interest rate borrowings. All interest rate derivative instruments mature progressively over the next six years, with the duration applicable to the interest rate and cross currency swaps consistent with maturities applicable to the underlying borrowings.

The Group adopts a policy that ensures a minimum of 35% and a maximum of 75% of its long-term borrowings are fixed interest rate borrowings. The use of interest rate derivative instruments provides the Group with the flexibility to raise term borrowings at fixed or variable interest rates where subsequently these borrowings can be converted to either variable or fixed rates of interest.

The acquisition loan facility was short-term in nature and was excluded from this policy requirement until it was refinanced with long-term debt.

Borrowings are held at amortised cost, meaning that the borrowing's effective rate of interest is charged as a finance cost to the Income Statement (not the interest paid in cash) and changes in market rates of interest are ignored. Whilst generally close, the carrying value at amortised cost may be different to the principal face value.

At the reporting date, the interest rate profile of the Group's interest bearing financial instruments was:

	2019 Carrying amount $m	2019 Notional amount[4] $m	2018 Carrying amount $m	2018 Notional amount[4] $m
Fixed rate instruments				
US senior notes – private placement – unsecured	**709.8**	**714.2**	670.1	677.8
CHF notes – unsecured[1,2]	**219.0**	**219.1**	204.3	204.6
US senior notes – 144A/Reg S – unsecured[3]	**1,349.7**	**1,353.7**	1,261.2	1,284.8
Finance lease liabilities	**6.1**	**6.1**	16.8	16.8
	2,284.6	**2,293.1**	2,152.4	2,184.0
Variable rate instruments				
Bank Loans – unsecured	**9.0**	**9.0**	273.0	273.0
US senior notes – private placement – unsecured	**106.9**	**106.9**	101.4	101.4
	115.9	**115.9**	374.4	374.4
	2,400.5	**2,409.0**	2,526.8	2,558.4
Pay variable interest rate derivatives				
Interest rate swap pay floating US$ LIBOR[2,3]	**(5.9)**	**526.9**	14.5	500.1
Other interest rate derivatives				
Cross currency swap pay fixed US$/receive fixed CHF[1]	**21.1**	**219.1**	19.3	204.6

1. CHF150 million (equivalent A$219.1 million) fixed rate notes due February 2020 have been swapped to USD fixed rate via cross currency swaps.
2. US$169.8 million (equivalent A$241.9 million) fixed rate notes due February 2020 have been swapped to USD floating rate via interest rate swaps.
3. US$200 million (equivalent A$285.0 million) fixed rate notes due November 2022 and May 2028 (US$100 million each) have been swapped to USD floating rate via interest rate swaps.
4. The notional amount shows the principal face value for each instrument.

The ineffective portion of the hedges transferred to the Income Statement was a $0.2 million loss in 2019 due to credit and execution charge cost of hedge on the interest rate swaps (2018: $0.6 million loss).

Sensitivity

At 30 June 2019, if interest rates had changed by +/- 1% pa from the year-end rates with all other variables held constant, the Group's pre-tax profit for the year would have been A$0.9 million higher/lower (2018: A$1.1 million) and the change in equity would have been A$1.6 million (2018: A$3.7 million) mainly as a result of a higher/lower interest cost applying to interest rate derivatives.

4.2 Financial risk management (continued)

COMMODITY PRICE RISK

Commodity price risk is the risk that the Group is exposed to fluctuations in commodity prices. The Group's primary exposures to commodity price risk are the purchase of diesel, natural gas, electricity and coal under variable price contract arrangements. The Group uses commodity swaps and options to hedge a component of these exposures.

The Group's policy is to hedge a minimum of 50% of purchases of diesel for the Australian business, for a period of six months. Other global commodity exposures may be hedged at the discretion of the Group. The maximum hedging levels are:

- 75% for Year 1 (months 1 to 12), and
- 50% for Year 2 (months 13 to 24).

The maximum permitted term for a hedge transaction is two years.

Commodities hedging activities

The notional and fair value of commodity derivative instruments at year end is as follows:

	2019 Notional $A equivalent[1] $m	2019 Fair value/ Carrying amount $m	2018 Notional $A equivalent[1] $m	2018 Fair value/ Carrying amount $m
Singapore gasoil	**17.8**	**(0.6)**	40.6	4.2
Natural gas (NYMEX)	**-**	**-**	2.9	-
Newcastle Coal	**4.1**	**(0.6)**	-	-
Electricity	**14.7**	**2.4**	12.6	(0.2)

1. The notional amount shows the principal face value for each instrument.

The commodity swaps and options are considered to be highly effective hedges as they are matched against forward commodity purchases. The ineffective portion of the hedges transferred to the Income Statement was a $1.0 million loss in 2019 due to amortisation of the premium paid on options (2018: $0.4 million loss).

Sensitivity

At 30 June 2019, if the commodity price had changed by +/- 10% from the year-end prices with all other variables held constant, the Group's pre-tax earnings for the year would be unchanged (2018: unchanged) and the change in equity would have been $4.0 million (2018: $4.8 million).

FAIR VALUE

The fair value of all financial instruments approximates its carrying value. The following describes the methodology adopted to derive fair values:

Financial instrument	Valuation method	Carried at fair value?
Commodity swaps and options	The fair value is calculated using closing commodity market prices and implied volatility data and includes bilateral credit value adjustments.	Yes
Forward exchange contracts and cross currency swaps	The fair value is calculated based on market-derived spot and forward prices, relevant currency interest rate curves, foreign currency basis spreads applicable to the relevant currency and includes bilateral credit value adjustments.	Yes
Interest rate swaps	The fair value is calculated from the present value of expected future cash flows for each instrument and includes the bilateral credit adjustment. The expected future cash flows are derived from yield curves constructed from market sources reflecting their term to maturity.	Yes
Cash, deposits, loans and receivables, payables and short-term borrowings	The carrying value approximates fair value due to the short-term nature of these assets and liabilities.	No
Long-term borrowings	Loans and borrowings are recognised initially at fair value less attributable transaction costs. Fair value on inception reflects the present value of expected cash flows using interest rates derived from market sources reflecting their term to maturity. Subsequently, loans and borrowings are stated at amortised cost, with any difference between amortised cost and redemption value being recognised in the Income Statement over the period of the borrowings on an effective interest rate basis.	No
Equity securities	The fair value represents the market value of the underlying securities.	Yes

4.2 Financial risk management (continued)

INTEREST RATES USED FOR DETERMINING FAIR VALUE

Where appropriate, the Group uses BBSW, LIBOR and Treasury Bond yield curves as of 30 June 2019 plus an adequate credit spread to discount financial instruments. The interest rates used are as follows:

	2019 % pa	2018 % pa
Derivatives	**3.25 – 4.76**	2.28 – 4.45
Loans and borrowings	**2.25 – 7.22**	2.25 – 7.22
Finance leases	**2.73 – 6.89**	3.10 – 6.01

THE 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 (ie as prices) or indirectly (ie derived from prices).

Level 3 – Inputs for the asset or liability that are not based on observable market data.

The following table presents the Group's financial assets and liabilities that are measured at Level 1 and Level 2 fair value:

	Level 1		Level 2	
	2019 $m	2018 $m	2019 $m	2018 $m
Assets				
Equity securities	**34.8**	32.3	**-**	-
Derivative financial assets	**-**	-	**10.6**	11.7
Total assets	**34.8**	32.3	**10.6**	11.7
Liabilities				
Derivative financial liabilities	**-**	-	**23.8**	35.5
Total liabilities	**-**	-	**23.8**	35.5

The Group does not have financial instruments that have been valued at Level 3.

4.2 Financial risk management (continued)

HEDGE ACCOUNTING

Boral has applied the ratio of 1:1 to all hedge relationships.

30 June 2019		Nominal Amount of Hedging Instrument and hedged Item $m	Hedge Rates	Carrying Amount of the Hedging Instrument (AUD) Financial Assets $m	Carrying Amount of the Hedging Instrument (AUD) Financial Liabilities $m	Change in Value of the Hedging Instrument Used for Calculating Hedge Ineffectiveness $m	Change in Value of the Hedged Item Used for Calculating Hedge Ineffectiveness $m	Change in Value of the Hedging Instrument Recognised in Reserve $m	Hedge Ineffectiveness Recognised in Profit and Loss[5] $m	Amount Reclassified from the Cash Flow Hedge Reserve to Profit and Loss and Asset Carrying Values $m
Cash flow hedges										
USD diesel costs - Commodity Swaps / Options (up to 1 year)	Barrels	**27.8**	**USD/Barrel**	**0.2**	**(0.9)**	**(3.2)**	**3.2**	**(3.2)**	**(1.0)**	**(1.7)**
			76.45 - 87.96							
AUD electricity costs - Commodity Swaps (up to 3 years)	MWh	**14.7**	**AUD/MWh**	**2.4**	**-**	**2.5**	**(2.5)**	**2.5**	**-**	**0.2**
			58.40 - 103.00							
AUD coal costs - Commodity Swaps (up to 1 year)	MT	**4.1**	**USD/MT**	**-**	**(0.6)**	**(0.6)**	**0.6**	**(0.6)**	**-**	**-**
			82.0							
Capital expenditures - Foreign Exchange Contracts (up to 1 year)	AUD	**20.1**	**AUD/EUR**	**-**	**(0.1)**	**(0.1)**	**0.1**	**(0.1)**	**-**	**(0.4)**
			0.6094 - 0.6134							
Capital expenditure - Foreign Exchange Contracts (up to 1 year)	AUD			**-**	**-**	**-**	**-**	**-**	**-**	**(1.4)**
Operation expenditures - Foreign Exchange Contracts (up to 1 year)	AUD	**80.8**	**AUD/USD**	**1.2**	**(0.4)**	**0.8**	**(0.8)**	**0.9**	**-**	**(1.6)**
			0.6931 - 0.7646							
Interest - Foreign Exchange Contracts (up to 1 year)	AUD	**24.1**	**AUD/USD**	**0.4**	**(0.2)**	**0.2**	**(0.2)**	**0.2**	**-**	**(2.6)**
			0.7012 - 0.7357							
Foreign currency borrowings - Cross Currency Swaps (up to 1 year)[1]	AUD	**189.4**	**Fixed**	**-**	**28.3**	**14.6**	**(14.6)**	**14.6**	**-**	**-**
			6.2%							
Foreign currency borrowings - CHF notes	CHF	**150.0**	**Fixed**	**-**	**-**	**-**	**-**	**(14.5)**	**-**	**-**
			2.25%							
				4.2	**26.1**	**14.2**	**(14.2)**	**(0.2)**	**(1.0)**	**(7.5)**
Fair value hedges										
Interest - Interest Rate Swaps (up to 1 year)[3]	USD	**169.8**	**Floating**	**-**	**(0.5)**	**2.8**	**(2.8)**	**-**	**-**	**-**
			n/a							
Interest - Interest Rate Swaps (up to 9 years)[4]	USD	**200.0**	**Floating**	**6.4**	**-**	**17.5**	**(17.7)**	**-**	**(0.2)**	**-**
			n/a							
				6.4	**(0.5)**	**20.3**	**(20.5)**	**-**	**(0.2)**	**-**
Net investment hedges										
Foreign currency investment - Cross Currency Swaps[2]	USD	**169.8**	**Fixed**	**-**	**(49.4)**	**(16.4)**	**16.4**	**(16.4)**	**-**	**-**
(up to 1 year)			**4.0%**							
				10.6	**(23.8)**	**18.1**	**(18.3)**	**(16.6)**	**(1.2)**	**(7.5)**

1. CHFUSD cross currency swap designated in cash flow hedge, net position is a liability.
2. CHFUSD cross currency swap designated in net investment hedge, net position is a liability.
3. Accumulated fair adjustment on hedged item carrying amount is $0.1 million.
4. Accumulated fair adjustment on hedged item carrying amount is $7.2 million.
5. Recognised in Other income/Other expenses in the Income Statement.

4.2 Financial risk management (continued)

HEDGE ACCOUNTING

Boral has applied the ratio of 1:1 to all hedge relationships.

30 June 2018		Nominal Amount of Hedging Instrument and hedged Item	Hedge Rates	Carrying Amount of the Hedging Instrument (AUD)		Change in Value of the Hedging Instrument Used for Calculating Hedge Ineffectiveness	Change in Value of the Hedging Item Used for Calculating Hedge Ineffectiveness	Change in Value of the Hedging Instrument Recognised in Reserve	Hedge Ineffectiveness Recognised in Profit and Loss	Amount Reclassified from the Cash Flow Hedge Reserve to Profit and Loss
				Financial Assets	Financial Liabilities					
		$m		$m	$m	$m	$m	$m	$m	$m
Cash flow hedges										
USD diesel costs - Commodity Swaps / Options (up to 1 year)	Barrels	40.6	USD/Barrel	4.2	-	4.3	(3.6)	3.6	(0.4)	1.4
			78.7 - 91.5							
AUD electricity costs - Commodity Swaps (up to 3 years)	MWh	12.6	AUD/MWh	0.4	(0.7)	(0.5)	0.5	(0.5)	-	(1.1)
			58.4 - 103.0							
AUD coal costs - Commodity Swaps (up to 1 year)	MT	-		-	-	-	-	-	-	(0.1)
Capital expenditures - Foreign Exchange Contracts (up to 2 years)	AUD	28.2	AUD/EUR	0.5	(0.1)	0.2	(0.2)	0.2	-	(0.8)
			0.6139 - 0.6888							
Capital expenditures - Foreign Exchange Contracts (up to 1 year)	AUD	20.0	AUD/USD	1.4	-	1.4	(1.4)	1.4	-	-
			0.7942 - 0.7652							
Operation expenditures - Foreign Exchange Contracts (up to 2 years)	AUD	40.7	AUD/USD	1.6	-	1.5	(1.5)	1.5	-	1.0
			0.7500 - 0.7949							
Interest - Foreign Exchange Contracts (up to 1 year)	AUD	37.9	AUD/USD	3.2	(0.6)	2.6	(2.6)	2.6	-	0.5
			0.7913 - 0.8067							
Foreign currency borrowings - Cross Currency Swaps (up to 3 years)[1]	AUD	189.4	Fixed	-	13.7	1.7	(1.7)	1.7	-	-
			6.2%							
Foreign currency borrowings - CHF notes	CHF	150.0	Fixed	-	-	-	-	(0.9)	-	-
			2.25%							
				11.3	12.3	11.2	(10.5)	9.6	(0.4)	0.9
Fair value hedges										
Interest - Interest Rate Swaps (up to 3 years)[3]	USD	169.8	Floating	0.4	(3.7)	(4.3)	4.3	(4.3)	-	-
			n/a							
Interest - Interest Rate Swaps (up to 10 years)[4]	USD	200.0	Floating	-	(11.1)	(11.1)	10.5	(10.5)	(0.6)	-
			n/a							
				0.4	(14.8)	(15.4)	14.8	(14.8)	(0.6)	-
Net investment hedges										
Foreign currency investment - Cross Currency Swaps[2]	USD	169.8	Fixed	-	(33.0)	(7.7)	7.7	(7.7)	-	-
(up to 3 years)			4.0%							
				11.7	(35.5)	(11.9)	12.0	(12.9)	(1.0)	0.9

1. CHFUSD cross currency swap designated in cash flow hedge, net position is a liability.
2. CHFUSD cross currency swap designated in net investment hedge, net position is a liability.
3. Accumulated fair adjustment on hedged item carrying amount is $2.8 million.
4. Accumulated fair adjustment on hedged item carrying amount is $10.5 million.

4.3 Issued capital

Ordinary shares issued are classified as equity and are fully paid, have no par value and carry one vote per share and the right to dividends. Incremental costs directly attributable to the issue of new shares or the exercise of options are recognised as a deduction from equity, net of any related income tax effects.

Where the Group purchases the Company's own equity instruments, as the result of a share buy-back, those instruments are deducted from equity and the associated shares are cancelled. The amount of the consideration paid, including directly attributable costs, is recognised as a deduction from contributed equity, net of any related income tax effects.

In the event of a winding up of Boral Limited, ordinary shareholders rank after creditors and are fully entitled to any proceeds of liquidation.

	2019 $m	2018 $m
Issued and paid up capital		
1,172,331,924 (2018: 1,172,331,924) ordinary shares, fully paid	**4,265.1**	4,265.1

There were no movements in issued capital during the current or prior period.

4.4 Reserves

Foreign currency translation reserve (FCTR)

Exchange differences arising on translation of foreign operations are recognised in FCTR, together with foreign exchange differences from the translation of liabilities that hedge the Group's net investment in a foreign operation. Gains or losses accumulated in equity are recognised in the Income Statement when a foreign operation is disposed.

	2019 $m	2018 $m
Balance at the beginning of the year	**115.2**	(25.9)
Net gain on translation of assets and liabilities of overseas entities	**258.8**	201.2
Foreign currency translation reserve transferred to net profit on disposal of controlled entities	**(10.8)**	-
Net loss on translation of long-term borrowings and foreign currency forward contracts net of tax benefit $27.8 million (2018: $25.6 million)	**(64.7)**	(60.1)
Balance at the end of the year	**298.5**	115.2

Hedging reserve

The hedging reserve records the portion of the gain or loss on a hedging instrument in a cash flow hedge that is determined to be an effective hedge relationship.

Balance at the beginning of the year	**5.3**	(2.1)
Transferred to the Income Statement	**(7.1)**	1.7
Transferred to initial carrying amount of hedged item	**(0.4)**	(0.9)
Gain/(loss) taken directly to equity	**(8.4)**	9.7
Tax benefit/(expense)	**4.8**	(3.1)
Balance at the end of the year	**(5.8)**	5.3

Share-based payments reserve

The share-based payments reserve is used to recognise the fair value of options and rights recognised as an expense.

Balance at the beginning of the year	**35.3**	47.3
Option/rights expense	**9.5**	10.4
Share acquisition rights vested	**(7.5)**	(22.4)
Balance at the end of the year	**37.3**	35.3

Total Reserves	**330.0**	155.8

Section 5: Taxation

This section provides the information that is most relevant to understanding the taxation treatment by the Group during the financial year.

Boral Limited and its wholly owned Australian controlled 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 Boral Limited.

5.1 Income tax expense

Income tax expense includes current and deferred tax. Current and deferred tax are recognised in the Income Statement except to the extent that they relate to items recognised directly in other comprehensive income or equity.

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

Significant accounting judgements, estimates and assumptions

The Group is subject to income taxes in Australia and other jurisdictions in which Boral operates. In determining the amount of current and deferred tax, the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. Changes in circumstances will alter expectations, which may impact the amount recognised on the Balance Sheet and the amount of other tax losses and temporary differences not yet recognised.

5.1 Income tax expense (continued)

For the year ended 30 June	Note	2019 $m	Restated[1] 2018 $m
(i) Income tax expense			
Current income tax expense		**52.7**	42.6
Deferred income tax expense		**32.9**	9.0
Changes in estimate from prior years		**5.8**	(9.6)
Income tax expense attributable to profit		**91.4**	42.0
(ii) Reconciliation of income tax expense to prima facie tax			
Income tax expense on profit:			
– at Australian tax rate 30% (2018: 30%)		**109.1**	144.9
– adjustment for difference between Australian and overseas tax rates		**(1.6)**	2.1
Income tax expense on pre-tax profit at standard rates		**107.5**	147.0
Tax effect of amounts which are not deductible/(taxable) in calculating taxable income:			
Capital and income tax losses realised		**(30.3)**	(27.6)
Share of associates' net profit (excluding significant items)		**(22.3)**	(25.6)
Non-deductible significant items		**38.5**	-
Tax benefit arising from share acquisition rights vested		**(2.3)**	(6.3)
Change in US federal tax rate	2.6	**-**	(33.7)
Other items		**(5.5)**	(2.2)
Income tax expense on profit		**85.6**	51.6
Changes in estimate from prior years		**5.8**	(9.6)
Income tax expense attributable to profit		**91.4**	42.0
Income tax expense/(benefit) from continuing operations			
Income tax expense excluding significant items		**116.4**	103.4
Income tax benefit relating to significant items	2.6	**(36.8)**	(69.4)
		79.6	34.0
Income tax expense from discontinued operations			
Income tax expense excluding significant items		**-**	8.0
Income tax expense relating to significant items	2.6	**11.8**	-
	6.1	**11.8**	8.0
		91.4	42.0
(iii) Tax amounts recognised directly in equity			
The following deferred tax amounts were charged/(credited) directly to equity during the year in respect of:			
Net exchange differences taken to equity		**(27.8)**	(25.6)
Fair value adjustment on cash flow hedges		**(4.8)**	3.1
Recognised in comprehensive income		**(32.6)**	(22.5)

1. Refer to Note 1D for further details.

5.2 Deferred tax assets and liabilities

Deferred tax is recognised on all temporary differences between the carrying amounts of assets and liabilities for financial reporting and taxation purposes.

The measurement of deferred tax mirrors the tax consequences that the Group expects to recover or settle the carrying amount of its assets and liabilities.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse.

A deferred tax asset is recognised 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 if it is no longer probable that the related tax benefit will be realised.

Significant accounting judgements, estimates and assumptions

The assumptions regarding future realisation, and the recognition of deferred tax assets, may change due to future operating performance and other factors.

	2019 $m	2018 $m
Recognised deferred tax balances		
Deferred tax asset	**78.7**	69.6
Deferred tax liability	**(50.8)**	(39.5)
	27.9	30.1
Unrecognised deferred tax assets		
The potential deferred tax asset has not been taken into account in respect of tax losses where recovery is not probable	**56.9**	81.9

The gross amount of capital and revenue tax losses carried forward that have not been recognised and the range of expiry dates for recovery by tax jurisdiction are as follows:

Tax jurisdiction	Expiry date	2019 $m	2018 $m
Germany	No restriction	**44.5**	45.7
United Kingdom[1]	No restriction	**42.1**	41.5
United States of America	30 June 2029 – 30 June 2037	**137.0**	230.6

1. Unbooked capital losses.

5.2 Deferred tax assets and liabilities (continued)

Movement in temporary differences during the year

As at 30 June 2019	Balance at the beginning of the year $m	Recognised in income $m	Recognised in equity $m	Change in US federal tax rate $m	Other movements $m	Balance at the end of the year[1] $m
Receivables	**2.2**	**(0.8)**	**-**	**-**	**-**	**1.4**
Inventories	**0.6**	**(2.5)**	**-**	**-**	**-**	**(1.9)**
Other financial instruments	**11.1**	**2.3**	**4.8**	**-**	**-**	**18.2**
Property, plant and equipment	**(79.7)**	**2.6**	**-**	**-**	**(0.4)**	**(77.5)**
Intangible assets	**(258.4)**	**61.6**	**-**	**-**	**(14.8)**	**(211.6)**
Payables	**13.0**	**0.7**	**-**	**-**	**-**	**13.7**
Loans and borrowings	**(1.9)**	**0.2**	**-**	**-**	**-**	**(1.7)**
Provisions	**109.1**	**(30.0)**	**-**	**-**	**1.2**	**80.3**
Other	**(12.9)**	**(16.1)**	**-**	**-**	**0.1**	**(28.9)**
Unrealised foreign exchange	**7.8**	**(2.6)**	**27.8**	**-**	**-**	**33.0**
Tax losses carried forward	**239.2**	**(48.3)**	**-**	**-**	**12.0**	**202.9**
	30.1	**(32.9)**	**32.6**	**-**	**(1.9)**	**27.9**

As at 30 June 2018	Balance at the beginning of the year $m	Recognised in income $m	Recognised in equity $m	Change in US federal tax rate $m	Other movements $m	Balance at the end of the year[1] $m
Receivables	3.7	(1.1)	-	(0.5)	0.1	2.2
Inventories	-	3.2	-	-	(2.6)	0.6
Other financial instruments	-	(0.2)	(3.1)	-	14.4	11.1
Property, plant and equipment	(89.7)	9.6	-	24.4	(24.0)	(79.7)
Intangible assets	(358.8)	1.3	-	122.8	(23.7)	(258.4)
Payables	8.0	2.3	-	-	2.7	13.0
Loans and borrowings	(10.2)	(0.4)	25.6	-	(16.9)	(1.9)
Provisions	121.1	(10.8)	-	(18.7)	17.5	109.1
Other	(52.5)	0.2	-	17.4	22.0	(12.9)
Unrealised foreign exchange	27.0	(15.1)	-	-	(4.1)	7.8
Tax losses carried forward	354.0	2.0	-	(111.7)	(5.1)	239.2
	2.6	(9.0)	22.5	33.7	(19.7)	30.1

1. Balance represents deferred tax asset $78.7 million (2018: $69.6 million) and deferred tax liability $50.8 million (2018: $39.5 million) giving rise to net deferred tax balance of $27.9 million (2018: $30.1 million).

Section 6: Group structure

This section explains significant aspects of Boral's group structure, including equity accounted investments that the Group has an interest in, its controlled entities and how changes have affected the Group structure. When applicable, it also provides information on business acquisitions and disposals made during the financial year.

6.1 Discontinued operations

A discontinued operation is a component of the Group's business that represents a separate major line of business or geographical area of operations that has been disposed of or is held for sale. An operation would be classified as held for sale if the carrying value of the assets of the operation will be principally recovered through a sale transaction rather than continuing use. Classification as a discontinued operation occurs upon disposal or when the operation meets the criteria to be classified as held for sale, if earlier. When an operation is classified as discontinued, the comparative Income Statement is restated as if the operation had been discontinued from the start of the comparative period.

During the current year, the Group completed the divestment of its Concrete and Quarries business in Denver, Colorado and the divestment of its US Block business.

As a result, the earnings in the current and comparative periods for these respective businesses, as well as the gain on sale, have been presented as "Discontinued Operations" in the Income Statement, and are summarised below.

	Note	2019 $m	Restated[1] 2018 $m
Results of discontinued operations			
Revenue		**62.1**	289.7
Expenses		**(62.1)**	(264.8)
Trading profit before significant items, net interest expense and income tax		**-**	24.9
Net profit on sale of discontinued operations	2.6	**69.6**	-
Profit before net interest expense and income tax		**69.6**	24.9
Net interest expense		**-**	-
Profit before income tax		**69.6**	24.9
Income tax expense	5.1	**(11.8)**	(8.0)
Net profit		**57.8**	16.9
Cash flows from discontinued operations			
Net cash provided by operating activities		**7.5**	35.3
Net cash (used in)/ provided by investing activities		**372.4**	(7.4)
Net cash provided by discontinued operations		**379.9**	27.9

1. Refer note 1D for further details.

6.1 Discontinued operations (continued)

Disposal of Denver Construction Materials

During July 2018, the Group sold its Concrete and Quarries business in Denver, Colorado to Brannan Sand and Gravel Company, LLC for A$173.2 million. Proceeds from the sale were used to reduce debt.

The following disposal entries were recorded in the current period.

	2019 $m
Consideration	**173.2**
Receivables	**(20.6)**
Inventories	**(2.9)**
Property, plant and equipment	**(78.1)**
Intangible assets	**(16.6)**
Other assets	**(3.2)**
Payables	**9.9**
Provisions	**0.4**
Net assets disposed	**(111.1)**
Costs incurred	**(4.3)**
Foreign currency translation reserve transferred to net profit on disposal of controlled entities	**8.3**
Gain on disposal before income tax	**66.1**

Disposal of US Block business

In November 2018, the Group sold the US Block business to Quikrete Holdings, Inc for A$210.6 million. This divestment helped to further strengthen the Group's Balance Sheet and focus on core operations.

The following disposal entries were recorded in the current period.

	2019 $m
Consideration	**210.6**
Receivables	**(15.8)**
Inventories	**(14.2)**
Property, plant and equipment	**(41.4)**
Intangible assets	**(95.9)**
Other assets	**(0.2)**
Payables	**3.0**
Provisions	**4.1**
Net assets disposed	**(160.4)**
Costs incurred	**(5.1)**
Goodwill allocated to disposal	**(44.1)**
Foreign currency translation reserve transferred to net profit on disposal of controlled entities	**2.5**
Gain on disposal before income tax	**3.5**

6.2 Equity accounted investments

The Group's investment in its equity accounted investments is initially recorded at cost and subsequently accounted for using the equity method. The carrying amount of the investment is adjusted to recognise changes in the Group's interest in the net assets of the investees. Dividends received from the investees are recognised as a reduction in the carrying amount of the investment. Goodwill relating to the investees is included in the carrying amount of the investment and is not tested for impairment individually. However, the carrying value of the investment is tested for impairment when there are indicators that the investment is potentially impaired.

The Group's share of the results of the investees is reported in the Income Statement and its share of movements in other comprehensive income is recognised in other comprehensive income.

When the Group's share of losses from an equity accounted investment exceed the Group's investment in the relevant equity accounted investment, the losses are taken against any long-term receivables relating to the equity accounted investment and if the Group's obligation for losses exceeds this amount, they are recorded as a provision in the Group's financial statements to the extent that the Group has an obligation to fund the liability.

Significant accounting judgements, estimates and assumptions

Assessing the recoverability of the carrying value of investments accounted for using the equity method requires judgement and estimates in determining the fair value of the asset. The value in use calculation requires the Group to estimate several key assumptions such as market forecasts, discount rate, long-term growth rate and EBITDA forecasts to calculate the future discounted cash flows expected to be generated by the CGU.

				OWNERSHIP INTEREST		INVESTMENT CARRYING AMOUNT	
Name	**Principal activity**	**Country of incorporation**	**Balance date**	**2019 %**	**2018 %**	**2019 $m**	**2018 $m**
Details of equity accounted investments							
Bitumen Importers Australia Pty Ltd	Bitumen importer	Australia	30-Jun	**50**	50	**6.8**	7.7
Caribbean Roof Tile Company Limited[1]	Roof tiles	Trinidad	31-Dec	**-**	50	**-**	-
Flyash Australia Pty Ltd	Fly ash collection	Australia	31-Dec	**50**	50	**3.1**	2.9
Highland Pine Products Pty Ltd	Timber	Australia	30-Jun	**50**	50	**-**	-
Meridian Brick[2]	Bricks	USA/ Canada	30-Jun	**50**	50	**228.6**	410.6
Penrith Lakes Development Corporation Ltd	Property development	Australia	30-Jun	**40**	40	**-**	-
South East Asphalt Pty Ltd	Asphalt	Australia	30-Jun	**50**	50	**1.3**	1.3
Sunstate Cement Ltd	Cement manufacturer	Australia	30-Jun	**50**	50	**11.1**	11.1
USG Boral Building Products[3]	Plasterboard	Australia/ Singapore	30-Jun	**50**	50	**1,041.1**	977.7
US Tile LLC	Roof tiles	USA	31-Dec	**50**	50	**-**	-
TOTAL						**1,292.0**	1,411.3

1. Sold during June 2019.
2. The Group has a 50% interest in the joint ventures in the USA (Meridian Brick LLC) and Canada (Meridian Brick Canada Ltd).
3. The Group has a 50% interest in the Gypsum joint ventures in Australia (USG Boral Building Products Pty Ltd) and Asia (USG Boral Building Products Pte Ltd).

6.2 Equity accounted investments (continued)

	Note	2019 $m	2018 $m
Movements in carrying value of equity accounted investments			
Balance at the beginning of the year		**1,411.3**	1,353.7
Share of equity accounted income		**73.1**	90.2
Significant items	2.6	**(200.8)**	(4.6)
Dividends received		**(55.0)**	(68.4)
Results recognised against losses previously taken to non-current receivables		**(2.3)**	(3.3)
Share of movement in currency reserve		**6.3**	5.1
Net foreign currency exchange differences		**59.4**	38.6
Balance at the end of the year		**1,292.0**	1,411.3

		Significant Equity Accounted Investments					
		USG Boral Building Products		Meridian Brick		Total	
	Note	2019 $m	2018 $m	2019[1] $m	2018 $m	2019 $m	2018 $m
Summarised Income Statement at 100%							
Revenue		**1,605.5**	1,574.9	**524.6**	519.4	**2,457.1**	2,407.6
Profit/(loss) before income tax		**167.8**	193.1	**(24.7)**	(0.6)	**216.7**	274.4
Income tax (expense)/benefit		**(50.6)**	(61.2)	**5.9**	(2.6)	**(65.5)**	(86.4)
Non-controlling interest		**(3.8)**	(5.7)	**-**	-	**(3.8)**	(5.7)
Net profit/(loss) before significant items		**113.4**	126.2	**(18.8)**	(3.2)	**147.4**	182.3
Significant items net of tax		**(10.4)**	(2.0)	**(391.2)**	(7.2)	**(401.6)**	(9.2)
Net profit/(loss)		**103.0**	124.2	**(410.0)**	(10.4)	**(254.2)**	173.1
The Group's share based on % ownership:							
Net profit/(loss) before significant items		**56.7**	63.1	**(9.4)**	(1.6)	**73.1**	90.2
Significant items net of tax	2.6	**(5.2)**	(1.0)	**(195.6)**	(3.6)	**(200.8)**	(4.6)
Net profit/(loss)		**51.5**	62.1	**(205.0)**	(5.2)	**(127.7)**	85.6
Depreciation and amortisation		**(83.6)**	(74.1)	**(29.3)**	(27.5)		
Net interest expense		**(0.4)**	(0.7)	**(3.1)**	(2.3)		

1. Underperformance of the business in the current year, particularly the second half of FY2019, which was primarily driven by a significant downturn in the Canadian housing market, a deterioration in the US housing starts and significant plant closures resulting in lower fixed cost recovery, triggered an assessment of the recoverability of the carrying value of the investment in the Meridian Brick CGU. A value in use methodology was used to determine the recoverable amount of the CGU, leading to an impairment of $195.6 million. The key assumptions used in the model were a post-tax discount rate of 10.5%, a long-term growth rate of 2.5% and housing starts aligned to future estimates prepared by reputable third parties. Given that the asset has been written down to value in use, any significant adverse change in an assumption in isolation or combination would increase the amount of impairment recognised.

6.2 Equity accounted investments (continued)

	USG Boral Building Products		Meridian Brick		Total	
	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
Summarised Balance Sheet at 100%						
Current assets	**591.2**	574.5	**209.9**	236.5	**874.2**	891.5
Non-current assets	**1,901.0**	1,786.8	**404.2**	745.1	**2,427.1**	2,660.7
Total assets	**2,492.2**	2,361.3	**614.1**	981.6	**3,301.3**	3,552.2
Current liabilities	**(223.2)**	(237.4)	**(144.1)**	(108.1)	**(390.1)**	(372.1)
Non-current liabilities	**(71.5)**	(65.2)	**(12.9)**	(52.4)	**(212.0)**	(254.2)
Total liabilities	**(294.7)**	(302.6)	**(157.0)**	(160.5)	**(602.1)**	(626.3)
Non-controlling interest	**(115.3)**	(103.2)	**-**	-	**(115.3)**	(103.2)
Net assets	**2,082.2**	1,955.5	**457.1**	821.1	**2,583.9**	2,822.7
The Group's share of net assets based on % ownership	**1,041.1**	977.7	**228.6**	410.6	**1,292.0**	1,411.3

Cash and cash equivalents	**89.9**	164.7	**13.6**	23.2
Current financial liabilities	**(17.5)**	(29.5)	**(46.7)**	(12.8)
Non-current financial liabilities	**(12.9)**	(21.5)	**-**	(44.2)

6.3 Acquisitions

Business combinations are accounted for using the acquisition method. Identifiable assets, liabilities and contingent liabilities acquired are measured at fair value at the acquisition date.

The fair value of the consideration transferred comprises the initial cash paid to the sellers and an estimate for any future payments the Group may be liable to pay, based on future performance of the business. The excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests and any previous interest held over the fair value of the net identifiable assets acquired is goodwill.

On the acquisition of a subsidiary, or of an interest in an associate or joint venture, fair values are attributed to the net assets including identifiable intangible assets and contingent liabilities acquired.

The non-controlling interests on the date of acquisition can be measured at either fair value or at the non-controlling shareholders' proportion of the net fair value of the identifiable assets assumed. This choice is made separately for each acquisition. Transactions with non-controlling interests are recorded directly in retained earnings.

Significant accounting judgements, estimates and assumptions

Accounting for acquisition of businesses requires judgement and estimates in determining the fair value of acquired assets and liabilities. Techniques used to determine the fair value of acquired assets and liabilities include the excess earnings approach and relief from royalty for the valuation of intangibles, and depreciated replacement cost for the valuation of property, plant and equipment. The relevant accounting standard allows the fair value of assets acquired to be refined for a window of one year after the acquisition date, and judgement is required to ensure that the adjustments made reflect new information obtained about facts and circumstances that existed as of the acquisition date. The adjustments made on fair value of assets are retrospective in nature and have an impact on goodwill recognised on acquisition.

Acquisition of Pro Concrete Group

On 2 July 2018, the Group acquired 100% of the assets of Pro Concrete Pumping, a concrete placing business in Queensland, Australia for total consideration of $10.9 million.

6.4 Controlled entities

The consolidated financial statements include Boral Limited (parent entity) and the following wholly owned subsidiaries, unless stated otherwise, in the table below.

		Beneficial ownership by	
	Country of incorporation	Group 2019 %	Group 2018 %
Boral Limited	Australia		
Boral Cement Limited >*	Australia	**100**	100
Barnu Pty Ltd*	Australia	**100**	100
Boral Building Materials Pty Ltd >*	Australia	**100**	100
Boral International Pty Ltd >*	Australia	**100**	100
MJI (Thailand) Ltd	Thailand	**100**	100
Eldorado Stone Philippines, Inc.	Philippines	**100**	100
Piedras Headwaters, S. de R.L. de C.V.	Mexico	**100**	100
Boral USA <	USA	**100**	100
Boral International Holdings Inc.	USA	**100**	100
Boral Construction Materials LLC	USA	**100**	100
Ready Mixed Concrete Company ***	USA	**-**	100
Sprat-Platte Ranch Co. LLLP ***	USA	**-**	100
Morton Lakes, LLC ***	USA	**-**	100
Aggregate Investments, L.L.C. ***	USA	**-**	100
BCM Oklahoma LLC	USA	**100**	100
McCanne Ditch and Reservoir Company	USA	**100**	100
Boral Industries Inc.	USA	**100**	100
Boral Meridian Holdings Inc.	USA	**100**	100
Boral IP Holdings LLC	USA	**100**	100
Headwaters Incorporated	USA	**100**	100
Global Climate Reserve Corporation	USA	**100**	100
Boral Windows LLC	USA	**100**	100
Magnolia Windows & Doors, LLC **	USA	**-**	100
Evonik Headwaters LLP	UK	**50**	50
Boral Building Products Inc.	USA	**100**	100
Boral Composites Inc. **	USA	**-**	100
Headwaters Building Products Inc.	USA	**100**	100
Boral Concrete Products Louisiana LLC ***	USA	**-**	100
Boral Concrete Products LLC ***	USA	**-**	100
Headwaters Stone LLC	USA	**100**	100
Boral Stone Products LLC	USA	**100**	100
Eldorado Stone LLC	USA	**100**	100
Stonecraft Manufacturing, LLC	USA	**100**	100
Eldorado Stone Operations, LLC	USA	**100**	100
Chihuahua Stone, LLC	USA	**100**	100
Quarry Stone, LLC	USA	**100**	100
Dutch Quality Stone, Inc.	USA	**100**	100

Section 6: Group structure (continued)

6.4 Controlled entities (continued)

		Beneficial ownership by	
	Country of incorporation	Group 2019 %	Group 2018 %
Boral CM Holdings LLC	USA	**100**	100
Boral CM Services LLC	USA	**100**	100
Boral Resources LLC	USA	**100**	100
Boral Plant Services LLC	USA	**100**	100
Boral Transportation Services LLC	USA	**100**	100
Headwaters Services, LLC	USA	**100**	100
Synthetic Materials, LLC	USA	**100**	100
Boral Materials LLC	USA	**100**	100
Headwaters Resources Limited	Canada	**100**	100
Headwaters Energy Services Corp.	USA	**100**	100
American Lignite Energy, LLC	USA	**67**	67
Covol Fuels Chinook, LLC	USA	**100**	100
Covol Fuels Rock Crusher, LLC	USA	**100**	100
Covol Engineered Fuels, LLC	USA	**100**	100
Covol Fuels No.2, LLC	USA	**100**	100
Covol Fuels No.4, LLC	USA	**100**	100
Boral Lifetile Inc.	USA	**100**	100
Boral Roofing de Mexico, S. de R.L. de C.V.	Mexico	**100**	100
Boral Roofing LLC	USA	**100**	100
Gerard Roof Products, LLC	USA	**100**	100
Boral Roofing Products Canada Ltd. ***	Canada	**-**	100
Metrotile Manufacturing, LLC	USA	**100**	100
Boral Concrete Tile Inc.	USA	**100**	100
Tile Service Company LLC	USA	**100**	100
E.U.M. Tejas De Concreto Servicios, S. de R.L. de C.V.	Mexico	**100**	100
Boral (UK) Ltd	UK	**100**	100
Tapco Europe Limited	UK	**100**	100
Boral Investments BV	Netherlands	**100**	100
Boral Industrie GmbH	Germany	**100**	100
Boral Klinker GmbH	Germany	**100**	100
Boral Mecklenburger Ziegel GmbH	Germany	**100**	100
Boral Canada Ltd	Canada	**100**	100
Boral Investments Pty Ltd >*	Australia	**100**	100
Boral Construction Materials Ltd >*	Australia	**100**	100
Boral Resources (WA) Ltd >*	Australia	**100**	100
Boral Contracting Pty Ltd*	Australia	**100**	100
Boral Construction Related Businesses Pty Ltd >*	Australia	**100**	100

6.4 Controlled entities (continued)

		Beneficial ownership by	
	Country of incorporation	Group 2019 %	Group 2018 %
Boral Resources (Vic) Pty Ltd >*	Australia	**100**	100
Bayview Quarries Pty Ltd*	Australia	**100**	100
Boral Resources (Qld) Pty Ltd >*	Australia	**100**	100
Allen's Asphalt Pty Ltd >*	Australia	**100**	100
Q-Crete Premix Pty Ltd >*	Australia	**100**	100
Boral Resources (NSW) Pty Ltd >*	Australia	**100**	100
Dunmore Sand & Soil Pty Ltd*	Australia	**100**	100
Boral Recycling Pty Ltd >*	Australia	**100**	100
De Martin & Gasparini Pty Ltd >*	Australia	**100**	100
Pro Concrete Group Pty Limited*	Australia	**100**	100
De Martin & Gasparini Pumping Pty Ltd*	Australia	**100**	100
De Martin & Gasparini Contractors Pty Ltd*	Australia	**100**	100
Boral Precast Holdings Pty Ltd >*	Australia	**100**	100
Boral Construction Materials Group Ltd >*	Australia	**100**	100
Concrite Pty Ltd >*	Australia	**100**	100
Boral Resources (SA) Ltd >*	Australia	**100**	100
Bitumax Pty Ltd >*	Australia	**100**	100
Road Surfaces Group Pty Ltd >*	Australia	**100**	100
Alsafe Premix Concrete Pty Ltd >*	Australia	**100**	100
Boral Transport Ltd >*	Australia	**100**	100
Boral Corporate Services Pty Ltd	Australia	**100**	100
Bitupave Ltd >*	Australia	**100**	100
Boral Resources (Country) Pty Ltd >*	Australia	**100**	100
Boral Concrete Contracting Pty Ltd >*	Australia	**100**	100
Bayview Pty Ltd*	Australia	**100**	100
Dandenong Quarries Pty Ltd*	Australia	**100**	100
Boral Insurance Pty Ltd	Australia	**100**	100
Allen Taylor & Company Ltd >*	Australia	**100**	100
Oberon Softwood Holdings Pty Ltd >*	Australia	**100**	100
Duncan's Holdings Ltd >*	Australia	**100**	100
Boral Bricks Pty Ltd >*	Australia	**100**	100
Boral Masonry Ltd >*	Australia	**100**	100
Boral Hollostone Masonry (South Aust) Pty Ltd >*	Australia	**100**	100
Boral Montoro Pty Ltd >*	Australia	**100**	100
Boral Timber Fibre Exports Pty Ltd >*	Australia	**100**	100
Boral Shared Business Services Pty Ltd >*	Australia	**100**	100
Boral Building Products Ltd >*	Australia	**100**	100
Boral Bricks Western Australia Pty Ltd >*	Australia	**100**	100
Boral IP Holdings (Australia) Pty Ltd	Australia	**100**	100
Boral Finance Pty Ltd >*	Australia	**100**	100

> Granted relief by the Australian Securities and Investments Commission from specified accounting requirements in accordance with ASIC Corporations (Wholly-owned Companies) Instrument 2016/785 (refer to note 8.7).
* Entered into cross guarantee with Boral Limited (refer to note 8.7).
** Deregistered during the year.
*** Disposed of during the year.
< A Delaware general partnership.

All the shares held by Boral Limited in controlled entities are ordinary shares.

6.4 Controlled entities (continued)

The following controlled entities were disposed of or deregistered during the financial year ended 30 June 2019:

Entities disposed:	**Date of disposal**
Ready Mixed Concrete Company	Jul 2018
Sprat-Platte Ranch Co. LLLP	Jul 2018
Morton Lakes, LLC	Jul 2018
Aggregate Investments, L.L.C.	Jul 2018
Boral Concrete Products Louisiana LLC	Nov 2018
Boral Concrete Products LLC	Nov 2018
Boral Roofing Products Canada Ltd.[1]	Apr 2019

[1] Sold to Meridian Brick Canada Ltd, an equity accounted investment of the Group.

Entities deregistered:			**Date of deregistration**
Boral Composites Inc.	merged into	Boral Building Products Inc.	Dec 2018
Magnolia Windows & Doors, LLC	merged into	Boral Windows LLC	Jun 2019

The following controlled entities had name changes during the financial year ended 30 June 2019:

Name changes during the financial period:		
De Martin & Gasparini Concrete Placers Pty Ltd	to	Pro Concrete Group Pty Limited
Tapco International Corporation	to	Boral Building Products Inc.
Allmet Roof Products, Ltd	to	Boral Roofing Products Canada Ltd.

Section 7: Employee benefits

This section provides a breakdown of the various programs Boral uses to reward and recognise employees and key executives, including Key Management Personnel (KMP). Boral believes that these programs reinforce the value of ownership and incentives and drive performance both individually and collectively to deliver better returns to shareholders.

7.1 Employee liabilities

Liabilities for wages and salaries, including non-monetary benefits, and annual leave expected to be settled within 12 months of the reporting date, are measured at the amounts expected to be paid when the liabilities are settled.

Liabilities for long service leave are measured as the present value of estimated future payments for the services provided by employees up to the reporting date. Liabilities that are not expected to be settled within 12 months are discounted at the reporting date using market yields of high-quality corporate bonds or government bonds for countries where there is no deep market for corporate bonds. The rates used reflect the terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

	2019 $m	2018 $m
Employee liabilities		
Current	**118.7**	129.6
Non-current	**46.1**	40.6
	164.8	170.2

7.2 Employee benefits expense

Employee benefits expense includes salaries and wages, defined contribution expenses, share-based payments and other entitlements.

	2019 $m	2018 $m
Employee benefits expense[1]	**1,305.5**	1,254.5

[1] Total defined contribution expense for the period was $53.0 million (2018: $50.1 million).

7.3 Share-based payments

The Group provides benefits to senior executives in the form of share-based payment transactions, whereby senior executives render services in exchange for options and/or rights over shares.

The cost of the share-based payments with employees is measured by reference to the fair value at the date at which they are granted, and amortised over the expected vesting period with a corresponding increase in equity. The amount recognised is adjusted to reflect the actual number of rights that vest, except for those that fail to vest due to market conditions not being achieved.

Significant accounting judgements, estimates and assumptions

The fair value at grant date is independently determined using a pricing model that takes into account the exercise price, the terms of the share-based payment, the vesting and performance criteria, the impact of dilution, the non-tradeable nature of the payment, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk-free interest rate for the term of the share-based payment.

7.3 Share-based payments (continued)

Share Acquisition Rights (SAR)

During the current year, SARs were issued under the Boral Equity Plan Rules. SARs issued with a Total Shareholder Return (TSR) hurdle were valued at $3.52 per right, while SARs with a Return on Funds Employed (ROFE) target were valued at $6.13 per right.

The following represents the inputs to the pricing model used in estimating fair value:

	2019	2018
Grant date share price	**$7.00**	$6.62
Risk-free rate	**1.99%**	2.51%
Dividend yield	**4.50%**	4.12%
Volatility factor	**25%**	25%

In addition, SARs were issued during the year for Deferred Short-Term Incentive (STI) – representing the deferral of 20% of short-term incentive payments into equity, subject to a vesting requirement for the employee to remain with the Company for two years following grant date. The rights were valued at $6.93 per right, being the volume weighted average price traded on the ASX over the five trading days up to 1 September 2018.

Further details of the terms and conditions of the issue of rights are contained in the Remuneration Report.

Set out below are summaries of share acquisition rights granted under the plans.

Rights	Grant date	Expiry date	Exercise price	Balance at beginning of the year	Issued during the year	Cancelled during the year	Vested and exercised during the year	Balance at end of the year
				Number	Number	Number	Number	Number
Consolidated - 2019								
TSR	**1/9/2011**	**1/9/2018**	**$0.00**	**707,871**	**-**	**(707,871)**	**-**	**-**
TSR	**1/9/2015**	**1/9/2018**	**$0.00**	**1,762,939**	**-**	**(1,762,939)**	**-**	**-**
ROFE	**1/9/2015**	**1/9/2018**	**$0.00**	**881,442**	**-**	**(881,442)**	**-**	**-**
TRI[1]	**1/9/2015**	**1/9/2018**	**$0.00**	**427,463**	**-**	**-**	**(427,463)**	**-**
TSR	**1/9/2016**	**1/9/2019**	**$0.00**	**1,564,024**	**-**	**(67,147)**	**-**	**1,496,877**
ROFE	**1/9/2016**	**1/9/2019**	**$0.00**	**781,982**	**-**	**(33,572)**	**-**	**748,410**
Deferred STI	**1/9/2016**	**1/9/2018**	**$0.00**	**654,731**	**-**	**(8,466)**	**(646,265)**	**-**
TSR	**1/9/2017**	**1/9/2020**	**$0.00**	**1,959,988**	**-**	**(188,694)**	**-**	**1,771,294**
ROFE	**1/9/2017**	**1/9/2020**	**$0.00**	**979,539**	**-**	**(93,897)**	**-**	**885,642**
Deferred STI	**1/9/2017**	**1/9/2019**	**$0.00**	**502,189**	**-**	**(21,666)**	**-**	**480,523**
TSR	**1/9/2018**	**1/9/2021**	**$0.00**		**2,024,426**	**(140,092)**	**-**	**1,884,334**
ROFE	**1/9/2018**	**1/9/2021**	**$0.00**		**1,012,212**	**(70,046)**	**-**	**942,166**
Deferred STI	**1/9/2018**	**1/9/2020**	**$0.00**		**490,579**	**(12,906)**	**-**	**477,673**
				10,222,168	**3,527,217**	**(3,988,738)**	**(1,073,728)**	**8,686,919**

1. Targeted retention incentive.

7.3 Share-based payments (continued)

Share Acquisition Rights (SAR) (continued)

Rights	Grant date	Expiry date	Exercise price	Balance at beginning of the year	Issued during the year	Cancelled during the year	Vested and exercised during the year	Balance at end of the year
				Number	Number	Number	Number	Number
Consolidated - 2018								
TSR	12/11/2010	12/11/2017	$0.00	1,406,102	-	(474,377)	(931,725)	-
TSR	1/9/2011	1/9/2018	$0.00	711,495	-	(3,624)	-	707,871
TSR	1/9/2014	1/9/2017	$0.00	1,709,810	-	(197,336)	(1,512,474)	-
ROFE	1/9/2014	1/9/2017	$0.00	854,919	-	(854,919)	-	-
TSR	1/9/2015	1/9/2018	$0.00	1,817,015	-	(54,076)	-	1,762,939
ROFE	1/9/2015	1/9/2018	$0.00	908,500	-	(27,058)	-	881,442
TRI[1]	1/9/2015	1/9/2018	$0.00	427,463	-	-	-	427,463
Deferred STI	1/9/2015	1/9/2017	$0.00	798,823	-	(1,365)	(797,458)	-
TSR	1/9/2016	1/9/2019	$0.00	1,598,624	-	(34,600)	-	1,564,024
ROFE	1/9/2016	1/9/2019	$0.00	799,280	-	(17,298)	-	781,982
Deferred STI	1/9/2016	1/9/2018	$0.00	673,034	-	(18,303)	-	654,731
TSR	1/9/2017	1/9/2020	$0.00	-	2,050,009	(90,021)		1,959,988
ROFE	1/9/2017	1/9/2020	$0.00	-	1,025,004	(45,465)	-	979,539
Deferred STI	1/9/2017	1/9/2019	$0.00	-	510,554	(8,365)	-	502,189
				11,705,065	3,585,567	(1,826,807)	(3,241,657)	10,222,168

1. Targeted retention incentive.

During the year ended 30 June 2019, the Group recognised an expense of $9.5 million (2018: $10.4 million) in relation to share-based payments.

7.4 Key management personnel disclosures

Key management personnel compensation is set out below. Detailed remuneration disclosures are provided in the audited Remuneration Report section in the Directors' Report.

	2019 $'000	2018 $'000
Short-term employee benefits	**6,967.6**	9,365.9
Post-employment benefits	**622.1**	615.5
Share-based payments	**2,717.7**	3,458.4
Long-term employee benefits	**180.3**	62.1
	10,487.7	13,501.9

Section 8: Other notes

This section provides details on other required disclosures relating to the Group to comply with the accounting standards and other pronouncements.

8.1 Contingent liabilities

Details of contingent liabilities where the probability of future payments/receipts is not considered remote are set out below.

	2019 $m	2018 $m
Unsecured contingent liabilities		
Bank guarantees	**42.4**	38.5

A number of sites within the Group and its associates have been identified as contaminated, generally as a result of prior activities conducted at the sites. Review and appropriate implementation of clean-up requirements for these is ongoing. For sites where the requirements can be assessed, estimated clean-up costs have been provisioned. For some sites, the requirements cannot be reliably assessed at this stage.

Certain entities within the Group are, from time to time, subject to various lawsuits, claims, regulatory investigations, and on occasion, prosecution.

Consistent with other companies of the size and diversity of Boral, the Group is the subject of periodic information requests, investigations and audit activity by the Australian Taxation Office (ATO) and taxation authorities in other jurisdictions in which Boral operates.

Where the liability is estimable and probable, the Group has recognised appropriate provisions based on consideration of available information and, where appropriate, independent advice.

8.2 Subsequent events

On 23 August 2019, the Group agreed to sell its Midland Bricks business for $86.0 million, subject to customary completion adjustments. The transaction is expected to complete by the end of this calendar year, or soon after.

On 26 August 2019, the Group announced that its USG plasterboard joint venture entered into an agreement with Gebr Knauf KG ("Knauf") to expand the joint venture by acquiring Knauf's plasterboard business in Asia. In addition, the Group has agreed to acquire Knauf's 50% ownership interest in USG Boral Australia & New Zealand (NZ), subject to a call option to buy back their ownership interest that Knauf can exercise within five years. The transactions are subject to typical conditions precedent, including regulatory approvals.

The Group's total net investment is approximately US$441.0 million being US$200 million to buy the remaining 50% of USG Boral Australia & NZ and US$241.0 million for the Group's 50% share of the USG Boral JV's investment in Knauf Asia Plasterboard after divesting the Middle East business.

8.3 Commitments

The Group leases property, equipment and vehicles under operating leases expiring from one to 25 years. Leases generally provide the consolidated entity with a right of renewal at which time all terms are renegotiated. Some leases involve lease payments comprising a base amount plus an incremental contingent rental. Contingent rentals are based on the Consumer Price Index or operating criteria.

	2019 $m	2018 $m
Capital expenditure commitments		
Contracted but not provided for are payable as follows:		
Not later than one year	**19.5**	32.3
The capital expenditure commitments are in respect of the purchase of plant and equipment.		
Finance leases		
Lease commitments in respect of finance leases are payable as follows:		
Not later than one year	**3.3**	6.8
Later than one year but not later than five years	**3.2**	10.3
Later than five years	**-**	0.2
	6.5	17.3
Less: Future finance charges and executory costs	**(0.4)**	(0.5)
	6.1	16.8

	2019 $m	2018 $m
Operating leases		
Lease commitments in respect of operating leases are payable as follows:		
Not later than one year	**106.7**	99.6
Later than one year but not later than five years	**222.2**	211.6
Later than five years	**134.5**	74.2
	463.4	385.4

8.4 Auditors' remuneration

	2019 $'000	2018 $'000
Audit services:		
KPMG Australia – audit and review of financial reports	**1,465**	1,466
KPMG overseas firms – audit and review of financial reports	**1,189**	1,249
KPMG Australia – other assurance services	**102**	616
	2,756	3,331
Other services:		
KPMG Australia – taxation services	**402**	256
KPMG Australia – due diligence	**178**	-
KPMG Australia – advisory	**20**	209
KPMG Australia – other	**-**	16
KPMG overseas firms – due diligence and advisory	**615**	-
KPMG overseas firms – taxation services	**210**	47
	1,425	528
	4,181	3,859

8.5 Related party disclosures

Controlled entities

Interests held in controlled entities are set out in note 6.4.

Associated entities

Interests held in associated entities are set out in note 6.2. The business activities of a number of these entities are conducted under joint venture arrangements. Associated entities conduct business transactions with various controlled entities. Such transactions include purchases and sales of certain products, dividends, interest and loans. All such transactions are conducted on the basis of normal commercial terms and conditions.

Director transactions with the Group

Transactions entered into during the year with Directors of Boral Limited and the Group are within normal employee, customer or supplier relationships on terms and conditions no more favourable than dealings in the same circumstances on an arm's length basis and include:

- the receipt of dividends from Boral Limited;
- participation in the Boral Long Term Incentive Plan;
- terms and conditions of employment;
- reimbursement of expenses; and
- purchases of goods and services.

A number of Directors of the Company hold directorships in other entities. Several of these entities transacted with the Group on terms and conditions no more favourable than those available on an arm's length basis.

8.6 Parent entity disclosures

For the year ended 30 June	BORAL LIMITED 2019 $m	 2018 $m
RESULT OF THE PARENT ENTITY		
Profit after tax	**369.7**	278.6
Other comprehensive income after tax	**2.3**	3.9
Total comprehensive income for the period	**372.0**	282.5
SUMMARISED BALANCE SHEET		
Current assets	**4,989.3**	4,827.0
Non-current assets	**1,382.5**	1,348.2
Total assets	**6,371.8**	6,175.2
Current liabilities	**1,022.6**	683.0
Non-current liabilities	**287.9**	488.4
Total liabilities	**1,310.5**	1,171.4
Net assets	**5,061.3**	5,003.8
Issued capital	**4,265.1**	4,265.1
Reserves	**36.4**	32.1
Retained earnings	**759.8**	706.6
Total equity	**5,061.3**	5,003.8

Parent entity contingencies

Details of contingent liabilities and contingent assets where the probability of future payments/receipts is not considered remote are set out below.

Unsecured contingent liabilities		
Bank guarantees	**42.2**	38.3

The Company has given to its bankers letters of responsibility in respect of accommodation provided from time to time by the banks to controlled entities.

The Company, from time to time, may be subject to lawsuits and claims in the ordinary course of business.

Consistent with other companies of the size and diversity of Boral, the Company is the subject of periodic information requests, investigations and audit activity by the Australian Taxation Office (ATO) and taxation authorities in other jurisdictions in which Boral operates.

The Company has considered all of the above claims and, where appropriate, sought independent advice and believes it holds appropriate provisions.

8.7 Deed of cross guarantee

Under the terms of ASIC Corporations (Wholly-owned Companies) Instrument 2016/785, certain wholly owned controlled entities have been granted relief from the requirement to prepare audited financial reports. Boral Limited has entered into an approved deed of indemnity for the cross-guarantee of liabilities with those controlled entities identified in note 6.4.

The following consolidated Statement of Comprehensive Income and Balance Sheet comprises Boral Limited and its controlled entities which are party to the Deed of Cross Guarantee, after eliminating all transactions between parties to the Deed.

There were no discontinued operations during the year.

	2019 $m	2018 $m
STATEMENT OF COMPREHENSIVE INCOME		
Revenue	**3,572.0**	3,589.8
Profit before income tax expense	**575.8**	435.8
Income tax expense	**(51.9)**	(40.7)
Net profit	**523.9**	395.1
Other comprehensive income		
Items that may be reclassified subsequently to Income Statement:		
Exchange differences from translation of foreign operations taken to equity	**25.9**	53.0
Fair value adjustment on cash flow hedges	**(15.9)**	10.5
Income tax on items that may be reclassified subsequently to Income Statement	**4.8**	(3.2)
Total comprehensive income	**538.7**	455.4
Reconciliation of movements in retained earnings		
Balance at the beginning of the year	**1,113.1**	1,005.2
Transition impact from implementation of AASB 15	**(1.4)**	-
Net profit	**523.9**	395.1
Dividends paid	**(316.5)**	(287.2)
Balance at the end of the year	**1,319.1**	1,113.1

8.7 Deed of cross guarantee (continued)

	2019 $m	2018 $m
BALANCE SHEET		
CURRENT ASSETS		
Cash and cash equivalents	**95.0**	25.0
Receivables	**853.6**	822.7
Inventories	**396.6**	363.9
Financial assets	**3.8**	11.2
Other assets	**29.5**	28.3
TOTAL CURRENT ASSETS	**1,378.5**	1,251.1
NON-CURRENT ASSETS		
Receivables	**139.9**	158.6
Inventories	**11.4**	11.9
Investments accounted for using the equity method	**1,063.5**	1,000.7
Financial assets	**4,011.9**	4,004.6
Property, plant and equipment	**2,155.2**	2,079.7
Intangible assets	**75.9**	72.9
Deferred tax assets	**78.7**	69.6
Other assets	**10.9**	11.6
TOTAL NON-CURRENT ASSETS	**7,547.4**	7,409.6
TOTAL ASSETS	**8,925.9**	8,660.7
CURRENT LIABILITIES		
Payables	**1,111.1**	788.2
Loans and borrowings	**230.1**	20.6
Financial liabilities	**23.8**	8.6
Current tax liabilities	**18.0**	10.1
Employee benefit liabilities	**108.5**	124.8
Provisions	**28.4**	29.4
TOTAL CURRENT LIABILITIES	**1,519.9**	981.7
NON-CURRENT LIABILITIES		
Loans and borrowings	**1,630.7**	2,092.0
Financial liabilities	**-**	26.9
Employee benefit liabilities	**10.8**	10.0
Provisions	**70.6**	73.5
Other liabilities	**15.2**	20.8
TOTAL NON-CURRENT LIABILITIES	**1,727.3**	2,223.2
TOTAL LIABILITIES	**3,247.2**	3,204.9
NET ASSETS	**5,678.7**	5,455.8
EQUITY		
Issued capital	**4,265.1**	4,265.1
Reserves	**94.5**	77.6
Retained earnings	**1,319.1**	1,113.1
TOTAL EQUITY	**5,678.7**	5,455.8

Statutory Statements

Boral Limited and Controlled Entities

Directors' Declaration

1. In the opinion of the Directors of Boral Limited:
    (a) the consolidated financial statements and notes set out on pages 83 to 147 and the Remuneration Report in the Directors' Report, set out on pages 61 to 82, are in accordance with the *Corporations Act 2001*, including:
        (i) giving a true and fair view of the Group's financial position as at 30 June 2019 and of its performance for the financial year ended on that date; and
        (ii) complying with Australian Accounting Standards and the *Corporations Regulations 2001*;
    (b) there are reasonable grounds to believe that the Group will be able to pay its debts as and when they become due and payable.
2. There are reasonable grounds to believe that Boral Limited and the controlled entities identified in note 6.4 will be able to meet any obligations or liabilities to which they are or may become subject by virtue of the Deed of Cross Guarantee between Boral Limited and those controlled 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 30 June 2019.
4. The Directors draw attention to note 1 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:

KJ Fagg

Kathryn Fagg
Chairman

Mike Kane
CEO & Managing Director

Sydney, 26 August 2019

Independent Auditor's Report to the shareholders of Boral Limited

Report on the audit of the Financial Report

Opinion

We have audited the *Financial Report* of Boral Limited (the Company).

In our opinion, the accompanying Financial Report of the Company is in accordance with the *Corporations Act 2001*, including:

- giving a true and fair view of the *Group*'s financial position as at 30 June 2019 and of its financial performance for the year ended on that date; and
- complying with *Australian Accounting Standards* and the *Corporations Regulations 2001*.

The *Financial Report* comprises:

- Balance Sheet as at 30 June 2019;
- Income Statement, Statement of Comprehensive Income, Statement of Changes in Equity, and Statement of Cash Flows for the year then ended;
- Notes including a summary of significant accounting policies; and
- Directors' Declaration.

The *Group* consists of the Company and the entities it controlled at the year-end or from time to time during the financial year.

Basis for opinion

We conducted our audit in accordance with *Australian Auditing Standards*. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the Financial Report* section of our report.

We are independent of the Group in accordance with the *Corporations Act 2001* and the ethical requirements of the *Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the Financial Report in Australia. We have fulfilled our other ethical responsibilities in accordance with the Code.

Key Audit Matters

The *Key Audit Matters* we identified are:

- Carrying value of North America goodwill;
- Carrying value of the investment in USG Boral JV and Meridian Brick JV; and
- Availability and recoverability of US tax loss asset.

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.

Carrying value of North America goodwill (A$2.1 billion)

Refer to note 3.5 of the Financial Report

The Key Audit Matter	***How the matter was addressed in our audit***
Following the acquisition of Headwaters in 2017 the carrying value of Boral's Goodwill in relation to North America is a Key Audit Matter due to: • the complexity of auditing forward looking estimates used to support carrying values that are inherently subjective and require a significant level of judgement to assess; • the size of the Goodwill balance, representing a significant portion of Boral's net assets. Boral's recoverability assessment over the carrying value of North America Goodwill involved determining the output of valuation models for the business and comparing this to the carrying value of assets. This recoverability assessment applies significant judgements which include: • forecasting operating cash flows – the Group has experienced competitive market conditions in the current year as a result of the slower than expected recovery of the US housing and construction markets. This drives additional audit effort in consideration of the appropriateness of the future cash-flow assumptions and consistency with economic indicators and the Group's strategy; • calculating discount rate, forecast growth rate and terminal growth rate – these are complicated in nature and vary according to the conditions and environment a Cash Generating Unit (CGU) is subject to from time to time, and the approach taken to incorporate risks into the cash flows or discount rates; • calculating terminal value – the terminal value calculation depends on the economic drivers of each business unit and the stage of the business cycle. The Group's modelling is sensitive to changes in management's terminal value assumptions, which drives additional audit effort to consider the appropriateness of these assumptions; and • determining the appropriate level of disclosure of the key assumptions used in the Group's valuation model. We involved valuation specialists to supplement our senior audit team members in assessing this key audit matter.	Our procedures included, amongst others: • assessing the appropriateness of the Group's determination of CGUs and groups of CGUs used for impairment testing, considering management's internal reporting and monitoring and the requirements of the accounting standards; • assessing the integrity of the value in use models used, including the accuracy of the underlying calculation formulas; • comparing the forecast cash flows contained in the value in use models to Board approved forecasts and considering the impact of past performance of the Group versus previous forecasts as an indicator of risk in future forecasts; • considering the sensitivity of the models by varying key assumptions, such as forecast growth rates, terminal growth rates and discount rates, within a reasonably possible range, to identify those assumptions at higher risk of bias or inconsistency in application; • comparing the economic assumptions such as industry growth rates to external sources; • checking the consistency of growth rates with the Group's strategy and our experience of the economic environment in which the Group operates; • assessing management's terminal value assumptions by considering the impact of alternative assumptions and assessing the impact on the present value calculation; • assessing the adequacy of the related disclosures against the requirements of the accounting standards; and • using our valuation specialists to: – independently develop a discount rate range using publicly available market data for comparable entities, adjusted by risk factors specific to the Group and the industry it operates in; – compare the Group's long term growth rate assumptions against publicly available long term economic forecasts specific to the United States; and – assess the methodology logic of discounted cash flow models.

Carrying value of the investment in USG Boral JV (A$1,041 million) and Meridian Brick JV (A$229 million)

Refer to note 6.2 of the Financial Report

The Key Audit Matter

The carrying value of Boral's equity accounted investments in the USG Boral JV and the Meridian Brick JV (the Joint Ventures) is a Key Audit Matter due to:

- the complexity of auditing forward looking estimates used to support carrying values that are inherently subjective and require a significant level of judgement to assess;
- the variation in market demand and synergies for building products and average selling prices across countries that create a risk that business forecasts, which are the basis for the assessment of recoverability, may not be achieved;
- the sectors in which the Joint Ventures operate experienced competitive market conditions during the year. This increased the uncertainty of forecast cash flows used in the Joint Ventures valuation models; and
- in addition to the above, the Group recorded an impairment charge of $195.6m against the investment in the Meridian Bricks JV, increasing the sensitivity of the model to small changes in the assumptions.

Boral's recoverability assessment over the carrying value of these investments involved our consideration of impairment indicators at the investment level and the output of valuation models for each asset prepared by JV management. This recoverability assessment applies significant judgements which include:

- key assumptions relating to forecast market demand and average selling prices in Australia, Asia, the Middle East and North America;
- discount rates applied to forecast cash flows as well as the assumptions underlying the forecast growth and terminal growth rates;
- consideration of impairment indicators across multiple countries with varied economic conditions; and
- determining the appropriate level of disclosure of the key assumptions used in the Group's valuation model.

In assessing this Key Audit Matter, we involved senior audit team members, including valuation specialists and our component auditors, who understand the USG Boral JV and Meridian Brick JV businesses, and the industries and economic environment in which they operate.

How the matter was addressed in our audit

Our procedures included, amongst others:

- evaluating key assumptions such as forecast market demand for building products, average selling prices and synergies by:
  - comparing key assumptions to actual historical data over multiple business cycles;
  - comparing forecasts of market demand for building products against published analyst views;
  - performing sensitivity analysis to identify changes in assumptions that may give rise to a reasonably possible change in each of the valuations;
  - comparing key underlying data in valuation models to Board approved forecasts; and
  - assessing historical forecasting accuracy as an indication of risk in future forecasts.
- using information from the component auditors' valuation specialists to assist the audit team in assessing the valuation approach;
- comparing the discounted cash flow methodology and assumptions over discount rates, forecast growth rates and terminal growth rates to industry practice and externally sourced market data;
- recalculating the impairment charge against the recorded amount disclosed; and
- assessing the adequacy of the related disclosures against the requirements of the accounting standards.

Availability and recoverability of US tax loss asset (A$203 million)

Refer to note 5.2 of the Financial Report

The Key Audit Matter	***How the matter was addressed in our audit***
The availability and recoverability of the US tax loss asset was a Key Audit Matter due to: • the complexity of US laws and regulations governing the continued availability of tax losses, necessitating involvement of our tax specialists; and • the significant level of judgement required to audit forward looking estimates on Boral's assessment of the future utilisation of tax losses, which are inherently subjective. US tax losses held by Boral have a maximum carry forward period of 20 years before which they must be utilised. On an annual basis, they are subject to the US continuity of ownership test. This is an added complexity to our audit, due to: • the specialised nature of US taxation requirements; • the slower than expected recovery of the US housing and construction markets; and • the period of the forecast utilisation of the US tax losses and the US federal and state restrictions on utilisation over the forecast period. Boral's assessment of the recoverability of the US tax loss asset is based on the application of significant judgement to estimate forecast taxable income. In assessing this Key Audit Matter, we involved senior audit team members and our US taxation specialists, who understand Boral's US business, industry and the economic and regulatory environment it operates in.	Our procedures included, amongst others: • obtaining the results of the most recent US continuity of ownership assessment performed by Boral's taxation experts when assessing the tax losses that remain available to be utilised; • assessing the competence, capability and objectivity of Boral's taxation experts who prepared the continuity of ownership assessment; • analysing the forecast timing of utilisation of US tax losses against the timing of forecast future taxable income and considering US federal and state restrictions on utilisation; • using our US taxation specialists to assess availability of US tax losses against US taxation requirements; • challenging Boral's key assumptions such as forecast taxable income by: – comparing key assumptions to historical actual data over multiple business cycles; – comparing key assumptions to Board approved forecasts; and – assessing Boral's prior forecasting accuracy. • performing sensitivity analysis on the key assumptions of forecast taxable income with a range of scenarios.

Other Information

Other Information is financial and non-financial information in Boral 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 the 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 and whether the use of the going concern basis of accounting is appropriate. 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 this 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: http://www.auasb.gov.au/auditors_responsibilities/ar1.pdf. This description forms part of our Auditor's Report.

Report on the Remuneration Report

Opinion

In our opinion, the Remuneration Report of Boral Limited for the year ended 30 June 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 pages 61 to 82 of the Directors' Report for the year ended 30 June 2019.

Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with *Australian Auditing Standards*.

KPMG

KPMG

Kevin Leighton
Partner
Sydney, 26 August 2019

Daniel Camilleri
Partner
Sydney, 26 August 2019

Shareholder Information

Boral Limited and Controlled Entities

SHAREHOLDER COMMUNICATIONS

Enquiries or notifications by shareholders regarding their shareholdings or dividends should be directed to Boral's share registry:

Link Market Services Limited
Locked Bag A14
Sydney South NSW 1235 Australia

Hand deliveries to:
Level 12, 680 George Street
Sydney NSW 2000 Australia
Telephone +61 1300 730 644
Facsimile +61 2 9287 0303

ONLINE SERVICES

Shareholders can access information and update information about their Boral shareholdings via the internet by visiting Link Market Services' website at www.linkmarketservices.com.au or Boral's website at www.boral.com.

Some of the services available online include: checking current and previous holding balances, choosing a preferred Annual Report option, updating address and bank details, confirming that a tax file number (TFN), Australian business number (ABN) or proof of exemption has been lodged, checking the share prices and graphs, and downloading a variety of forms.

DIVIDENDS

Boral expects to pay the final dividend for FY2019 of 13.5 cents per share on 1 October 2019. The dividend will be 50% franked.

Dividend Reinvestment Plan

Following payment of the interim dividend on 24 March 2014, Boral's Dividend Reinvestment Plan (DRP) was suspended until further notice. Shareholders were notified about additional amendments to the terms and conditions of the DRP on 24 March 2014. For further information on the suspension and amendments to the DRP, please visit Boral's website. If the DRP is reactivated in the future, Boral will notify shareholders through an ASX announcement.

Dividend payments

Since 2012, Boral has used direct credit as the preferred method for paying cash dividends.

For those shareholders with a registered address in Australia or New Zealand, dividend payments will only be made by direct credit to a nominated bank account (rather than by cheque posted to a registered address). To provide or update bank account details, please contact the share registry or visit its website at www.linkmarketservices.com.au.

Shareholders who don't have a registered address in Australia or New Zealand and who wish their dividends to be paid directly to a bank, building society or credit union account in Australia or New Zealand should contact the share registry or visit its website at www.linkmarketservices.com.au for an application form. Payments are electronically credited on the dividend payment date and confirmed by a payment advice mailed to the shareholder's registered address. All instructions received remain in force until amended or cancelled in writing.

Shareholders are also reminded to bank dividend cheques as soon as possible. Dividend cheques that are not banked are required to be handed over to the Chief Commissioner of State Revenue under the *Unclaimed Money Act 1995* (NSW).

Tax or exemption

Shareholders are strongly advised to lodge their TFN, ABN or exemption. If these details are not lodged with the share registry, Boral Limited is obliged to deduct tax at the highest marginal rate (plus the Medicare levy) from the unfranked portion of any dividend payment. Certain pensioners are exempt from supplying a TFN. Shareholders can confirm whether they have lodged a TFN, ABN or exemption via the internet at www.linkmarketservices.com.au.

UNCERTIFICATED FORMS OF SHAREHOLDING

Two forms of uncertificated holdings are available to Boral shareholders:

Issuer-sponsored holdings: this type of holding is sponsored by Boral and provides shareholders with the advantages of uncertificated holdings without the need to be sponsored by any particular stockbroker.

Broker-sponsored holdings (CHESS): shareholders may arrange to be sponsored by a stockbroker (or certain other financial institutions) and are required to sign a sponsorship agreement appointing the sponsor as their "controlling participant" for the purposes of CHESS. This type of holding is likely to attract regular stock market traders or those shareholders who have their share portfolio managed by a stockbroker.

Holding statements are issued to shareholders not later than five business days after the end of any month in which transactions alter the balance of a holding. Shareholders requiring replacement holding statements should request them from their controlling participant.

Shareholders communicating with the share registry should have to hand their Securityholder Reference Number (SRN) or Holder Identification Number (HIN) as it appears on the Issuer Sponsored/CHESS holding statements or dividend statements. For security reasons, shareholders should keep their Securityholder Reference Numbers confidential.

ANNUAL REPORT MAILING LIST

Shareholders (whether Issuer or Broker Sponsored) not wishing to receive the Annual Report should advise the share registry in writing so that their name can be removed from the mailing list. Shareholders are also able to update their preference via the Link Market Services or Boral websites, and can nominate to receive email notification of the release of the Annual Report and then access it via a link. The share registry can provide forms for making annual report delivery elections.

While companies are not required to send annual reports to shareholders other than those who have elected to receive them, any shareholder who has not made an election is sent the Boral Review.

CHANGE OF ADDRESS

Shareholders who are Issuer Sponsored should notify any change of address to the share registry promptly. This can be done via the Link Market Services website or in writing quoting their Securityholder Reference Number, previous address and new address. Application forms for Change of Address are also available for download via the Link Market Services or Boral websites. Broker Sponsored (CHESS) holders must advise their sponsoring broker of the change.

INFORMATION ON BORAL

Boral has a comprehensive website featuring news items, announcements, corporate information and a wide range of product and service information. Boral's internet address is www.boral.com.

The Annual Report is the main source of information for shareholders. Other sources of information include:

- February – the interim results announcement for the December half year
- August – the annual results announcement for the year ended 30 June, and
- November – the Annual General Meeting.

Requests for publications and other enquiries about Boral's affairs should be addressed to:

Group Communications & Investor Relations Director
Boral Limited
PO Box 1228
North Sydney NSW 2059

Enquiries can also be made via email: info@boral.com.au or visit Boral's website at www.boral.com

SHARE TRADING AND PRICE

Boral shares are traded on the Australian Securities Exchange Limited (ASX). The stock code under which they are traded is "BLD" and the details of trading activity are available on the internet and published in most daily newspapers under that abbreviation.

SHARE SALE FACILITY

Issuer-sponsored shareholders, particularly small shareholders, can sell their entire Boral shareholding using the share registry's sale facility. To do so, contact Link Market Services' Share Sale Centre on +61 1300 730 644.

AMERICAN DEPOSITARY RECEIPTS (ADRS)

In the USA, Boral shares are traded in the over-the-counter market in the form of ADRs issued by the depositary, The Bank of New York Mellon (BNY Mellon). Each ADR represents four ordinary Boral shares.

Holders of Boral's ADRs should contact BNY Mellon on all matters relating to their ADR holdings.

By mail:
BNY Mellon Shareowner Services
PO Box 30170
College Station, TX 77842-3170
USA

By telephone:
To speak directly to a BNY Mellon representative, please call 1-888-BNY-ADRS (1-888-269-2377) if calling from within the United States. If calling from outside the United States, please call 201-680-6825.

By email:
Send email enquiries to shrrelations@bnymellon.com or visit the website at www.bnymellon.com/shareowner

SHARE INFORMATION AS AT 20 AUGUST 2019

Substantial shareholders

The Capital Group of Companies, Inc., by notice of change of interest of substantial holder dated 1 December 2016, advised that it and its associates were entitled to 61,918,012 ordinary shares.

BlackRock Group (BlackRock Inc. and its subsidiaries), by notice of change of interest of substantial holder dated 16 August 2019, advised that it and its associates were entitled to 66,849,618 ordinary shares.

The Vanguard Group, Inc., by notice of initial substantial holder dated 1 August 2018, advised that it and its associates were entitled to 58,648,100 ordinary shares.

Sumitomo Mitsui Trust Holdings Inc., by notice of initial substantial holder dated 9 August 2019, advised that it and its associates were entitled to 58,915,250 ordinary shares.

Distribution schedule of shareholders as at 20 August 2019

Size of shareholding	Number of shareholders	% of ordinary shares
(a) in the categories –		
1 to 1,000	26,496	1.14
1,001 to 5,000	34,968	7.47
5,001 to 10,000	9,031	5.60
10,001 to 100,000	5,643	10.36
100,001 and over	187	75.43
	76,325	100.00
(b) holding less than a marketable parcel (100 shares)	1,423	0.004

Voting rights – ordinary shares

On a show of hands, every person present, who is a member or proxy, attorney or representative of a member, shall have one vote and on a poll every member who is present in person or by proxy, attorney or representative shall have one vote for each share held by him or her.

On-market share buy-back

There is no current on-market buy-back of ordinary shares.

Twenty largest shareholders as at 20 August 2019

		Ordinary shares	% of ordinary shares
1	HSBC CUSTODY NOMINEES	348,040,432	29.69
2	J P MORGAN NOMINEES AUSTRALIA LIMITED	245,643,941	20.95
3	CITICORP NOMINEES PTY LIMITED	111,035,211	9.47
4	NATIONAL NOMINEES LIMITED	49,141,325	4.19
5	BNP PARIBAS NOMS PTY LTD	37,996,106	3.24
6	ARGO INVESTMENTS LIMITED	11,596,552	0.99
7	CS FOURTH NOMINEES PTY LIMITED	8,710,079	0.74
8	ANZ EXECUTORS & TRUSTEE	5,440,981	0.46
9	EQUITAS NOMINEES PTY LIMITED	3,842,265	0.33
10	PACIFIC CUSTODIANS PTY LIMITED	3,610,133	0.31
11	BNP PARIBAS NOMINEES PTY LTD	3,473,259	0.30
12	AMP LIFE LIMITED	3,106,624	0.26
13	MUTUAL TRUST PTY LTD	2,688,618	0.23
14	CS THIRD NOMINEES PTY LIMITED	2,682,303	0.23
15	GWYNVILL INVESTMENTS PTY LTD	2,521,264	0.22
16	MILTON CORPORATION LIMITED	2,089,293	0.18
17	INVIA CUSTODIAN PTY LIMITED	1,972,351	0.17
18	NETWEALTH INVESTMENTS LIMITED	1,791,581	0.15
19	NAVIGATOR AUSTRALIA LTD	1,555,109	0.13
20	AUSTRALIAN EXECUTOR TRUSTEES LIMITED	1,532,510	0.13

Financial History

Boral Limited and Controlled Entities

30 June	2019 $m	2018 $m	2017 $m	2016 $m	2015 $m	2014 $m	2013 $m	2012 $m	2011 $m	2010 $m
Revenue	**5,863**	5,869	4,388	4,311	4,415	5,204	5,286	5,010	4,711	4,599
Earnings before interest, tax, depreciation and amortisation (EBITDA)[1]	**1,037**	1,056	720	645	605	556	519	473	522	505
Depreciation and amortisation	**378**	368	260	247	249	261	291	273	245	253
Earnings before interest and tax[1]	**660**	688	460	398	357	294	228	200	277	252
Net interest expense[1]	**(103)**	(104)	(51)	(63)	(64)	(83)	(97)	(88)	(64)	(97)
Profit before tax[1]	**557**	585	409	335	293	211	130	111	213	155
Income tax expense[1]	**(116)**	(111)	(67)	(67)	(44)	(37)	(20)	(9)	(40)	(22)
Non-controlling interests	**-**	-	-	-	-	(3)	(6)	(1)	2	(1)
Profit after tax[1]	**440**	473	343	268	249	171	104	101	175	132
Significant items – net of tax	**(168)**	(32)	(46)	(12)	8	2	(316)	75	(8)	(222)
Net profit/(loss) attributable to members of Boral Limited	**272**	441	297	256	257	173	(212)	177	168	(91)
Total assets	**9,544**	9,510	9,381	5,801	5,865	5,559	6,316	6,499	5,668	5,209
Total liabilities	**3,685**	3,780	3,940	2,294	2,341	2,211	2,923	3,096	2,512	2,583
Net assets/ shareholders' funds	**5,859**	5,731	5,441	3,506	3,524	3,348	3,394	3,403	3,156	2,626
Net debt	**2,193**	2,453	2,333	893	817	718	1,446	1,518	505	1,183
Funds employed	**8,052**	8,183	7,774	4,399	4,341	4,066	4,840	4,921	3,662	3,809
Dividends paid or declared	**311**	311	281	167	139	117	85	82	105	88
Statistics										
Dividend per ordinary share	**26.5c**	26.5c	24.0c	22.5c	18.0c	15.0c	11.0c	11.0c	14.5c	13.5c
Dividend payout ratio[1]	**71%**	66%	82%	62%	56%	68%	81%	81%	60%	67%
Dividend cover[1]	**1.4**	1.5	1.2	1.6	1.8	1.5	1.2	1.2	1.7	1.5
Earnings per ordinary share[1]	**37.5c**	40.4c	33.7c	35.8c	31.9c	22.0c	13.6c	13.6c	24.4c	22.1c
Earnings per ordinary share[1,2]	**37.5c**	40.4c	33.7c	33.3c	29.7c	20.5c	12.7c	12.7c	22.7c	20.5c
Return on equity[1]	**7.5%**	8.3%	6.3%	7.6%	7.1%	5.1%	3.2%	3.0%	5.6%	5.0%
EBIT to sales[1]	**11.3%**	11.7%	10.5%	9.2%	8.1%	5.7%	4.3%	4.0%	5.9%	5.5%
EBIT to funds employed[1,3]	**8.2%**	8.4%	9.2%	9.0%	8.2%	7.2%	4.7%	4.1%	7.6%	6.6%
ROFE[4] (EBIT to average funds employed)[1]	**8.1%**	8.6%	7.6%	9.1%	8.5%	6.6%	4.7%	4.7%	7.4%	6.2%
Net interest cover (times)[1]	**6.4**	6.6	9.1	6.3	5.6	3.5	2.3	2.3	4.4	2.6
Gearing (net debt to equity)	**37%**	43%	43%	25%	23%	21%	43%	45%	16%	45%
Gearing (net debt to net debt plus equity)	**27%**	30%	30%	20%	19%	18%	30%	31%	14%	31%
Net tangible asset backing per share	**$2.12**	$1.99	$1.79	$4.40	$4.31	$4.03	$3.17	$3.31	$3.91	$3.92

1. Excludes significant items.
2. Adjusted to reflect the bonus element in the renounceable entitlement offer that occurred during November and December 2016.
3. Return on funds employed (ROFE) calculated as EBIT (before significant items) on funds employed at 30 June, except for FY2017 ROFE, which is based on average monthly funds employed due to the impact of Headwaters only contributing eight weeks of EBIT in FY2017 but funds employed increasing fully at 30 June 2017. Based on year end funds employed, ROFE for FY2017 would be reported as 5.9%.
4. Refer to the Remuneration Report for a discussion of how ROFE is used as an additional performance hurdle under the Company's long-term incentive plan.

Results have been prepared under Australian equivalents to International Financial Reporting Standards (A-IFRS).
Figures may not add due to rounding.

This page has been intentionally left blank

BORAL LIMITED
ABN 13 008 421 761

Level 18, 15 Blue Street, North Sydney NSW 2060
PO Box 1228, North Sydney NSW 2059
Telephone: +61 2 9220 6300
Internet: www.boral.com
Email: info@boral.com.au

SHARE REGISTRY
c/- Link Market Services
Level 12, 680 George St, Sydney NSW 2000
Locked Bag A14, Sydney South NSW 1235
Telephone: +61 1300 730 644
Internet: www.linkmarketservices.com.au
Email: boral@linkmarketservices.com.au

AGM DETAILS

The Annual General Meeting of Boral Limited will be held at the Civic Pavilion, The Concourse, Chatswood, NSW on Wednesday, 6 November 2019 at 10.30am.

CONNECT

Download
BORAL'S IR APP

To easily access:
- Boral's share price
- ASX announcements
- presentations
- reports
- calendar of events.

Business made easy with
BORAL CONNECTS

Working with our concrete customers towards an exceptional customer experience.

www.boral.com.au/boralconnects

Boral's IR app is available on the App Store and on Google Play.

Download on the App Store

GET IT ON Google Play

BORAL®