UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16
under the Securities Exchange Act of 1934

For the Month of May 2019

1-15240
(Commission File Number)

JAMES HARDIE INDUSTRIES plc
(Translation of registrant's name into English)

Europa House, Second Floor
Harcourt Centre
Harcourt Street, Dublin 2, D02, WR20, Ireland
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F..X.... Form 40-F.........

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): Not Applicable

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): Not Applicable

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Forward-Looking Statements

This Form 6-K contains forward-looking statements. James Hardie Industries plc (the "company") may from time to time make forward-looking statements in its periodic reports filed with or furnished to the Securities and Exchange Commission, on Forms 20-F and 6-K, in its annual reports to shareholders, in offering circulars, invitation memoranda and prospectuses, in media releases and other written materials and in oral statements made by the company's officers, directors or employees to analysts, institutional investors, existing and potential lenders, representatives of the media and others. Statements that are not historical facts are forward-looking statements and such forward-looking statements are statements made pursuant to the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995.

Examples of forward-looking statements include:

- statements about the company's future performance;
- projections of the company's results of operations or financial condition;
- statements regarding the company's plans, objectives or goals, including those relating to strategies, initiatives, competition, acquisitions, dispositions and/or its products;
- expectations concerning the costs associated with the suspension or closure of operations at any of the company's plants and future plans with respect to any such plants;
- expectations concerning the costs associated with the significant capital expenditure projects at any of the company's plants and future plans with respect to any such projects;
- expectations regarding the extension or renewal of the company's credit facilities including changes to terms, covenants or ratios;
- expectations concerning dividend payments and share buy-backs;
- statements concerning the company's corporate and tax domiciles and structures and potential changes to them, including potential tax charges;
- statements regarding tax liabilities and related audits, reviews and proceedings;
- statements regarding the possible consequences and/or potential outcome of legal proceedings brought against us and the potential liabilities, if any, associated with such proceedings;
- expectations about the timing and amount of contributions to AICF, a special purpose fund for the compensation of proven Australian asbestos-related personal injury and death claims;
- expectations concerning the adequacy of the company's warranty provisions and estimates for future warranty-related costs;
- statements regarding the company's ability to manage legal and regulatory matters (including but not limited to product liability, environmental, intellectual property and competition law matters) and to resolve any such pending legal and regulatory matters within current estimates and in anticipation of certain third-party recoveries; and
- statements about economic conditions, such as changes in the US economic or housing market conditions or changes in the market conditions in the Asia Pacific region, the levels of new home construction and home renovations, unemployment levels, changes in consumer income, changes or stability in housing values, the availability of mortgages and other financing, mortgage and other interest rates, housing affordability and supply, the levels of foreclosures and home resales, currency exchange rates, and builder and consumer confidence.

Words such as "believe," "anticipate," "plan," "expect," "intend," "target," "estimate," "project," "predict," "forecast," "guideline," "aim," "will," "should," "likely," "continue," "may," "objective," "outlook" and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. Readers are cautioned not to place undue reliance on these forward-looking statements and all such forward-looking statements are qualified in their entirety by reference to the following cautionary statements.

Forward-looking statements are based on the Company's current expectations, estimates and assumptions and because forward-looking statements address future results, events and conditions, they, by their very nature, involve inherent risks and uncertainties, many of which are unforeseeable and beyond the Company's control. Such known and unknown risks, uncertainties and other factors may cause actual results, performance or other achievements to differ materially from the anticipated results, performance or achievements expressed, projected or implied by these forward-looking statements. These factors, some of which are discussed under “Risk Factors” in Section 3 of the Form 20-F filed with the Securities and Exchange Commission on 21 May 2019, include, but are not limited to: all matters relating to or arising out of the prior manufacture of products that contained asbestos by current and former Company subsidiaries; required contributions to AICF, any shortfall in AICF and the effect of currency exchange rate movements on the amount recorded in the Company’s financial statements as an asbestos liability; the continuation or termination of the governmental loan facility to AICF; compliance with and changes in tax laws and treatments; competition and product pricing in the markets in which the Company operates; the consequences of product failures or defects; exposure to environmental, asbestos, putative consumer class action or other legal proceedings; general economic and market conditions; the supply and cost of raw materials; possible increases in competition and the potential that competitors could copy the Company’s products; reliance on a small number of customers; a customer’s inability to pay; compliance with and changes in environmental and health and safety laws; risks of conducting business internationally; compliance with and changes in laws and regulations; currency exchange risks; dependence on customer preference and the concentration of the Company’s customer base on large format retail customers, distributors and dealers; dependence on residential and commercial construction markets; the effect of adverse changes in climate or weather patterns; possible inability to renew credit facilities on terms favorable to the Company, or at all; acquisition or sale of businesses and business segments; changes in the Company’s key management personnel; inherent limitations on internal controls; use of accounting estimates; the integration of Fermacell into our business; and all other risks identified in the Company’s reports filed with Australian, Irish and US securities regulatory agencies and exchanges (as appropriate). The Company cautions you that the foregoing list of factors is not exhaustive and that other risks and uncertainties may cause actual results to differ materially from those referenced in the Company’s forward-looking statements. Forward-looking statements speak only as of the date they are made and are statements of the Company’s current expectations concerning future results, events and conditions. The Company assumes no obligation to update any forward-looking statements or information except as required by law.

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99.8	Directors Retirement Announcement

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

	James Hardie Industries plc
Date: 21 May 2019	By: /s/ Natasha Mercer
	Natasha Mercer Company Secretary

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Exhibit 99.1

Results for Announcement to the Market

James Hardie Industries plc

ARBN 097 829 895

Appendix 4E - Preliminary Final Report Year Ended 31 March 2019				
Key Information	Year Ended 31 March			
	FY 2019 US$M	FY 2018 US$M	Movement	
Net Sales From Ordinary Activities	2,506.6	2,054.5	Up	22%
Profit From Ordinary Activities After Tax Attributable to Shareholders	228.8	146.1	Up	57%
Net Profit Attributable to Shareholders	228.8	146.1	Up	57%
Net Tangible Assets (Liabilities) per Ordinary Share	US$1.35	US$(0.52)	Up	360%

Dividend Information

- A FY2019 second half ordinary dividend ("**FY2019 second half dividend**") of US26.0 cents per security is payable to CUFS holders on 2 August 2019.
- A FY2019 first half ordinary dividend ("**FY2019 first half dividend**") of US10.0 cents per security was paid to CUFS holders on 22 February 2019.
- The record date to determine entitlements to the FY2019 second half dividend is 6 June 2019 (on the basis of proper instruments of transfer received by the Company's registrar, Computershare Investor Services Pty Ltd, Level 4, 60 Carrington Street, Sydney NSW 2000, Australia, by 5:00pm if securities are not CHESS approved, or security holding balances established by 5:00pm or such later time permitted by ASTC Operating Rules if securities are CHESS approved).
- The FY2019 first half dividend, the FY2019 second half dividend and future dividends will be unfranked for Australian taxation purposes.
- The Company will be required to deduct Irish DWT (currently 20% of the gross dividend amount) from this dividend and future dividends, unless the beneficial owner has completed and returned a non-resident declaration form (DWT Form).
- The Australian currency equivalent amount of the FY2019 second half dividend to be paid to CUFS holders will be announced after the record date. The amount payable to shareholders who have elected to receive their dividend in NZ dollars or British pounds will also be announced on the same date.
- No dividend reinvestment plan is currently in operation for the FY2019 second half dividend.
- The FY2018 second half ordinary dividend ("**FY2018 second half dividend**") of US30.0 cents per security was paid to CUFS holders on 3 August 2018.

Movements in Controlled Entities during the Year Ended 31 March 2019

The following entities were created or acquired:

XI (DL) Holdings GmbH (3 April 2018) (n/k/a James Hardie Europe Holdings 2), Fermacell GmbH (3 April 2018) (n/k/a James Hardie Europe GmbH), SNC Parc 3 (3 April 2018), Fermacell B.V (3 April 2018), Fermacell Spain S.L.U. (3 April 2018), Fermacell Schraplau GmbH (3 April 2018), FELS Recycling GmbH (3 April 2018), Fermacell SAS (3 April 2018)

Associates and Joint Venture Entities

FELS Recycling GmbH (51%); Aplicaciones Minerales S.A. (28%)

Audit

The results and information included within this Preliminary Final Report have been prepared using US GAAP and have been subject to an independent audit by external auditors.

Results for the 4th Quarter and Year Ended 31 March 2019

Contents

James Hardie Industries plc is incorporated under the laws of Ireland with its corporate seat in Dublin, Ireland. The liability of members is limited. The information contained in the above documents should be read in conjunction with the James Hardie 2019 Annual Report which can be found on the company website at www.jameshardie.com.

Media Release

21 May 2019

Exhibit 99.2

James Hardie Announces Adjusted Net Operating Profit of US$73.8 million for Q4 Fiscal Year 2019 and US$300.5 million for the full year ended 31 March 2019

James Hardie announces a fiscal year 2019 second half dividend of US 26.0 cents per security

James Hardie today announced results for the fourth quarter of fiscal year 2019 and the full year ended 31 March 2019:

- Group Adjusted net operating profit of US$73.8 million for the quarter and US$300.5 million for the full year, a decrease of 9% and an increase of 3%, respectively, compared to the prior corresponding periods ("pcp");
- Group Adjusted EBIT of US$100.0 million for the quarter and US$404.6 million for the full year, a decrease of 3% and an increase of 2%, respectively, compared to pcp;
- Group net sales of US$624.8 million for the quarter and US$2,506.6 million for the full year, an increase of 19% and 22%, respectively, compared to pcp;
- North America Fiber Cement Segment volume increased 1% for the quarter and 3% for the full year, compared to pcp;
- North America Fiber Cement Segment EBIT margin excluding product line discontinuation expenses of 22.5% for the quarter and 23.1% for the full year;
- Asia Pacific Fiber Cement Segment EBIT margin of 20.0% for the quarter and 22.3% for the full year;
- Europe Building Products Segment Adjusted EBIT margin excluding costs associated with the acquisition of 11.3% for the quarter and 10.6% for the full year; and
- The Fermacell acquisition closed on 3 April 2018 and is included in the financial results for the full year of fiscal year 2019.

CEO Commentary

James Hardie CEO Jack Truong said, "Our North America Fiber Cement segment delivered solid revenue growth of 3% for the quarter and 6% for the full year while generating good EBIT margins within our target range in a challenging input cost environment. The North America housing market demand was soft across most geographies and customer segments the last six months of fiscal year 2019. Our exteriors business grew 1% above our addressable market for fiscal year 2019 compared to negative 2% in fiscal year 2018. It was a good improvement over our fiscal year 2018 performance, albeit below our internal expectations. We have encouraging signs of early momentum on our recent commercial transformation and implementation of lean manufacturing in our North American plants. We are confident these transformations will lead to marked improvement in our ability to execute and deliver on expected results."

He continued, "Our Asia Pacific Fiber Cement segment continued to deliver excellent top line growth of 7% and 11% in Australian dollars for the quarter and full year, respectively. Our Australian and Philippines businesses lead the way in gaining volume growth above their underlying market growth. This strong growth was achieved despite a continued, softening Australian housing market throughout the year. Further, our EBIT margins were significantly impacted by input cost rapid inflation during most of fiscal year 2019."

Dr Truong added, "Our Europe Building Products segment delivered strong pro-forma revenue growth in Euros of 7% with an Adjusted EBIT margin of 10.6% for the full fiscal year after excluding costs associated with the acquisition and integration. We are encouraged by the positive first year results. We are excited about our European business gaining significant momentum in fiber cement growth in fiscal year 2020 while continually improving on our fiber gypsum business."

He concluded, "Our consolidated group results reflected good and disciplined financial performance in a significant inflationary cost environment. We enter fiscal year 2020 with our global team aligned on one global strategy that is centered around delivering growth above the market in all of our regions with strong financial returns."

Outlook

We expect to see modest growth in the US housing market in fiscal year 2020. The single family new construction market and repair and remodel market growth rates in fiscal year 2020 are expected to grow, albeit at a growth rate lower than that in fiscal year 2019. The Company expects new construction starts between approximately 1.2 million and 1.3 million.

We expect our North America Fiber Cement segment EBIT margin to be in the top half of our range of 20% to 25% for fiscal year 2020. This expectation is based upon the Company continuing to improve operating performance in our plants, improved net average sales price and mix, continued inflation for input costs and modest underlying housing growth.

In Australia, it is anticipated that our addressable underlying market will decrease in fiscal year 2020 compared to fiscal year 2019. Net sales from our Australian business are expected to continue to trend above the average growth of the domestic repair and remodel and single family detached housing markets in the eastern states of Australia.

We expect our Europe Building Product segment to achieve year on year net sales and EBIT margin growth.

Further Information

Readers are referred to the Company's Consolidated Financial Statements and Management's Analysis of Results for the fourth quarter and full year ended 31 March 2019 for additional information regarding the Company's results, including information regarding income taxes, the asbestos liability and contingent liabilities.

As of 30 June 2018, the Company changed its reportable operating segments. Previously, the Company reported on four operating segments: (i) North America Fiber Cement, (ii) International Fiber Cement, (iii) Other Businesses, and (iv) Research and Development. As of 30 June 2018, the Company began reporting on five operating segments: (i) North America Fiber Cement, (ii) Asia Pacific Fiber Cement, (iii) Europe Building Products, (iv) Other Businesses, and (v) Research and Development. The significant changes to how certain businesses are reported in the new segment structure are as follows: Our European Fiber Cement business as well as the newly acquired Fermacell business are now reported as the Europe Building Products segment, and the remaining businesses that were historically reported in the International Fiber Cement segment are now reported in the Asia Pacific Fiber Cement segment. The Company has revised its historical segment information at 31 March 2018 and for the years ended 31 March 2018 and 2017 to be consistent with the new reportable segment structure. The change in reportable segments had no effect on the Company's financial position, results of operations or cash flows for the periods presented. Readers are referred to Note 18 of our consolidated financial statements for further information on our segments.

Use of Non-GAAP Financial Information; Australian Equivalent Terminology

This Media Release includes financial measures that are not considered a measure of financial performance under generally accepted accounting principles in the United States (GAAP), such as Adjusted net operating profit and Adjusted EBIT. These non-GAAP financial measures should not be considered to be more meaningful than the equivalent GAAP measure. Management has included such measures to provide investors with an alternative method for assessing its operating results in a manner that is focused on the performance of its ongoing operations and excludes the impact of certain legacy items, such as asbestos adjustments. Additionally, management uses such non-GAAP financial measures for the same purposes. However, these non-GAAP financial measures are not prepared in accordance with US GAAP, may not be reported by all of the Company's competitors and may not be directly comparable to similarly titled measures of the Company's competitors due to potential differences in the exact method of calculation. For additional information regarding the non-GAAP financial measures presented in this Media Release, including a reconciliation of each non-GAAP financial measure to the equivalent US GAAP measure, see the section titled "Non-US GAAP Financial Measures" included in the Company's Management's Analysis of Results for the fourth quarter and full year ended 31 March 2019.

In addition, this Media Release includes financial measures and descriptions that are considered to not be in accordance with US GAAP, but which are consistent with financial measures reported by Australian companies, such as operating profit, EBIT and EBIT margin. Since the Company prepares its Consolidated Financial Statements in accordance with US GAAP, the Company provides investors with a table and definitions presenting cross-references between each US GAAP financial measure used in the Company's Consolidated Financial Statements to the equivalent non-US GAAP financial measure used in this Media Release. See the sections titled "Non-US GAAP Financial Measures" included in the Company's Management's Analysis of Results for the fourth quarter and full year ended 31 March 2019.

Forward-Looking Statements

This Media Release contains forward-looking statements and information that are necessarily subject to risks, uncertainties and assumptions. Many factors could cause the actual results, performance or achievements of James Hardie to be materially different from those expressed or implied in this release, including, among others, the risks and uncertainties set forth in Section 3 "Risk Factors" in James Hardie's Annual Report on Form 20-F for the year ended 31 March 2019; changes in general economic, political, governmental and business conditions globally and in the countries in which James Hardie does business; changes in interest rates; changes in inflation rates; changes in exchange rates; the level of construction generally; changes in cement demand and prices; changes in raw material and energy prices; changes in business strategy and various other factors. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein. James Hardie assumes no obligation to update or correct the information contained in this Media Release except as required by law.

END

Media/Analyst Enquiries:
Jason Miele
Vice President, Investor and Media Relations

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Exhibit 99.3

Management's Analysis of Results

This Management's Analysis of Results forms part of a package of information about James Hardie Industries plc's results. It should be read in conjunction with the other parts of this package, including the Media Release, the Management Presentation and the consolidated financial statements. Except as otherwise indicated in this Management's Analysis of Results, James Hardie Industries plc is referred to as "JHI plc." JHI plc, together with its direct and indirect wholly-owned subsidiaries, are collectively referred to as "James Hardie," the "Company," "we," "our," or "us." Definitions for certain capitalized terms used in this Management's Analysis of Results can be found in the section titled "Non-GAAP Financial Measures."

This Management's Analysis of Results includes financial measures that are not considered a measure of financial performance under generally accepted accounting principles in the United States ("US GAAP"). These non-GAAP financial measures should not be considered to be more meaningful than the equivalent US GAAP measures. Management has included such measures to provide investors with an alternative method for assessing its financial condition and operating results in a manner that is focused on the performance of its ongoing operations. These measures exclude the impact of certain legacy items, such as asbestos adjustments, or significant non-recurring items, such as debt restructuring and acquisition costs, asset impairments, as well as adjustments to tax expense. In addition, management provides an adjusted effective tax rate, which excludes the tax impact of the pre-tax special items (items listed above) and tax special items. Management believes that this non-GAAP tax measure provides an ongoing effective rate which investors may find useful for historical comparisons and for forecasting and is an alternative method of assessing the economic impact of taxes on the Company, as it more closely approximates payments to taxing authorities. Management uses such non-GAAP financial measures for the same purposes. These non-GAAP measures should not be considered as a substitute for, or superior to, measures of financial performance prepared in accordance with US GAAP. These non-GAAP financial measures are not prepared in accordance with US GAAP, may not be reported by all of the Company's competitors and may not be directly comparable to similarly titled measures of the Company's competitors due to potential differences in the exact method of calculation. For additional information regarding the non-GAAP financial measures presented in this Management's Analysis of Results, including a reconciliation of each non-GAAP financial measure to the equivalent US GAAP measure, see the section titled "Non-US GAAP Financial Measures." In addition, this Management's Analysis of Results includes financial measures and descriptions that are considered to not be in accordance with US GAAP, but which are consistent with financial measures reported by Australian companies. Since James Hardie prepares its consolidated financial statements in accordance with US GAAP, the Company provides investors with a table and definitions presenting cross-references between each US GAAP financial measure used in the Company's consolidated financial statements to the equivalent non-US GAAP financial measure used in this Management's Analysis of Results. See the section titled "Non-US GAAP Financial Measures."

These documents, along with an audio webcast of the Management Presentation on 21 May 2019, are available from the Investor Relations area of our website at *http://www.ir.jameshardie.com.au*

NOTE TO THE READER:

As of 30 June 2018, the Company changed its reportable operating segments. Previously, the Company reported on four operating segments: (i) North America Fiber Cement, (ii) International Fiber Cement, (iii) Other Businesses, and (iv) Research and Development. As of 30 June 2018, the Company began reporting on five operating segments: (i) North America Fiber Cement, (ii) Asia Pacific Fiber Cement, (iii) Europe Building Products, (iv) Other Businesses, and (v) Research and Development. The significant changes to how certain businesses are reported in the new segment structure are as follows: (i) our European Fiber Cement business, as well as the newly acquired Fermacell business, are now reported as the Europe Building Products segment, and the remaining businesses that were historically reported in the International Fiber Cement segment are now reported in the Asia Pacific Fiber Cement segment. The Company has revised its historical segment information for the fourth quarter and full year ended 31 March 2018 to be consistent with the new reportable segment structure. The change in reportable segments had no effect on the Company's financial position, results of operations or cash flows for the periods presented. Readers are referred to Note 18 of our consolidated financial statements for further information on our segments.

Media/Analyst Enquiries:
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James Hardie Industries plc
Results for the 4th Quarter and Full Year Ended 31 March

US$ Millions	**Three Months and Full Year Ended 31 March**					
	Q4 FY19	**Q4 FY18**	**Change %**	**FY19**	**FY18**	**Change %**
Net sales	**$ 624.8**	**$ 525.9**	**19**	**$ 2,506.6**	**$ 2,054.5**	**22**
Cost of goods sold	(414.2)	(334.8)	(24)	(1,675.6)	(1,324.3)	(27)
Gross profit	**210.6**	**191.1**	**10**	**831.0**	**730.2**	**14**
Selling, general and administrative expenses	(102.3)	(85.1)	(20)	(403.6)	(311.3)	(30)
Research and development expenses	(9.4)	(8.9)	(6)	(37.9)	(33.3)	(14)
Asset impairments	(2.8)	—		(15.9)	—	
Asbestos adjustments	(73.4)	(192.9)	62	(22.0)	(156.4)	86
EBIT	**22.7**	**(95.8)**		**351.6**	**229.2**	**53**
Net interest expense	(13.3)	(7.9)	(68)	(50.1)	(29.5)	(70)
Loss on early debt extinguishment[1]	—	—		(1.0)	(26.1)	96
Other income	—	0.5		0.1	0.7	(86)
Operating profit (loss) before income taxes	9.4	(103.2)		300.6	174.3	72
Income tax (expense) benefit	(8.6)	45.6		(71.8)	(28.2)	
Net operating profit (loss)	**$ 0.8**	**$ (57.6)**		**$ 228.8**	**$ 146.1**	**57**
Earnings per share - basic (US cents)	—	(13)		52	33	
Earnings per share - diluted (US cents)	—	(13)		52	33	
Volume (mmsf)	942.2	715.7	32	3,670.0	2,767.5	33

[1]Readers are referred to Note 10 of our 31 March 2019 consolidated financial statements for further information related to long-term debt

Net sales for the quarter and full year increased 19% and 22%, respectively, from the prior corresponding periods to US$624.8 million and US$2,506.6 million, respectively. For both periods, net sales were favorably impacted by the acquisition of Fermacell in Europe and higher net sales in the North America Fiber Cement segment.

Gross profit of US$210.6 million for the quarter and US$831.0 million for the full year increased 10% and 14%, respectively, when compared to prior corresponding periods. Gross profit margin of 33.7% for the quarter and 33.2% for the full year, decreased 2.6 percentage points and 2.3 percentage points, respectively, when compared to the prior corresponding periods.

Selling, general and administrative ("SG&A") expenses for the quarter and full year increased 20% and 30%, respectively, when compared to the prior corresponding periods. The increase is primarily driven by the SG&A costs in the Europe Building Products segment, due to the acquisition of Fermacell on 3 April 2018 and the corresponding transaction and integration costs, as well as, higher labor and discretionary costs in the North America Fiber Cement segment.

Asset impairments for the full year reflects asset impairment charges of US$12.9 million related to our decision to discontinue our windows business, and US$3.0 million related to our decision to discontinue our Multiple Contour Trim ("MCT") product line.

Asbestos adjustments for the full year primarily reflects the unfavorable movement in the actuarial adjustment of US$72.7 million recorded at year end in line with KPMGA's actuarial report partially offset by the effect of foreign exchange on Asbestos net liabilities.

Interest expense for the quarter and full year increased due to the higher average debt balance, primarily due to funding the acquisition of Fermacell.

Income tax expense for the quarter and full year increased when compared to the prior corresponding periods due to the movement in asbestos adjustments and a change in the accounting treatment of intangible assets which did not apply in the prior corresponding period, partially offset by a decrease in the US corporate income tax rate.

Net operating profit increased for the quarter and full year, primarily driven by the favorable movement in asbestos adjustments and higher gross profit, partially offset by higher income tax expense and SG&A expenses.

North America Fiber Cement Segment

Operating results for the North America Fiber Cement segment were as follows:

US$ Millions	Three Months and Full Year Ended 31 March					
	Q4 FY19	Q4 FY18	Change	FY19	FY18	Change
Volume (mmsf)	593.3	586.8	1%	2,308.1	2,238.8	3%
Average net sales price per unit (per msf)	US$704	US$692	2%	US$718	US$698	3%
Fiber cement net sales	422.0	410.1	3%	1,676.9	1,578.1	6%
Gross profit			(4%)			3%
Gross margin (%)			(2.6 pts)			(0.9 pts)
EBIT	95.1	103.4	(8%)	382.5	381.9	—
EBIT margin (%)	22.5	25.2	(2.7 pts)	22.8	24.2	(1.4 pts)
EBIT excluding product line discontinuation[1]	95.1	103.4	(8%)	387.9	381.9	2%
EBIT margin excluding product line discontinuation[1](%)	22.5	25.2	(2.7 pts)	23.1	24.2	(1.1 pts)

[1] Excludes product line discontinuation expenses of nil for the quarter and US$5.4 million for fiscal year 2019. These expenses include asset impairments of US$3.0 million, and a one-time charge of US$2.4 million to cost of goods sold associated with our decision to discontinue our MCT product line, as well as certain excess and obsolete ColorPlus® color palettes

Net sales for the quarter and full year were favorably impacted by higher sales volumes and a higher average net sales price compared to prior corresponding periods. The increase in volume includes growth in exteriors for the quarter and full year of 3% and 5%, respectively, compared to the prior corresponding periods, reflecting slight growth above the market index. This increase in volume was partially offset by a decrease in interiors volume for the quarter and full year of 10% and 4%, respectively. The increase in average net sales price of 2% for the quarter primarily reflects the annual change in our strategic pricing effective April 2018, partially offset by tactical pricing. For the full year, the increase in average net sales price of 3% primarily reflects the annual change in our strategic pricing effective April 2018.

We note that there are a number of data sources that measure US housing market growth. At the time of filing our results for the period ended 31 March 2019, only US Census Bureau data was available. According to the US Census Bureau, single family housing starts for the quarter were 184,500, or 5% below the prior corresponding period. For the full year ended 31 March 2019, single family housing starts were 865,400, or flat compared to the prior corresponding period. We note that the US Census Bureau's data can be different from other indices we use to measure US housing market growth, namely the McGraw-Hill Construction Residential Starts Data (also known as Dodge), the National Association of Home Builders and Fannie Mae.

Results Including Product Line Discontinuation Expenses

The change in gross margin for the quarter and full year can be attributed to the following components:

For the Three Months Ended 31 March 2019:	
Higher average net sales price	1.1 pts
Higher production and other costs	(3.7 pts)
Total percentage point change in gross margin	(2.6 pts)

For the Full Year Ended 31 March 2019:	
Higher average net sales price	2.0 pts
Higher start up costs	(0.1 pts)
Higher production and other costs	(2.8 pts)
Total percentage point change in gross margin	(0.9 pts)

Gross margin for the quarter decreased 2.6 percentage points compared to the prior corresponding period. This decrease was primarily due to higher production costs, partially offset by a higher average net sales price. Higher production costs were driven by higher input costs, primarily due to market rates for pulp and unfavorable plant performance.

Gross margin for the full year decreased 0.9 percentage points, compared to prior corresponding period. This decrease was primarily due to higher production costs, partially offset by a higher average net sales price. Higher production costs were driven by higher input costs, primarily due to market rates for pulp and freight. In addition, gross margin for the full year decreased as a result of a one-time charge of US$2.4 million from our decision to discontinue the MCT product line and certain excess and obsolete ColorPlus® color palettes related to our win-with-color strategy.

For the full year of fiscal year 2019, we experienced significant inflationary trends across our key input costs, especially in pulp, and other raw materials. In addition, the freight market in the first half of fiscal year 2019 was in very tight supply, and as a result, market rates for freight exhibited significant inflationary pricing.

As a percentage of sales, SG&A expenses was flat for the quarter and increased 0.3 percentage points for the full year, when compared to the prior corresponding periods. SG&A expenses for the quarter and full year were higher compared to the prior corresponding periods, driven primarily by higher labor related costs and higher discretionary spend.

EBIT for the quarter decreased 8% compared to the prior corresponding period, primarily driven by a 4% decrease in gross profit and higher SG&A expenses. EBIT for the full year was flat compared to the prior corresponding period, primarily driven by a 3% increase in gross profit, offset by higher SG&A expenses and product line discontinuation expenses of US$5.4 million.

EBIT margin for the quarter and full year decreased 2.7 percentage points and 1.4 percentage points to 22.5% and 22.8%, respectively, when compared to the prior corresponding periods, driven primarily by the decrease in gross margin. EBIT margin for the full year was additionally impacted by higher SG&A expenses as described above and product line discontinuation expenses.

Results Excluding Product Line Discontinuation Expenses

Gross margin for the full year, excluding product line discontinuation expenses, decreased compared to the prior corresponding period, primarily driven by higher production costs, partially offset by a higher average net sales price. Higher production costs were primarily due to higher input and freight costs.

EBIT for the full year, excluding product line discontinuation expenses, increased 2%, compared to the prior corresponding period, driven by an increase in gross profit, partially offset by higher SG&A expenses.

EBIT margin for the full year, excluding product line discontinuation expenses, decreased 1.1 percentage points to 23.1% when compared to the prior corresponding period, primarily driven by the decrease in gross margin and higher SG&A expenses.

Asia Pacific Fiber Cement Segment

The Asia Pacific Fiber Cement segment is comprised of the following businesses: (i) Australia Fiber Cement, (ii) New Zealand Fiber Cement, and (iii) Philippines Fiber Cement.

Operating results for the Asia Pacific Fiber Cement segment in US dollars were as follows:

US$ Millions	Three Months and Full Year Ended 31 March					
	Q4 FY19	Q4 FY18	Change	FY19	FY18	Change
Volume (mmsf)	129.9	121.6	7%	546.1	494.7	10%
Average net sales price per unit (per msf)	US$701	US$767	(9%)	US$724	US$762	(5%)
Fiber cement net sales	102.3	105.1	(3%)	446.8	425.4	5%
Gross profit			(16%)			(6%)
Gross margin (%)			(4.9 pts)			(3.9 pts)
EBIT	20.5	26.3	(22%)	99.8	108.1	(8%)
EBIT margin (%)	20.0	25.0	(5.0 pts)	22.3	25.4	(3.1 pts)

The Asia Pacific Fiber Cement segment results in US dollars were unfavorably impacted by average foreign exchange rate movements for the quarter and full year as detailed in the table below:

	Q4 FY19			Full Year FY19		
	Results in AUD	Results in USD	Impact of FX	Results in AUD	Results in USD	Impact of FX
Average net sales price per unit (per msf)	+1%	-9%	-10%	+1%	-5%	-6%
Net sales	+7%	-3%	-10%	+11%	+5%	-6%
Gross profit	-7%	-16%	-9%	FLAT	-6%	-6%
EBIT	-14%	-22%	-8%	-2%	-8%	-6%

Operating results for the Asia Pacific Fiber Cement segment in Australian dollars were as follows:

A$ Millions	Three Months and Full Year Ended 31 March					
	Q4 FY19	Q4 FY18	Change	FY19	FY18	Change
Volume (mmsf)	129.9	121.6	7%	546.1	494.7	10%
Average net sales price per unit (per msf)	A$984	A$976	1%	A$992	A$985	1%
Fiber cement net sales	143.6	133.8	7%	612.2	549.7	11%
Gross profit			(7%)			—
Gross margin (%)			(5.1 pts)			(4.0 pts)
EBIT	28.8	33.5	(14%)	136.5	139.8	(2%)
EBIT margin (%)	20.1	25.0	(4.9 pts)	22.3	25.4	(3.1 pts)

Volume for the quarter and full year increased 7% and 10%, respectively, compared to the prior corresponding periods, primarily driven by our Australian and Philippines businesses gaining volume growth above their underlying market growth. In Australia, volume growth was driven by market penetration and category share gains. In the Philippines, volume growth was due to strategic distributor programs resulting in market penetration. Fiber cement net sales in Australian dollars for the quarter and full year increased 7% and 11%, respectively, compared to the prior corresponding periods, primarily driven by higher volume across all regions.

Gross profit in Australian dollars decreased 7% for the quarter compared to the prior corresponding period. The decrease for the quarter was primarily driven by higher input costs, partially offset by higher net sales. Gross profit was flat for the full year due to higher production costs driven by higher pulp and freight costs, as well as unfavorable plant performance in New Zealand, offset by higher net sales.

In Australian dollars, the change in gross margin for the quarter and full year can be attributed to the following components:

For the Three Months Ended 31 March 2019:	
Higher average net sales price	0.4 pts
Higher production costs	(5.5 pts)
Total percentage point change in gross margin	(5.1 pts)

For the Full Year Ended 31 March 2019:	
Higher average net sales price	0.3 pts
Higher production costs	(4.3 pts)
Total percentage point change in gross margin	(4.0 pts)

As a percentage of sales, SG&A expenses in Australian dollars was flat for the quarter and decreased 0.8 percentage points for the full year when compared to the prior corresponding periods. EBIT in Australian dollars decreased 14% and 2% for the quarter and full year, respectively, when compared to the prior corresponding periods to A$28.8 million and A$136.5 million, respectively.

Country Analysis

Australia Fiber Cement

Net sales in local currency for the quarter and full year increased 5% and 11%, respectively, from the prior corresponding periods, primarily due to an increase in volume and the favorable impact of our price increase. The key driver of volume growth was market penetration, as we gained market share compared to the prior corresponding periods, despite a continued, softening market. The market share gains were driven by the addition of several large customers, including one large customer in the first half of fiscal year 2018, and another large customer in the first quarter of fiscal year 2019. The volume growth during the quarter and full year was most prominent in the East Coast regions, and was realized in both the new construction and additions and alterations markets.

EBIT in local currency for the quarter and full year decreased 14% and increased 3%, respectively, when compared to the prior corresponding periods. The decrease in EBIT for the quarter was primarily due to higher pulp costs and SG&A expenses, partially offset by higher net sales. The increase in EBIT for the full year was primarily driven by higher net sales and favorable plant performance, partially offset by higher pulp, freight costs, and employment costs.

According to Australian Bureau of Statistics data, approvals for detached houses, a key driver of Australian business' sales volume, were 24,803 for the quarter, a decrease of 13% compared to the prior corresponding period. For the full year, approvals for detached houses were 115,373, a decrease of 4% compared to the prior corresponding period. The other key driver of our sales volume, the alterations and additions market, was flat and increased 3% for the quarter and full year ended 31 March 2019, respectively, when compared to the prior corresponding periods.

New Zealand Fiber Cement

Net sales in local currency for the quarter and full year increased 4% and 8%, respectively, from the prior corresponding periods, primarily driven by higher volume. EBIT in local currency decreased for the quarter and full year, compared to the prior corresponding periods, primarily due to unfavorable plant performance and higher input costs.

Philippines Fiber Cement

Volume for the quarter and full year increased 14% and 15%, respectively, when compared to the prior corresponding periods, primarily as a result of market penetration during the current fiscal year. EBIT in local currency for the quarter and full year decreased compared to the prior corresponding periods, driven by higher input costs, one time inventory adjustments and start-up costs associated with our capacity expansion.

Europe Building Products Segment

The Europe Building Products segment is comprised of: (i) Europe Fiber Cement; and (ii) Fiber Gypsum. Operating results for the Europe Building Products segment in US dollars were as follows:

US$ Millions	**Three Months and Full Year Ended 31 March**					
	Q4 FY19	**Q4 FY18**	**Change**	**FY19**	**FY18**	**Change**
Volume (mmsf)	219.0	7.3		815.8	34.0	
Average net sales price per unit (per msf)	US$346	US$878	(61%)	US$354	US$950	(63%)
Fiber cement net sales	8.8	7.4	19%	35.8	36.3	(1%)
Fiber gypsum net sales[1]	89.9	—		332.5	—	
Net sales	98.7	7.4		368.3	36.3	
Gross profit[2]			NM			NM
Gross margin (%)[2]			NM			NM
EBIT[3]	7.1	(0.3)		10.0	0.3	
EBIT margin (%)[3]	7.2	(4.1)	11.3 pts	2.7	0.8	1.9 pts

[1] Also includes cement bonded board net sales

[2] The change in gross profit and gross margin is not presented due to the impact from the acquisition of Fermacell during the first quarter of fiscal year 2019

[3] Includes Fermacell transaction and integration costs of US$4.1 million for the fourth quarter and US$21.8 million for the full year, as well as, a US$7.3 million inventory fair value adjustment during the full year resulting from acquisition accounting adjustments in Q1FY19

Net sales for the quarter and full year increased compared to the prior corresponding period, driven by the increase in volume due to the Fermacell acquisition on 3 April 2018. Average net sales price in US dollars for the quarter and full year decreased compared to prior corresponding periods, primarily due to product mix, as most of the volume in the current period was from fiber gypsum products, which have a lower average net sales price than fiber cement.

EBIT for the quarter increased US$7.4 million, compared to the prior corresponding period, primarily due to additional earnings provided by Fermacell, partially offset by US$4.1 million of Fermacell integration costs.

EBIT for the full year increased US$9.7 million to US$10.0 million, compared to the prior corresponding period, primarily due to additional earnings provided by Fermacell, partially offset by costs associated with the Fermacell acquisition. These costs for the full year include integration costs of US$14.6 million, a one-time inventory fair value adjustment of US$7.3 million, and transaction costs of US$7.2 million.

Below, we have included Non-US GAAP measures, Europe Building Products segment Adjusted EBIT and Adjusted EBIT margin excluding costs associated with the acquisition. Note that the below reconciling items have not been excluded from Adjusted EBIT and Adjusted net operating profit as presented on pages 13 and 15, respectively.

US$ Millions	**Three Months and Full Year Ended 31 March**	
	Q4 FY19	**FY19**
Europe Building Products segment EBIT	7.1	10.0
Inventory fair value adjustment [1]	—	7.3
Transaction costs[2]	—	7.2
Integration costs[3]	4.1	14.6
Europe Building Products segment Adjusted EBIT excluding costs associated with the acquisition	11.2	39.1
Europe Building Products segment Adjusted EBIT margin excluding costs associated with the acquisition	11.3 %	10.6 %

[1] Under US GAAP, we are required to value the inventory acquired at fair market value, resulting in a preliminary total inventory fair value adjustment of US$7.3 million. As this inventory was sold during the first quarter of FY19, the entire adjustment was recognized into cost of goods sold during that quarter

[2] Transaction costs include certain non-recurring fees incurred in conjunction with the acquisition of Fermacell

[3] Integration costs relate to professional, legal and other fees incurred in conjunction with the integration of Fermacell

Net sales in the Europe Building Products segment for the quarter and full year of US$98.7 million and US$368.3 million, respectively, decreased 1% and increased 6%, respectively, from pro-forma net sales from the prior corresponding periods of US$99.5 million and US$348.8 m illion, respectively. In Euros, pro-forma net sales for the quarter and full year increased 7%.

Other Businesses Segment

US$ Millions	Three Months and Full Year Ended 31 March					
	Q4 FY19	Q4 FY18	Change	FY19	FY18	Change
Net sales	1.8	3.3	(45%)	14.6	14.7	(1%)
Gross profit			NM			NM
Gross profit margin (%)			NM			NM
EBIT	(4.4)	(2.8)	(57%)	(30.9)	(8.6)	
Product line discontinuation	(3.5)	—		(24.1)	—	

The Other Businesses segment is comprised of our fiberglass windows business, which includes a fiberglass windows assembly facility as well as a fiberglass pultrusion business. In fiscal year 2019, we made the decision to shut down the fiberglass windows business and recorded product line discontinuation costs associated with the closure. In April 2019, we entered into a sale and purchase agreement for our fiberglass pultrusion portion of the business, which closed in the first quarter of fiscal year 2020.

EBIT loss for the quarter and full year was US$ 4.4 million and US$ 30.9 million, respectively. The EBIT loss for the quarter and full year was driven by product line discontinuation costs of US$3.5 million and US$24.1 million, respectively, as well as EBIT loss from operations of US$0.9 million and US$6.8 million, respectively. Product line discontinuation costs consist of impairment costs of US$12.9 million, inventory adjustments of US$8.5 million, and other related closure costs of US$2.7 million.

Research and Development Segment

We record R&D expenses depending on whether they are core R&D projects that are designed to benefit all business units, which are recorded in our R&D segment, or commercialization projects for the benefit of a particular business unit, which are recorded in the individual business unit's segment results. The table below details the expenses of our R&D segment:

US$ Millions	Three Months and Full Year Ended 31 March					
	Q4 FY19	Q4 FY18	Change %	FY19	FY18	Change %
Segment R&D expenses	$ (6.1)	$ (6.8)	10	$ (26.7)	$ (25.4)	(5)
Segment R&D SG&A expenses	(1.0)	(0.5)		(2.3)	(2.4)	4
Total R&D EBIT	$ (7.1)	$ (7.3)	3	$ (29.0)	$ (27.8)	(4)

The change in segment R&D expenses for the quarter and full year was due to normal variation among our research and development projects. The expense will fluctuate period to period depending on the nature and number of core R&D projects being worked on and the AUD/USD exchange rates during the period.

Other R&D expenses associated with commercialization projects in business units are recorded in the results of the respective business unit segment. Other R&D expenses associated with commercialization projects were US$3.3 million for the quarter and US$11.2 million for the full year, compared to US$2.1 million and US$7.9 million, respectively, for the prior corresponding periods. The increase was primarily driven by additional projects undertaken by the R&D team in our Europe Building Products segment.

General Corporate

Results for General Corporate were as follows:

US$ Millions	Three Months and Full Year Ended 31 March					
	Q4 FY19	Q4 FY18	Change %	FY19	FY18	Change %
General Corporate SG&A expenses	$ (14.7)	$ (16.3)	10	$ (57.3)	$ (56.4)	(2)
Fermacell acquisition costs[1]	—	(5.3)		—	(10.0)	
Asbestos:						
Asbestos adjustments	(73.4)	(192.9)	62	(22.0)	(156.4)	86
AICF SG&A expenses[2]	(0.4)	(0.6)	33	(1.5)	(1.9)	21
General Corporate EBIT	$ (88.5)	$ (215.1)	59	$ (80.8)	$ (224.7)	64

[1] Relates to professional, legal and other fees incurred in FY2018 prior to the close of the Fermacell acquisition

[2] Relates to non-claims related operating costs incurred by AICF, which we consolidate into our financial results due to our pecuniary and contractual interests in AICF

For the quarter, General Corporate SG&A expenses decreased when compared with the prior corresponding period, primarily due to a favorable settlement related to New Zealand weathertightness claims of US$1.1 million and favorable movements in recognized foreign exchange gains.

For the full year, General Corporate SG&A expenses increased US$ 0.9 million, compared to the prior corresponding period. This increase was primarily due to a non-recurring US$3.4 million gain in the prior year from the sale of a storage building located near our Fontana facility, as well as New Zealand weathertightness claims of US$3.3 million, partially offset by lower stock compensation expenses and favorable movements in recognized foreign exchange gains.

Asbestos adjustments for both periods primarily reflect the unfavorable actuarial adjustment recorded at year end in line with KPMGA's actuarial report, as well as, the non-cash foreign exchange re-measurement impact on asbestos related balance sheet items, driven by the change in the AUD/USD spot exchange rate from the beginning balance sheet date to the ending balance sheet date, for each respective period.

The AUD/USD spot exchange rates are shown in the table below:

FY19		FY18	
31 March 2018	0.7681	31 March 2017	0.7644
31 March 2019	0.7096	31 March 2018	0.7681
Change ($)	(0.0585)	Change ($)	0.0037
Change (%)	(8)	Change (%)	—

For fiscal years 2019 and 2018, the asbestos adjustments recorded by the Company were made up of the following compo nents:

US$ Millions	Full Year Ended 31 March	
	FY19	FY18
Increase in actuarial estimate	$ (72.7)	$ (151.4)
Effect of foreign exchange rate movements	49.5	(5.3)
(Loss) gain on foreign currency forward contracts	(0.8)	1.4
Adjustments in insurance receivable	2.0	—
Asbestos research and education contribution	—	(1.1)
Asbestos adjustments	$ (22.0)	$ (156.4)

Per the KPMGA actuarial report, the undiscounted and uninflated central estimate net of insurance recoveries decreased to A$1.400 billion at 31 March 2019 from A$1.443 billion at 31 March 2018. The change in the undiscounted and uninflated central estimate of A$43.1 million or 4% is primarily due to net cash outflows in the fiscal year 2019 of A$142.8 million partially offset by an increase to the actuarial estimate. The increase in the KPMGA actuarial estimate is primarily due to the impact of increasing the undiscounted and uninflated central estimate to prevailing costs at 31 March 2019 from 31 March 2018 levels and additional costs associated with overseas exposures.

During fiscal year 2019, mesothelioma claims reporting activity was below actuarial expectations and the prior corresponding period. One of the more significant assumptions is the estimated peak period of mesothelioma disease claims, which was assumed to have occurred during the period 1 April 2014 through 31 March 2017. In fiscal year 2018, KPMGA formed the view that the increases in the mesothelioma claims reporting seen in recent years was a permanent effect, and therefore increased the projected number of future mesothelioma claims at 31 March 2018. The revised KPMGA modeling approach for mesothelioma claims considered the claimant's age which resulted in a higher number of projected claims, partially offset by a reduction in projected average claim size.

At 31 March 2019, KPMGA has formed the view that although the mix of claimants by age was slightly favorable relative to expectations, at this time it is too early to reflect changes to the valuation adjustments given that 2018/2019 was the first year of the new model. Changes to the assumptions may be necessary in future periods should mesothelioma claims reporting escalate or decline.

Potential variation in the estimated peak period of claims has an impact much greater than the other assumptions used to derive the discounted central estimate. In performing the sensitivity assessment of the estimated incidence pattern reporting for mesothelioma, if the pattern of incidence was shifted by two years, the central estimate could
increase by approximately 19% on a discounted basis.

Asbestos gross cash outflows of A$154.4 million for fiscal year 2019 were slightly higher than the actuarial expectation of A$151.8 million.

Readers are referred to Note 12 of our 31 March 2019 consolidated financial statements for further information on asbestos adjustments.

EBIT

The table below summarizes EBIT results as discussed above:

US$ Millions	Three Months and Full Year Ended 31 March					
	Q4 FY19	Q4 FY18	Change %	FY19	FY18	Change %
North America Fiber Cement [1]	$ 95.1	$ 103.4	(8)	$ 387.9	$ 381.9	2
Asia Pacific Fiber Cement	20.5	26.3	(22)	99.8	108.1	(8)
Europe Building Products	7.1	(0.3)		10.0	0.3	
Other Businesses [2]	(0.9)	(2.8)	68	(6.8)	(8.6)	21
Research and Development	(7.1)	(7.3)	3	(29.0)	(27.8)	(4)
General Corporate [3]	(14.7)	(16.3)	10	(57.3)	(56.4)	(2)
Adjusted EBIT	**100.0**	**103.0**	**(3)**	**404.6**	**397.5**	**2**
Asbestos:						
Asbestos adjustments	(73.4)	(192.9)	62	(22.0)	(156.4)	86
AICF SG&A expenses	(0.4)	(0.6)	33	(1.5)	(1.9)	21
Fermacell acquisition costs [4]	—	(5.3)		—	(10.0)	
Product line discontinuation [5]	(3.5)	—		(29.5)	—	
EBIT	**$ 22.7**	**$ (95.8)**		**$ 351.6**	**$ 229.2**	**53**

[1] Excludes product line discontinuation expenses of US$5.4 million for the full year 2019, as a result of our decision to discontinue our MCT product line, as well as, certain excess and obsolete ColorPlus® color palettes

[2] Excludes product line discontinuation expenses of US$3.5 million and US$24.1 million for the quarter and full year 2019, respectively, as a result of our decision to discontinue our Windows business

[3] Excludes Asbestos-related expenses and adjustments, and acquisition costs incurred prior to the close of Fermacell

[4] Relates to professional, legal and other fees incurred in FY2018 prior to the close of the Fermacell acquisition

[5] Product line discontinuation expenses include asset impairments and other charges as a result of our decision to discontinue product lines in both our North America Fiber Cement segment and our Other Businesses segment

Net Interest Expense

US$ Millions	Three Months and Full Year Ended 31 March					
	Q4 FY19	Q4 FY18	Change %	FY19	FY18	Change %
Gross interest expense	$ (16.2)	$ (11.2)	(45)	$ (59.6)	$ (37.7)	(58)
Capitalized interest	1.7	1.7	—	5.4	4.8	13
Interest income	0.7	0.7	—	2.1	1.5	40
Net AICF interest income	0.5	0.9	(44)	2.0	1.9	5
Net interest expense	**$ (13.3)**	**$ (7.9)**	**(68)**	**$ (50.1)**	**$ (29.5)**	**(70)**

Gross interest expense for the quarter and full year increased US$5.0 million and US$21.9 million, respectively, when compared to the prior corresponding periods, primarily due to the higher outstanding balance of our senior unsecured notes, which includes the financing of the Fermacell acquisition.

Other Income

During the quarter, other income decreased from US$0.5 million in the prior corresponding period to nil. For the full year, other income decreased from US$0.7 million in the prior corresponding period to US$0.1 million. The movement in other income is primarily driven by the valuation of our interest rate swaps.

Income Tax

	Three Months and Full Year Ended 31 March			
	Q4 FY19	Q4 FY18	FY19	FY18
Income tax (expense) benefit (US$ Millions)	(8.6)	45.6	(71.8)	(28.2)
Effective tax rate (%)	91.5	44.2	23.9	16.2
Adjusted income tax expense[1] (US$ Millions)	(12.4)	(13.6)	(52.1)	(75.5)
Adjusted effective tax rate[1] (%)	14.4	14.4	14.8	20.6

[1] Includes tax adjustments related to the amortization benefit of certain US intangible assets, asbestos, product line discontinuation, loss on early debt extinguishment, and other tax adjustments

Total income tax expense for the quarter increased US$ 54.2 million when compared to the prior corresponding period. The increase in income tax expense was primarily due to the change in the asbestos actuarial adjustment, when compared to the prior corresponding period.

Total income tax expense for the full year increased US$ 43.6 million, when compared to the prior corresponding period. The increase was primarily due to the change in the accounting treatment of the amortization of intangible assets which did not apply in the prior corresponding period and the change in the asbestos actuarial adjustment, partially offset by the decrease in the US corporate income tax rate.

Total Adjusted income tax expense for the quarter and full year decreased US$ 1.2 million and US$23.4 million, respectively, compared to the prior corresponding periods. The decrease in Adjusted income tax expense for the quarter and full year was driven by adjustments from the ongoing accounting treatment of amortization of intangible assets and a reduction in the US statutory corporate tax rate.

Readers are referred to Note 15 of our 31 March 2019 consolidated financial statements for further information related to income tax.

Net Operating Profit

US$ Millions	Three Months and Full Year Ended 31 March					
	Q4 FY19	Q4 FY18	Change %	FY19	FY18	Change %
EBIT	**$ 22.7**	**$ (95.8)**		**$ 351.6**	**$ 229.2**	53
Net interest expense	(13.3)	(7.9)	(68)	(50.1)	(29.5)	(70)
Loss on early debt extinguishment[1]	—	—		(1.0)	(26.1)	96
Other income	—	0.5		0.1	0.7	(86)
Income tax (expense) benefit	(8.6)	45.6		(71.8)	(28.2)	
Net operating profit (loss)	**0.8**	**(57.6)**	**101**	**228.8**	**146.1**	**57**
Excluding:						
Asbestos:						
Asbestos adjustments	73.4	192.9	(62)	22.0	156.4	(86)
AICF SG&A expenses	0.4	0.6	(33)	1.5	1.9	(21)
AICF interest income, net	(0.5)	(0.9)	44	(2.0)	(1.9)	5
Fermacell acquisition costs[2]	—	5.3		—	10.0	
Product line discontinuation[3]	3.5	—		29.5	—	
Loss on early debt extinguishment[1]	—	—		1.0	26.1	(96)
Tax adjustments[4]	(3.8)	(59.2)	94	19.7	(47.3)	
Adjusted net operating profit	**73.8**	**81.1**	**(9)**	**300.5**	**291.3**	**3**
Adjusted diluted earnings per share (US cents)	17	18		68	66	

[1] In December 2017, we redeemed our 5.875% senior notes due 2023 and recorded a loss on early debt extinguishment in connection with this redemption of US$26.1 million, including call redemption premiums and unamortized financing costs. In October 2018, we repaid our outstanding 364-day term loan facility and incurred a loss of US$1.0 million, associated with unamortized financing costs. Readers are referred to Note 10 of our 31 March 2019 consolidated financial statements for further information related to long-term debt.

[2] Relates to professional, legal and other fees incurred in FY2018 in conjunction with the acquisition of Fermacell

[3] Product line discontinuation expenses incurred in FY2019 include asset impairments and other charges as a result of our decision to discontinue product lines in both our North America Fiber Cement and Other Businesses segments

[4] Includes tax adjustments related to the amortization benefit of certain US intangible assets, asbestos, product line discontinuation, loss on early debt extinguishment, and other tax adjustments

Adjusted net operating profit of US$73.8 million for the quarter decreased US$7.3 million, or 9%, compared to the prior corresponding period, primarily due to higher net interest expense of US$5.4 million and a US$3.0 million decrease in Adjusted EBIT, partially offset by lower Adjusted income tax expense of US$1.2 million. The decrease in Adjusted EBIT was driven by the underlying performance of the operating business units when compared to the prior corresponding period, primarily due to the US$8.3 million and US$5.8 million decrease in Adjusted EBIT in the North America Fiber Cement and Asia Pacific Fiber Cement segments, respectively. The decrease was partially offset by the US$7.4 million increase in EBIT in the Europe Building Products segment, compared to the prior corresponding period.

Adjusted net operating profit of US$300.5 million for the full year increased US$9.2 million, or 3%, compared to the prior corresponding period, primarily due to lower Adjusted income tax expense of US$23.4 million and a US$7.1 million increase in Adjusted EBIT, partially offset by higher net interest expense of US$20.6 million. The increase in Adjusted EBIT was primarily driven by the favorable underlying performance of the operating business units when compared to the prior corresponding period.

Cash Flow

Operating Activities

Cash provided by operating activities decreased US$14.4 million to US$287.6 million. The decrease in cash provided by operating activities was primarily driven by changes in other operating assets and liabilities of US$56.2 million and net cash outflows in working capital of US$20.1 million, partially offset by a US$61.9 million increase in net income adjusted for non-cash items. The primary driver of the change in other operating assets and liabilities was due to changes in income taxes payable and other normal variations in the course of our business. The net cash outflow in working capital was primarily due to the timing of payments in accounts payable and the timing of collections in accounts receivable, partially offset by the buildup of inventories in the North America Fiber Cement segment in the prior year, related to our then capacity constraint.

Investing Activities

Cash used in investing activities increased US$609.0 million to US$848.0 million. The increase in cash used in investing activities was primarily due to the US$558.7 million acquisition of Fermacell, as well as an increase in purchases in property, plant and equipment of US$ 97.4 million. The increase in capital expenditures was primarily related to the greenfield expansion projects in Prattville and Tacoma. This was partially offset by higher net proceeds from AICF's short-term investments of US$66.2 million.

Financing Activities

Cash provided by financing activities increased US$303.6 million to US$364.2 million. The increase in cash provided by financing activities was primarily driven by higher net proceeds from credit facilities and senior notes of US$125.0 million and US$102.0 million, respectively, as well as AICF's repayment of its NSW loan in the prior year of US$51.9 million, compared to nil in the current year.

Capacity Expansion

We continually evaluate the capacity required to service the housing markets in which we operate to ensure we meet demand and achieve our market penetration objectives. During the current quarter:

In North America we:

- Continued the start-up of our Tacoma greenfield expansion project, which is expected to be completed in the first half of fiscal year 2020;
- Continued the construction of a greenfield expansion project in Prattville, Alabama, which is expected to be commissioned in the first half of fiscal year 2021 at an estimated total cost of US$240.0 million; and
- Continued the planning and design of an expansion project within our ColorPlus® product line, including projects at our Peru and Pulaski facilities, and a greenfield project in Massachusetts.

In Asia Pacific we:

- Completed the start-up of the additional capacity expansion in the Philippines; and
- Continued the planning and design of a brownfield expansion project at our existing Carole Park facility in Australia with an estimated total cost of A$28.5 million. The brownfield expansion project is expected to be commissioned by the first quarter of fiscal year 2021.

Liquidity and Capital Allocation

Our cash position decreased from US$281.6 million at 31 March 2018 to US$ 78.7 million at 31 March 2019.

At 31 March 2019, we held two forms of debt: an unsecured revolving credit facility and senior unsecured notes. The effective weighted average interest rate on our total debt was 4.4% and 4.7% at 31 March 2019 and 31 March 2018, respectively. The weighted average term of all debt, including undrawn facilities, was 6.3 years and 6.9 years at 31 March 2019 and 31 March 2018, respectively.

At 31 March 2019, we had a US$500.0 million unsecured revolving credit facility. At 31 March 2019, a total of US$150.0 million was drawn from the unsecured revolving facility, compared to US$100.0 million at 31 March 2018. The unsecured revolving credit facility's expiration date is December 2022 and the size of the facility may be increased by up to US$250.0 million.

On 3 April 2018, we drew €400.0 million (US$492.4 million based on the exchange rate at 3 April 2018) from the 364-day term loan facility, and used these funds to complete the Fermacell acquisition. In October 2018, we completed the sale of €400.0 million (US$458.8 million, based on the exchange rate at 3 October 2018) aggregate principal amount of 3.625% senior unsecured notes due 2026. The proceeds from the offering were used to repay our outstanding 364-day term loan facility.

Based on our existing cash balances, together with anticipated operating cash flows arising during the year and unutilized committed credit facilities, we anticipate that we will have sufficient funds to meet our planned working capital and other expected cash requirements for the next twelve months.

We have historically met our working capital needs and capital expenditure requirements from a combination of cash flows from operations and credit facilities. Seasonal fluctuations in working capital generally have not had a significant impact on our short or long term liquidity.

Capital Management and Dividends

The following table summarizes the dividends declared or paid in respect of fiscal years 2019, 2018 and 2017:

US$ Millions	US Cents/ Security	Total US$ (Millions)	Announcement Date	Record Date	Payment Date
FY 2019 second half dividend	0.26	115.0	21 May 2019	6 June 2019	2 August 2019
FY 2019 first half dividend	0.10	43.6	8 November 2018	12 December 2018	22 February 2019
FY 2018 second half dividend	0.30	128.5	22 May 2018	7 June 2018	3 August 2018
FY 2018 first half dividend	0.10	46.2	9 November 2017	13 December 2017	23 February 2018
FY 2017 second half dividend	0.28	131.3	18 May 2017	8 June 2017	4 August 2017
FY 2017 first half dividend	0.10	46.6	17 November 2016	21 December 2016	24 February 2017
FY 2016 second half dividend	0.29	130.2	19 May 2016	9 June 2016	5 August 2016

We periodically review our capital structure and capital allocation objectives and expect the following prioritization to remain:

- invest in R&D and capacity expansion to support organic growth;
- provide ordinary dividend payments within the payout ratio of 50-70% of net operating profit, excluding asbestos;
- maintain flexibility to manage through market cycles; and
- consider flexibility for accretive and strategic inorganic growth and/or other shareholder returns when appropriate.

Other Asbestos Information

Claims Data

	Three Months and Full Year Ended 31 March					
	Q4 FY19	Q4 FY18	Change %	FY19	FY18	Change %
Claims received	133	129	(3)	568	562	(1)
Actuarial estimate for the period	144	144	—	576	576	—
Difference in claims received to actuarial estimate	11	15		8	14	
Average claim settlement[1] (A$)	219,000	231,000	5	262,000	253,000	(4)
Actuarial estimate for the period[2]	290,000	283,000	(2)	290,000	283,000	(2)
Difference in claims paid to actuarial estimate	71,000	52,000		28,000	30,000	

[1] Average claim settlement is derived as the total amount paid divided by the number of non-nil claim settlements

[2] This actuarial estimate is a function of the assumed experience by disease type and the relative mix of settlements assumed by disease type. Any variances in the assumed mix of settlements by disease type will have an impact on the average claim settlement experience

For the period ended 31 March 2019, we noted the following related to asbestos-related claims:

- Claims received during the full year were 1% below actuarial estimates and 1% higher than the prior corresponding period;
- Mesothelioma claims reported for the full year were 4% lower than actuarial expectations and 5% lower than the prior corresponding period;
- The average claim settlement for the quarter and full year was 24% and 10% below actuarial expectations, respectively;
- Average claim settlement sizes were lower for most disease types, including mesothelioma claims for most age groups, compared to actuarial expectations for fiscal year 2019; and
- The decrease in the average claim settlement for the full year versus actuarial estimates was largely attributable to lower average claim settlement for non-mesothelioma claims.

AICF Funding

On 2 July 2018, we made a payment of A$138.4 million (US$103.0 million) to AICF, representing 35% of our free cash flow for fiscal year 2018. Free cash flow, as defined in the AFFA, was equivalent to our fiscal year 2018 operating cash flow of US$295.0 million less an adjustment of US$0.8 million, resulting in free cash flow of US$294.2 million for fiscal year 2018, as defined by the AFFA.

We anticipate that we will make a contribution of approximately US$100.9 million to AICF on 1 July 2019. This amount represents 35% of our free cash flows of US$288.4 million. Our free cash flow as defined by the AFFA, is our operating cash flow per US GAAP in effect in December 2004. To reconcile our current year operating cash flow of US$287.6 million to 2004 US GAAP, a US$0.8 million adjustment is required.

From the time AICF was established in February 2007 through the date of this Report, we have contributed approximately A$1,193.4 million to the fund.

Readers are referred to Notes 2 and 12 of our 31 March 2019 consolidated financial statements for further information on asbestos.

Financial Measures - US GAAP equivalents

This document contains financial statement line item descriptions that are considered to be non-US GAAP, but are consistent with those used by Australian companies. Because we prepare our consolidated financial statements under US GAAP, the following table cross-references each non-US GAAP line item description, as used in Management's Analysis of Results and Media Release, to the equivalent US GAAP financial statement line item description used in our consolidated financial statements:

Management's Analysis of Results and Media Release	Consolidated Statements of Operations and Other Comprehensive Income (Loss) (US GAAP)
Net sales	Net sales
Cost of goods sold	Cost of goods sold
Gross profit	Gross profit
Selling, general and administrative expenses	Selling, general and administrative expenses
Research and development expenses	Research and development expenses
Asbestos adjustments	Asbestos adjustments
EBIT*	Operating income (loss)
Net interest income (expense)*	Sum of interest expense and interest income
Other income (expense)	Other income (expense)
Operating profit (loss) before income taxes*	Income (loss) before income taxes
Income tax (expense) benefit	Income tax (expense) benefit
Net operating profit (loss)*	Net income (loss)

*- Represents non-US GAAP descriptions used by Australian companies.

EBIT – Earnings before interest and tax.

EBIT margin – EBIT margin is defined as EBIT as a percentage of net sales.

Sales Volume

mmsf – million square feet, where a square foot is defined as a standard square foot of 5/16" thickness.

msf – thousand square feet, where a square foot is defined as a standard square foot of 5/16" thickness.

This Management's Analysis of Results includes certain financial information to supplement the Company's consolidated financial statements which are prepared in accordance with accounting principles generally accepted in the United States ("US GAAP"). These financial measures are designed to provide investors with an alternative method for assessing our performance from on-going operations, capital efficiency and profit generation. Management uses these financial measure for the same purposes. These financial measures include:

- Adjusted EBIT;
- North America Fiber Cement Segment Adjusted EBIT excluding product line discontinuation;
- Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition;
- Adjusted EBIT margin;
- North America Fiber Cement Segment Adjusted EBIT margin excluding product line discontinuation;
- Europe Building Products Segment Adjusted EBIT margin excluding costs associated with the acquisition;
- Adjusted net operating profit;
- Adjusted diluted earnings per share;
- Adjusted operating profit before income taxes;
- Adjusted income tax expense;
- Adjusted effective tax rate;
- Adjusted EBITDA;
- Adjusted EBITDA excluding Asbestos;
- Adjusted selling, general and administrative expenses ("Adjusted SG&A"); and
- Adjusted return on capital employed ("Adjusted ROCE").

These financial measures are or may be non-US GAAP financial measures as defined in the rules of the U.S. Securities and Exchange Commission and may exclude or include amounts that are included or excluded, as applicable, in the calculation of the most directly comparable financial measures calculated in accordance with US GAAP. These financial measures are not meant to be considered in isolation or as a substitute for comparable US GAAP financial measures and should be read only in conjunction with the Company's consolidated financial statements prepared in accordance with US GAAP. In evaluating these financial measures, investors should note that other companies reporting or describing similarly titled financial measures may calculate them differently and investors should exercise caution in comparing the Company's financial measures to similar titled measures by other companies.

Non-financial Terms

AFFA – Amended and Restated Final Funding Agreement

AICF – Asbestos Injuries Compensation Fund Ltd

Legacy New Zealand weathertightness claims ("New Zealand weathertightness") – Expenses arising from defending and resolving claims in New Zealand that allege poor building design, inadequate certification of plans, inadequate construction review and compliance certification and deficient work by sub-contractors

New South Wales loan facility ("NSW Loan") – AICF has access to a secured loan facility made available by the New South Wales Government, which can be used by AICF to fund the payment of asbestos claims and certain operating and legal costs

Financial Measures - US GAAP equivalents

Adjusted EBIT

US$ Millions	Three Months and Full Year Ended 31 March			
	Q4 FY19	Q4 FY18	FY19	FY18
EBIT	**$ 22.7**	**$ (95.8)**	**$ 351.6**	**$ 229.2**
Asbestos:				
Asbestos adjustments	73.4	192.9	22.0	156.4
AICF SG&A expenses	0.4	0.6	1.5	1.9
Fermacell acquisition costs	—	5.3	—	10.0
Product line discontinuation	3.5	—	29.5	—
Adjusted EBIT	**$ 100.0**	**$ 103.0**	**$ 404.6**	**$ 397.5**
Net sales	624.8	525.9	2,506.6	2,054.5
Adjusted EBIT margin	**16.0%**	**19.6%**	**16.1%**	**19.3%**

North America Fiber Cement Segment Adjusted EBIT excluding product line discontinuation

US$ Millions	Three Months and Full Year Ended 31 March	
	Q4 FY19	FY19
North America Fiber Cement Segment EBIT	**$ 95.1**	**$ 382.5**
Product line discontinuation	—	5.4
North America Fiber Cement Segment Adjusted EBIT excluding product line discontinuation	**$ 95.1**	**$ 387.9**
North America Fiber Cement segment net sales	422.0	1,676.9
North America Fiber Cement Segment Adjusted EBIT margin excluding product line discontinuation	**22.5%**	**23.1%**

Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition

US$ Millions	Three Months and Full Year Ended 31 March	
	Q4 FY19	FY19
Europe Building Products Segment EBIT	**$ 7.1**	**$ 10.0**
Inventory fair value adjustment	—	7.3
Transaction costs	—	7.2
Integration costs	4.1	14.6
Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition	**$ 11.2**	**$ 39.1**
Europe Building Products segment net sales	98.7	368.3
Europe Building Products Segment Adjusted EBIT margin excluding costs associated with the acquisition	**11.3%**	**10.6%**

Adjusted net operating profit

US$ Millions	Q4 FY19	Q4 FY18	FY19	FY18
	Three Months and Full Year Ended 31 March			
Net operating profit (loss)	**$ 0.8**	**$ (57.6)**	**$ 228.8**	**$ 146.1**
Asbestos:				
Asbestos adjustments	73.4	192.9	22.0	156.4
AICF SG&A expenses	0.4	0.6	1.5	1.9
AICF interest income, net	(0.5)	(0.9)	(2.0)	(1.9)
Loss on early debt extinguishment	—	—	1.0	26.1
Fermacell acquisition costs	—	5.3	—	10.0
Product line discontinuation	3.5	—	29.5	—
Tax adjustments[1]	(3.8)	(59.2)	19.7	(47.3)
Adjusted net operating profit	**$ 73.8**	**$ 81.1**	**$ 300.5**	**$ 291.3**

[1] Includes tax adjustments related to the amortization benefit of certain US intangible assets, asbestos, product line discontinuation, loss on early debt extinguishment and other tax adjustments

Adjusted diluted earnings per share

	Q4 FY19	Q4 FY18	FY19	FY18
	Three Months and Full Year Ended 31 March			
Adjusted net operating profit (US$ millions)	**$ 73.8**	**$ 81.1**	**$ 300.5**	**$ 291.3**
Weighted average common shares outstanding - Diluted (millions)	443.4	443.0	443.0	442.3
Adjusted diluted earnings per share (US cents)	**17**	**18**	**68**	**66**

Adjusted effective tax rate

US$ Millions	Q4 FY19	Q4 FY18	FY19	FY18
	Three Months and Full Year Ended 31 March			
Operating profit (loss) before income taxes	**$ 9.4**	**$ (103.2)**	**$ 300.6**	**$ 174.3**
Asbestos:				
Asbestos adjustments	73.4	192.9	22.0	156.4
AICF SG&A expenses	0.4	0.6	1.5	1.9
AICF interest income, net	(0.5)	(0.9)	(2.0)	(1.9)
Loss on early debt extinguishment	—	—	1.0	26.1
Fermacell acquisition costs	—	5.3	—	10.0
Product line discontinuation	3.5	—	29.5	—
Adjusted operating profit before income taxes	**$ 86.2**	**$ 94.7**	**$ 352.6**	**$ 366.8**
Income tax (expense) benefit	(8.6)	45.6	(71.8)	(28.2)
Tax adjustments[1]	(3.8)	(59.2)	19.7	(47.3)
Adjusted income tax expense	**$ (12.4)**	**$ (13.6)**	**$ (52.1)**	**$ (75.5)**
Effective tax rate	91.5%	44.2%	23.9%	16.2%
Adjusted effective tax rate	**14.4%**	**14.4%**	**14.8%**	**20.6%**

[1] Includes tax adjustments related to the amortization benefit of certain US intangible assets, asbestos, product line discontinuation, loss on early debt extinguishment and other tax adjustments

Adjusted EBITDA excluding Asbestos

US$ Millions	Three Months and Full Year Ended 31 March			
	Q4 FY19	Q4 FY18	FY19	FY18
EBIT	**$ 22.7**	**(95.8)**	**$ 351.6**	**$ 229.2**
Depreciation and amortization	30.7	23.4	119.4	92.0
Adjusted EBITDA	**$ 53.4**	**$ (72.4)**	**$ 471.0**	**$ 321.2**
Asbestos:				
Asbestos adjustments	73.4	192.9	22.0	156.4
AICF SG&A expenses	0.4	0.6	1.5	1.9
Adjusted EBITDA excluding Asbestos	**$ 127.2**	**$ 121.1**	**$ 494.5**	**$ 479.5**

Adjusted selling, general and administrative expenses ("Adjusted SG&A")

US$ Millions	Three Months and Full Year Ended 31 March			
	Q4 FY19	Q4 FY18	FY19	FY18
SG&A expenses	**$ 102.3**	**$ 85.1**	**$ 403.6**	**$ 311.3**
Excluding:				
AICF SG&A expenses	(0.4)	(0.6)	(1.5)	(1.9)
Fermacell acquisition costs	—	(5.3)	—	(10.0)
Product line discontinuation	(0.7)	—	(2.1)	—
Adjusted SG&A expenses	**$ 101.2**	**$ 79.2**	**$ 400.0**	**$ 299.4**
Net sales	624.8	525.9	2,506.6	2,054.5
SG&A expenses as a percentage of net sales	16.4%	16.2%	16.1%	15.2%
Adjusted SG&A expenses as a percentage of net sales	**16.2%**	**15.1%**	**16.0%**	**14.6%**

Adjusted return on capital employed ("Adjusted ROCE")

US$ Millions	Full Year Ended 31 March[1]	
	FY19	FY18
Numerator		
Adjusted EBIT	**$ 404.6**	**$ 397.5**
Adjustments to EBIT[2]	(7.3)	—
Adjusted EBIT for ROCE	397.3	397.5
Denominator		
Gross capital employed (GCE)	1,492.7	1,272.0
Adjustments to GCE[3]	(77.4)	(24.3)
Adjusted gross capital employed[3]	**1,415.3**	**1,247.7**
Adjusted ROCE	**28.1 %**	**31.9 %**

[1] *Adjusted ROCE is used to assess annual financial results and therefore is not presented for the three months ended 31 March 2019*

[2] *Adjustments as calculated according to ROCE stock compensation plan documents*

[3] *Calculated as Total Assets minus Current Liabilities as reported in our financial results; adjusted by (i) excluding balance sheet items related to legacy issues (such as asbestos adjustments) dividends payables and deferred taxes; (ii) adding back asset impairment charges in the relevant period, unless otherwise determined by the renumeration committee; (iii) adding back leasehold assets for manufacturing facilities and other material leased assets; and (iv) deducting all greenfield construction-in-progress, and any brownfield construction-in-progress projects involving capacity expansion that are individually greater than US$20 million, until such assets reach commercial production and are transferred to the fixed asset register*

As set forth in Note 12 of the consolidated financial statements, the net AFFA liability, while recurring, is based on periodic actuarial determinations, claims experience and currency fluctuations. The Company's management measures its financial position, operating performance and year-over-year changes in operating results with and without the effect of the net AFFA liability.

Further, the Company's annual payment to AICF is determined by reference to the free cash flow as defined in the AFFA. Free cash flow for these purposes is defined as the Company's operating cash flow, based on US GAAP as of 21 December 2004. As there have been changes to US GAAP since the AFFA was entered into, the annual payment is no longer based upon the current US GAAP operating cash flow statement.

Accordingly, management believes that the following non-GAAP information is useful to it and investors in evaluating the company's financial position and ongoing operating financial performance, as well as estimating the annual payment due to AICF. The following non-GAAP tables should be read in conjunction with the consolidated financial statements and related notes contained therein.

James Hardie Industries plc
Supplementary Financial Information
31 March 2019
(Unaudited)

US$ Millions	**Total Excluding Asbestos Compensation**	**Asbestos Compensation**	**As Reported (US GAAP)**
Restricted cash and cash equivalents – Asbestos	$ —	$ 39.8	**39.8**
Restricted short term investments – Asbestos	—	17.7	**17.7**
Insurance receivable – Asbestos[1]	—	51.2	**51.2**
Workers compensation asset – Asbestos[1]	—	27.8	**27.8**
Deferred income taxes – Asbestos	—	349.3	**349.3**
Asbestos liability[1]	—	1,089.6	**1,089.6**
Workers compensation liability – Asbestos[1]	—	27.8	**27.8**
Income taxes payable[1]	63.9	(25.3)	**38.6**
Asbestos adjustments	—	(22.0)	**(22.0)**
Selling, general and administrative expenses	(402.1)	(1.5)	**(403.6)**
Net interest (expense) income	(52.1)	2.0	**(50.1)**
Income tax (expense) benefit	(93.0)	21.2	**(71.8)**

[1] The amounts shown on these lines are a summation of both the current and non-current portion of the respective asset or liability as presented on our consolidated balance sheets.

James Hardie Industries plc
Supplementary Statements of Cash Flows
For the Full Year Ended
31 March 2019
(Unaudited)

US$ Millions	US GAAP as of 21 December 2004	Reconciling Items to Current US GAAP	As Reported
Cash Flows From Operating Activities			
Net income	$ 228.8	$ —	$ 228.8
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation and amortization	119.4	—	119.4
Deferred income taxes	12.7	—	12.7
Stock-based compensation	12.5	—	12.5
Asbestos adjustments	22.0	—	22.0
Asset impairments	15.9	—	15.9
Loss on early debt extinguishment	1.0	—	1.0
Other, net	16.3	—	16.3
Changes in operating assets and liabilities:			
Restricted cash and cash equivalents - Asbestos	103.8	(103.8)	—
Payment to AICF	(103.0)	103.0	—
Accounts and other receivables	(18.1)	—	(18.1)
Inventories	(28.6)	—	(28.6)
Prepaid expenses and other assets	(1.7)	—	(1.7)
Insurance receivable - Asbestos	4.8	—	4.8
Accounts payable and accrued liabilities	(12.9)	—	(12.9)
Asbestos liability	(108.8)	108.8	—
Claims and handling costs paid - Asbestos	—	(108.8)	(108.8)
Income taxes payable	8.8	—	8.8
Other accrued liabilities	15.5	—	15.5
Net cash provided by operating activities	$ 288.4	$ (0.8)	$ 287.6
Cash Flows From Investing Activities			
Purchases of property, plant and equipment	$ (301.1)	$ —	$ (301.1)
Capitalized interest	(5.4)	—	(5.4)
Acquisition of business, net of cash acquired	(558.7)	—	(558.7)
Purchase of restricted short-term investments - Asbestos	—	(89.1)	(89.1)
Proceeds from restricted short-term investments - Asbestos	—	106.3	106.3
Net cash used in investing activities	$ (865.2)	$ 17.2	$ (848.0)
Cash Flows From Financing Activities			
Proceeds from credit facilities	$ 230.0	$ —	$ 230.0
Repayments of credit facilities	(180.0)	—	(180.0)
Proceeds from 364-day term loan facility	492.4	—	492.4
Repayment of 364-day term loan facility	(458.8)	—	(458.8)
Proceeds from senior unsecured notes	458.8	—	458.8
Debt issuance costs	(6.1)	—	(6.1)
Dividends paid	(172.1)	—	(172.1)
Net cash provided by financing activities	$ 364.2	$ —	$ 364.2
Effects of exchange rate changes on cash and cash equivalents, restricted cash and restricted cash - Asbestos	9.7	(3.1)	6.6
Net decrease in cash and cash equivalents, restricted cash and restricted cash - Asbestos	$ (202.9)	$ 13.3	$ (189.6)

FORWARD-LOOKING STATEMENTS

This Management's Analysis of Results contains forward-looking statements. James Hardie Industries plc (the "Company") may from time to time make forward-looking statements in its periodic reports filed with or furnished to the Securities and Exchange Commission, on Forms 20-F and 6-K, in its annual reports to shareholders, in offering circulars, invitation memoranda and prospectuses, in media releases and other written materials and in oral statements made by the Company's officers, directors or employees to analysts, institutional investors, existing and potential lenders, representatives of the media and others. Statements that are not historical facts are forward-looking statements and such forward-looking statements are statements made pursuant to the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995.

Examples of forward-looking statements include:

- statements about the Company's future performance;
- projections of the Company's results of operations or financial condition;
- statements regarding the Company's plans, objectives or goals, including those relating to strategies, initiatives, competition, acquisitions, dispositions and/or its products;
- expectations concerning the costs associated with the suspension or closure of operations at any of the Company's plants and future plans with respect to any such plants;
- expectations concerning the costs associated with the significant capital expenditure projects at any of the Company's plants and future plans with respect to any such projects;
- expectations regarding the extension or renewal of the Company's credit facilities including changes to terms, covenants or ratios;
- expectations concerning dividend payments and share buy-backs;
- statements concerning the Company's corporate and tax domiciles and structures and potential changes to them, including potential tax charges;
- statements regarding tax liabilities and related audits, reviews and proceedings;
- statements regarding the possible consequences and/or potential outcome of legal proceedings brought against us and the potential liabilities, if any, associated with such proceedings;
- expectations about the timing and amount of contributions to AICF, a special purpose fund for the compensation of proven Australian asbestos-related personal injury and death claims;
- expectations concerning the adequacy of the Company's warranty provisions and estimates for future warranty-related costs;
- statements regarding the Company's ability to manage legal and regulatory matters (including but not limited to product liability, environmental, intellectual property and competition law matters) and to resolve any such pending legal and regulatory matters within current estimates and in anticipation of certain third-party recoveries; and
- statements about economic conditions, such as changes in the US economic or housing market conditions or changes in the market conditions in the Asia Pacific region, the levels of new home construction and home renovations, unemployment levels, changes in consumer income, changes or stability in housing values, the availability of mortgages and other financing, mortgage and other interest rates, housing affordability and supply, the levels of foreclosures and home resales, currency exchange rates, and builder and consumer confidence.

Words such as "believe," "anticipate," "plan," "expect," "intend," "target," "estimate," "project," "predict," "forecast," "guideline," "aim," "will," "should," "likely," "continue," "may," "objective," "outlook" and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. Readers are cautioned not to place undue reliance on these forward-looking statements and all such forward-looking statements are qualified in their entirety by reference to the following cautionary statements.

Forward-looking statements are based on the Company's current expectations, estimates and assumptions and because forward-looking statements address future results, events and conditions, they, by their very nature, involve inherent risks and uncertainties, many of which are unforeseeable and beyond the Company's control. Such known and unknown risks, uncertainties and other factors may cause actual results, performance or other achievements to differ materially from the anticipated results, performance or achievements expressed, projected or implied by these forward-looking statements. These factors, some of which are discussed under "Risk Factors" in Section 3 of the Form 20-F filed with the Securities and Exchange Commission on 21 May 2019, include, but are not limited to: all matters relating to or arising out of the prior manufacture of products that contained asbestos by current and former Company subsidiaries; required contributions to AICF, any shortfall in AICF and the effect of currency exchange rate movements on the amount recorded in the Company's financial statements as an asbestos liability; the continuation or termination of the governmental loan facility to AICF; compliance with and changes in tax laws and treatments; competition and product pricing in the markets in which the Company operates; the consequences of product failures or defects; exposure to environmental, asbestos, putative consumer class action or other legal proceedings; general economic and market conditions; the supply and cost of raw materials; possible increases in competition and the potential that competitors could copy the Company's products; reliance on a small number of customers; a customer's inability to pay; compliance with and changes in environmental and health and safety laws; risks of conducting business internationally; compliance with and changes in laws and regulations; currency exchange risks; dependence on customer preference and the concentration of the Company's customer base on large format retail customers, distributors and dealers; dependence on residential and commercial construction markets; the effect of adverse changes in climate or weather patterns; possible inability to renew credit facilities on terms favorable to the Company, or at all; acquisition or sale of businesses and business segments; changes in the Company's key management personnel; inherent limitations on internal controls; use of accounting estimates; the integration of Fermacell into our business; and all other risks identified in the Company's reports filed with Australian, Irish and US securities regulatory agencies and exchanges (as appropriate). The Company cautions you that the foregoing list of factors is not exhaustive and that other risks and uncertainties may cause actual results to differ materially from those referenced in the Company's forward-looking statements. Forward-looking statements speak only as of the date they are made and are statements of the Company's current expectations concerning future results, events and conditions. The Company assumes no obligation to update any forward-looking statements or information except as required by law.

Q4 FY19 MANAGEMENT PRESENTATION

21 May 2019

JamesHardie™

CAUTIONARY NOTE ON FORWARD-LOOKING STATEMENTS

This Management Presentation contains forward-looking statements. James Hardie Industries plc (the "Company") may from time to time make forward-looking statements in its periodic reports filed with or furnished to the Securities and Exchange Commission, on Forms 20-F and 6-K, in its annual reports to shareholders, in offering circulars, invitation memoranda and prospectuses, in media releases and other written materials and in oral statements made by the Company's officers, directors or employees to analysts, institutional investors, existing and potential lenders, representatives of the media and others. Statements that are not historical facts are forward-looking statements and such forward-looking statements are statements made pursuant to the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995.

Examples of forward-looking statements include:

- statements about the Company's future performance;
- projections of the Company's results of operations or financial condition;
- statements regarding the Company's plans, objectives or goals, including those relating to strategies, initiatives, competition, acquisitions, dispositions and/or its products;
- expectations concerning the costs associated with the suspension or closure of operations at any of the Company's plants and future plans with respect to any such plants;
- expectations concerning the costs associated with the significant capital expenditure projects at any of the Company's plants and future plans with respect to any such projects;
- expectations regarding the extension or renewal of the Company's credit facilities including changes to terms, covenants or ratios;
- expectations concerning dividend payments and share buy-backs;
- statements concerning the Company's corporate and tax domiciles and structures and potential changes to them, including potential tax charges;
- statements regarding tax liabilities and related audits, reviews and proceedings;
- statements regarding the possible consequences and/or potential outcome of legal proceedings brought against us and the potential liabilities, if any, associated with such proceedings;
- expectations about the timing and amount of contributions to Asbestos Injuries Compensation Fund (AICF), a special purpose fund for the compensation of proven Australian asbestos-related personal injury and death claims;
- expectations concerning the adequacy of the Company's warranty provisions and estimates for future warranty-related costs;
- statements regarding the Company's ability to manage legal and regulatory matters (including but not limited to product liability, environmental, intellectual property and competition law matters) and to resolve any such pending legal and regulatory matters within current estimates and in anticipation of certain third-party recoveries; and
- statements about economic conditions, such as changes in the US economic or housing recovery or changes in the market conditions in the Asia Pacific region, the levels of new home construction and home renovations, unemployment levels, changes in consumer income, changes or stability in housing values, the availability of mortgages and other financing, mortgage and other interest rates, housing affordability and supply, the levels of foreclosures and home resales, currency exchange rates, and builder and consumer confidence.

CAUTIONARY NOTE ON FORWARD-LOOKING STATEMENTS (continued)

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NOTE TO THE READER

As of 30 June 2018, the Company changed its reportable operating segments. Previously, the Company reported on four operating segments: (i) North America Fiber Cement, (ii) International Fiber Cement, (iii) Other Businesses, and (iv) Research and Development. As of 30 June 2018, the Company began reporting on five operating segments: (i) North America Fiber Cement, (ii) Asia Pacific Fiber Cement, (iii) Europe Building Products, (iv) Other Businesses, and (v) Research and Development. The significant changes to how certain businesses are reported in the new segment structure are as follows: (i) our European Fiber Cement business, as well as the newly acquired Fermacell business, are now reported as the Europe Building Products segment, and the remaining businesses that were historically reported in the International Fiber Cement segment are now reported in the Asia Pacific Fiber Cement segment. The Company has revised its historical segment information for the fourth quarter and full year ended 31 March 2018 to be consistent with the new reportable segment structure. The change in reportable segments had no effect on the Company's financial position, results of operations or cash flows for the periods presented. Readers are referred to Note 18 of our consolidated financial statements for further information on our segments.

USE OF NON-GAAP FINANCIAL INFORMATION; AUSTRALIAN EQUIVALENT TERMINOLOGY

This Management Presentation includes financial measures that are not considered a measure of financial performance under generally accepted accounting principles in the United States (US GAAP). These financial measures are designed to provide investors with an alternative method for assessing our performance from on-going operations, capital efficiency and profit generation. Management uses these financial measures for the same purposes. These financial measures include:

- Adjusted EBIT;
- North America Fiber Cement Segment Adjusted EBIT excluding product line discontinuation;
- Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition;
- Adjusted EBIT margin;
- North America Fiber Cement Segment Adjusted EBIT margin excluding product line discontinuation;
- Europe Building Products Segment Adjusted EBIT margin excluding costs associated with the acquisition;
- Adjusted net operating profit;
- Adjusted diluted earnings per share;
- Adjusted operating profit before income taxes;
- Adjusted income tax expense;
- Adjusted effective tax rate;
- Adjusted EBITDA;
- Adjusted EBITDA excluding Asbestos;
- Adjusted selling, general and administrative expenses ("Adjusted SG&A"); and
- Adjusted return on capital employed ("Adjusted ROCE").

These financial measures are or may be non-US GAAP financial measures as defined in the rules of the U.S. Securities and Exchange Commission and may exclude or include amounts that are included or excluded, as applicable, in the calculation of the most directly comparable financial measures calculated in accordance with US GAAP. These non-GAAP financial measures should not be considered to be more meaningful than the equivalent US GAAP measure. Management has included such measures to provide investors with an alternative method for assessing its operating results in a manner that is focused on the performance of its ongoing operations and excludes the impact of certain legacy items, such as asbestos adjustments. Additionally, management uses such non-GAAP financial measures for the same purposes. However, these non-GAAP financial measures are not prepared in accordance with US GAAP, may not be reported by all of the Company's competitors and may not be directly comparable to similarly titled measures of the Company's competitors due to potential differences in the exact method of calculation. For additional information regarding the non-GAAP financial measures presented in this Management Presentation, including a reconciliation of each non-GAAP financial measure to the equivalent US GAAP measure, see the slide titled "Non-US GAAP Financial Measures" included in the Appendix to this Management Presentation.

In addition, this Management Presentation includes financial measures and descriptions that are considered to not be in accordance with US GAAP, but which are consistent with financial measures reported by Australian companies, such as operating profit, EBIT and EBIT margin. Since the Company prepares its Consolidated Financial Statements in accordance with US GAAP, the Company provides investors with a table and definitions presenting cross-references between each US GAAP financial measure used in the Company's Consolidated Financial Statements to the equivalent non-US GAAP financial measure used in this Management Presentation. See the section titled "Non-US GAAP Financial Measures" included in the Appendix to this Management Presentation.

AGENDA

- **Group Operating Review**

  Dr Jack Truong, CEO

- **Financial Review**

  Matt Marsh, EVP and CFO

- **Strategy Update**

  Dr Jack Truong, CEO

- **Questions and Answers**

GROUP OPERATING REVIEW – DR JACK TRUONG, CEO

FY19 GROUP RESULTS OVERVIEW

	Q4'19	FY19
Sales Volume	942.2 mmsf ↑ 32%	3,670.0 mmsf ↑ 33%
Net Sales	US$624.8M ↑ 19%	US$2,506.6M ↑ 22%
Adjusted EBIT[1]	US$100.0M ↓ 3%	US$404.6M ↑ 2%
Adjusted Net Operating Profit[2]	US$73.8M ↓ 9%	US$300.5M ↑ 3%
Operating Cash Flow		US$287.6M ↓ 5%

- North America delivered improved PDG, albeit below our expectations
- Australia and Philippines continue to lead the way in gaining growth above market
- European segment met our expectations
- Input cost environment remained challenging, and we are focused on lean manufacturing
- Disciplined capital allocation
- Windows business shut-down

[1] *Excludes product line discontinuation expenses, asbestos related expenses and adjustments, and acquisition costs incurred prior to the close of Fermacell*

[2] *Excludes product line discontinuation expenses, asbestos related expenses and adjustments, tax adjustments, loss on early debt extinguishment, and acquisition costs incurred prior to the close of Fermacell*

FY19 NORTH AMERICA SUMMARY

	Q4'19	FY19
Sales Volume	593.3 mmsf ↑ 1%	2,308.1 mmsf ↑ 3%
Net Sales	US$422.0M ↑ 3%	US$1,676.9M ↑ 6%
EBIT Excluding[1]	US$95.1M ↓ 8%	US$387.9M ↑ 2%
EBIT Margin Excluding[1]	22.5% ↓ 2.7 pts	23.1% ↓ 1.1 pts

[1] *Excludes product line discontinuation expenses*

- Housing market demand was soft in 2H of the fiscal year
- Exteriors business grew above market, showing improvement from prior year (volume up 4.7% in FY19)
- Continued soft performance in Interiors (volume down 4.4% in FY19)
- EBIT Margin Excluding[1] within our target range despite significant inflationary trends across key input costs
- Commercial transformation and implementation of lean manufacturing underway

FY19 APAC SUMMARY

	Q4'19	FY19
Sales Volume	**129.9** mmsf ↑ 7%	**546.1** mmsf ↑ 10%
Net Sales	**A$143.6**M ↑ 7%	**A$612.2**M ↑ 11%
EBIT	**A$28.8**M ↓ 14%	**A$136.5**M ↓ 2%
EBIT Margin	**20.1**% ↓ 4.9 pts	**22.3**% ↓ 3.1 pts

- Continued to deliver excellent top line results in a softening market
- Particularly strong volume growth in Australia and the Philippines
- Continued gains in market and category share
- EBIT and EBIT Margin significantly impacted by input cost inflation




James Hardie Q4 FY19 Results

FY19 EUROPE SUMMARY

	Q4'19	FY19
Net Sales	€86.9M ↑ 7%[1]	€318.0M ↑ 7%[1]
EBIT Excluding[2]	€9.8M ↑ 23%[1]	€33.7M ↑ 36%[1]
EBIT Margin Excluding[2]	11.3%	10.6%

- Good top line growth; up 7% in Euros
- Integration on track
- Good traction repositioning fiber cement for growth
- EBIT Margin Excluding[2] in line with expectations

[1] The unaudited pro forma information presents the results of operations of the Company as if the Fermacell acquisition and related financing was completed on 1 April 2017

[2] Excludes transaction & integration costs and inventory fair value adjustment in FY19

FINANCIAL REVIEW – MATT MARSH, EVP AND CFO

KEY FINANCIAL MESSAGES

- Good and disciplined financial performance in an inflationary market
  - North America Fiber Cement exteriors business continued to grow above our addressable market
  - Market penetration and category share gains in Asia Pacific Fiber Cement segment
  - Fermacell included in financial results for the full year and performing as expected
  - Exited Windows business
- FY19 Adjusted NOPAT of US$300.5 million
- Capital expenditure of US$301.1 million primarily consisting of capacity expansion
- Second half dividend declared of 26 cents per share

RESULTS – 4TH QUARTER FY19

Three Months Ended 31 March			
US$ Millions	Q4'19	Q4'18	% Change
Net sales	624.8	525.9	19
Gross profit	210.6	191.1	10
EBIT	22.7	(95.8)	
Net operating profit (loss)	0.8	(57.6)	
Adjusted EBIT [1]	100.0	103.0	(3)
Adjusted Net Operating Profit [2]	73.8	81.1	(9)

[1] *Excludes product line discontinuation expenses, asbestos related expenses and adjustments, and acquisition costs incurred prior to the close of Fermacell*

[2] *Excludes product line discontinuation expenses, asbestos related expenses and adjustments, tax adjustments, loss on early debt extinguishment, and acquisition costs incurred prior to the close of Fermacell*

Net sales increased 19%, US$98.9 million

- The acquired Fermacell business in Europe contributed net sales of US$89.9 million
- Higher average net sales price and volumes in the North America Fiber Cement segment
- Higher volumes in the Asia Pacific Fiber Cement segment

Gross profit increased 10%, gross margin % down 260bps

Adjusted net operating profit[2] decreased 9%

- North America Fiber Cement and Asia Pacific Fiber Cement segments EBIT decreased 8% and 22%, respectively

RESULTS – FULL YEAR FY19

Full Year Ended 31 March			
US$ Millions	**FY19**	**FY18**	**% Change**
Net sales	2,506.6	2,054.5	22
Gross profit	831.0	730.2	14
EBIT	351.6	229.2	53
Net operating profit	228.8	146.1	57
Adjusted EBIT [1]	404.6	397.5	2
Adjusted net operating profit [2]	300.5	291.3	3

[1] *Excludes product line discontinuation expenses, asbestos related expenses and adjustments, and acquisition costs incurred prior to the close of Fermacell*

[2] *Excludes product line discontinuation expenses, asbestos related expenses and adjustments, tax adjustments, loss on early debt extinguishment, and acquisition costs incurred prior to the close of Fermacell*

[3] *Excludes product line discontinuation expenses*

Net sales increased 22%, US$452.1 million

- The acquired Fermacell business in Europe contributed net sales of US$332.5 million
- Higher average net sales price and volumes in the North America Fiber Cement segment
- Higher volumes in the Asia Pacific Fiber Cement segment

Gross profit increased 14%, gross margin down 230bps

Adjusted net operating profit[2] increased US$9.2 million

- Europe Building Products EBIT and North America Fiber Cement segment EBIT Excluding[3] increased

NORTH AMERICA FIBER CEMENT SUMMARY

	Q4'19	FY19
Sales Volume	**593.3** mmsf ↑ 1%	**2,308.1** mmsf ↑ 3%
Net Sales	**US$422.0**M ↑ 3%	**US$1,676.9**M ↑ 6%
Average Price	**US$704** per msf ↑ 2%	**US$718** per msf ↑ 3%
EBIT	**US$95.1**M ↓ 8%	**US$382.5**M FLAT
EBIT Excluding[1]	**US$95.1**M ↓ 8%	**US$387.9**M ↑ 2%

[1] Excludes product line discontinuation expenses of US$5.4 million for the full year FY19

Volume

- Slightly positive PDG in exteriors, but below our expectations
  - Exteriors volumes +3.5% for Q4 and +4.7% for FY19
- Decline in interiors
  - Interiors volumes -9.6% for Q4 and -4.4% for FY19

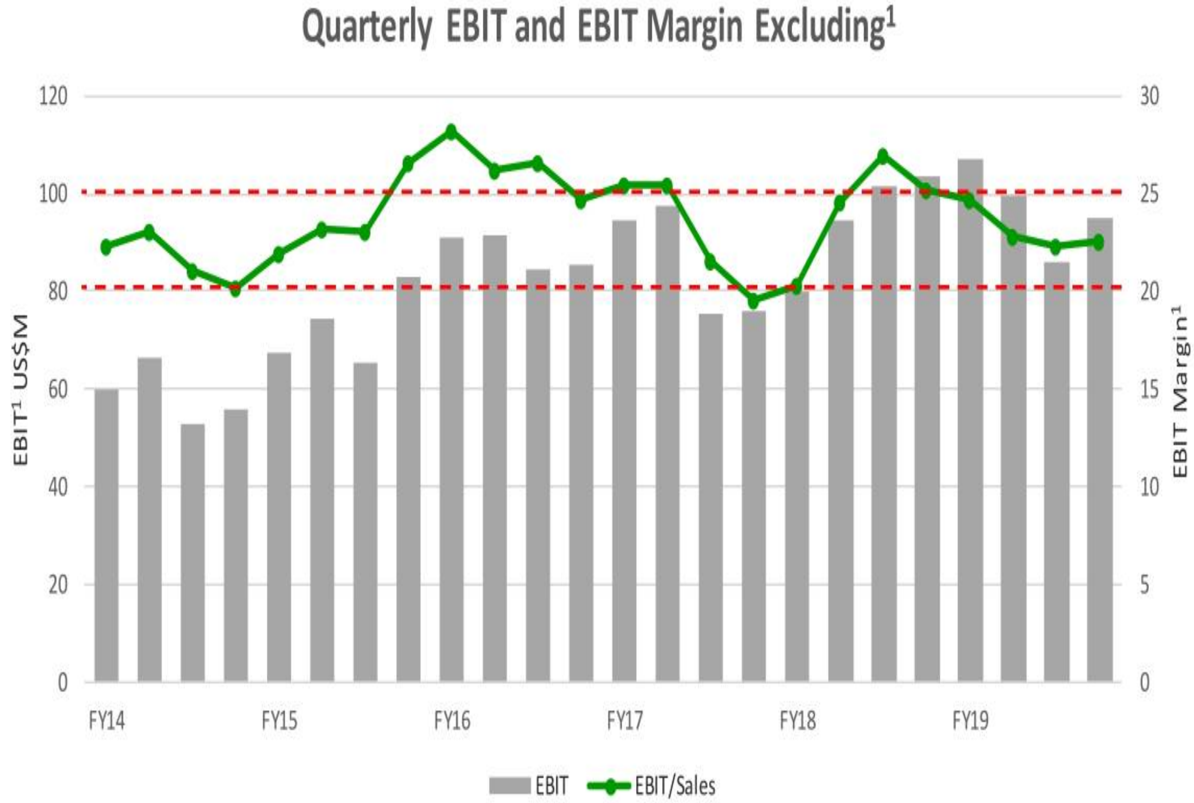
Price

- Favorably impacted by annual change in strategic pricing
- Quarter price partially offset by tactical pricing

EBIT Excluding[1]

- Q4 FY19 decrease driven by:
  - Higher input costs and unfavorable plant performance
  - Partially offset by a higher average net sales price
- Full year increase driven by:
  - Higher volume and average net sales price
  - Partially offset by higher input costs, higher freight costs and higher SG&A expenses

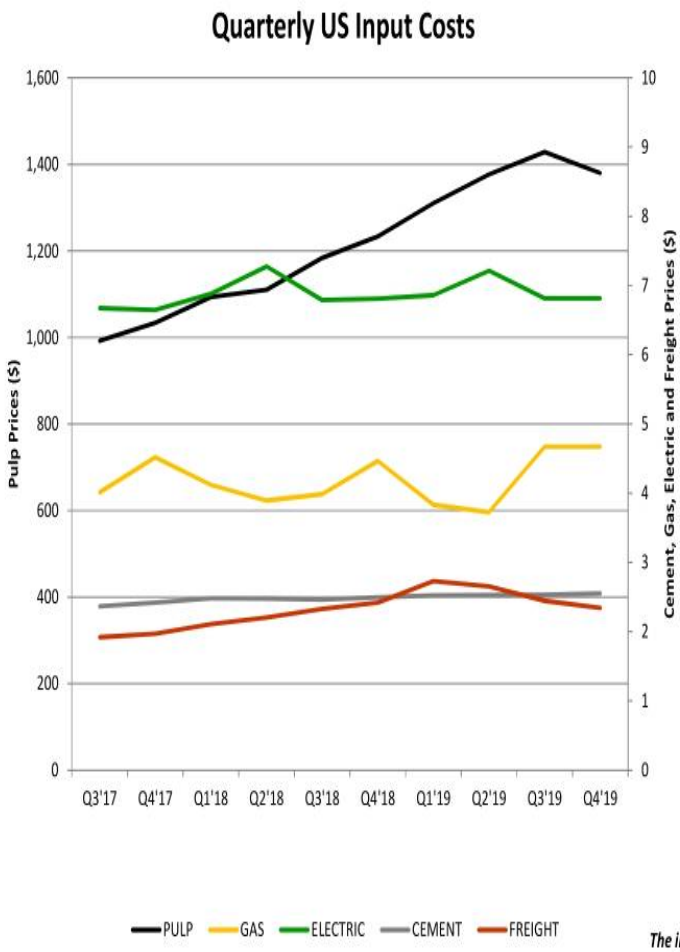
NORTH AMERICA FIBER CEMENT



FY19 EBIT Margin Excluding[1] % remains within our target range, but down 110 bps to 23.1% compared to pcp

[1] *Excludes product line discontinuation expenses of US$5.4 million in Q2 FY19*

NORTH AMERICA INPUT COSTS



- The price of NBSK pulp ***up*** 12% compared to pcp
- Gas prices ***up*** 5% compared to pcp
- Cement prices ***up*** 3% compared to pcp
- Electric prices ***flat*** compared to pcp
- Freight prices ***down*** 3% compared to pcp

The information underlying the table above is sourced as follows:

- *Pulp – Cost per ton – from RISI*
- *Gas – Cost per thousand cubic feet for industrial users – from US Energy Information Administration*
- *Electric – Cost per thousand kilowatt hour for industrial users – from US Energy Information Administration*
- *Cement – Relative index from the Bureau of Labor Statistics*
- *Freight – Cost per mile – from Dial-a-Truck Solutions*
- *Gas and Electric prices for current quarter are based on prior quarter actuals*

ASIA PACIFIC FIBER CEMENT SUMMARY

	Q4'19	FY19
Sales Volume	**129.9** mmsf ↑ 7%	**546.1** mmsf ↑ 10%
Net Sales	**A$143.6**M ↑ 7%	**A$612.2**M ↑ 11%
Average Price	**A$984** per msf ↑ 1%	**A$992** per msf ↑ 1%
US$ EBIT	**US$20.5**M ↓ 22%	**US$99.8**M ↓ 8%
A$ EBIT	**A$28.8**M ↓ 14%	**A$136.5**M ↓ 2%

Volume

- Strong volume growth above market index in Australia and Philippines
- Market penetration and category share gains, despite a softening market

EBIT

- Higher net sales and strong volume performance
- Inflationary input cost environment
- Segment results in US dollars impacted by unfavorable foreign exchange rate movements

ASIA PACIFIC FIBER CEMENT (LOCAL CURRENCY)

Q4'19			FY19		
Australia			Australia		
Volume	Net Sales	EBIT	Volume	Net Sales	EBIT
↑	↑	↓	↑	↑	↑

Australia

- Market penetration and category share gains
- EBIT for the full year favorably impacted by higher net sales and favorable plant performance, partially offset by higher input costs

Q4'19			FY19		
New Zealand			New Zealand		
Volume	Net Sales	EBIT	Volume	Net Sales	EBIT
↑	↑	↓	↑	↑	↓

New Zealand

- Favorably impacted by higher sales volume
- EBIT compressed by unfavorable plant performance and higher input costs

Q4'19			FY19		
Philippines			Philippines		
Volume	Net Sales	EBIT	Volume	Net Sales	EBIT
↑	↑	↓	↑	↑	↓

Philippines

- Volume increase driven by market penetration
- EBIT unfavorably impacted by higher input costs, non-recurring operating costs, and start up costs.

EUROPE BUILDING PRODUCTS SUMMARY[1]

	Q4'19	FY19
Net Sales	€86.9M ↑	€318.0M ↑
Sales Volume	219.0 mmsf ↑	815.8 mmsf ↑
Average Price	€305 per msf ↓	€306 per msf ↓
EBIT	€6.3M ↑	€9.1M ↑
EBIT Excluding[2]	€9.8M ↑	€33.7M ↑
EBIT Margin Excluding[2]	11.3% ↑	10.6% ↑

Volume

- Increase driven by acquisition of Fermacell

Price

- Decrease due to product mix
- Fiber gypsum has a lower average net sales price compared to Fiber Cement

Net Sales

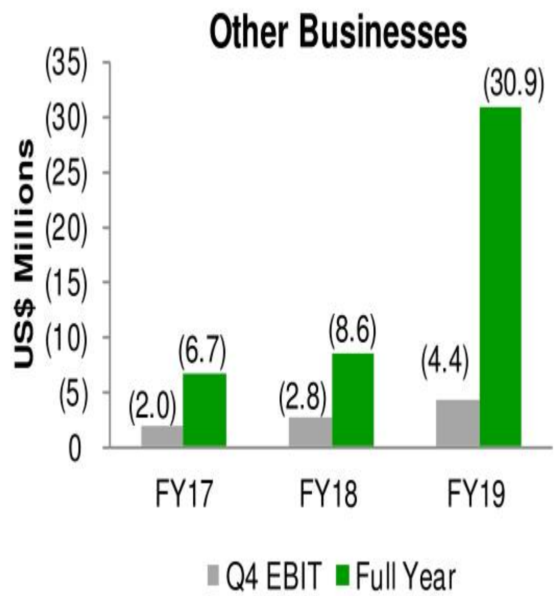
- Net sales in Euros increased 7% for the quarter and full year, on a pro-forma basis

EBIT

- EBIT includes:
  - €3.5 million and €18.4 million of transaction and integration costs for Q4 FY19 and FY19, respectively
  - €6.2 million inventory fair value adjustment in FY19
- EBIT Margin Excluding[2] of 11.3% and 10.6% for the quarter and full year, respectively

[1] Includes European Fiber Cement business, as well as Fermacell
[2] Excludes transaction & integration costs and inventory fair value adjustment

OTHER BUSINESSES SEGMENT EBIT



- **Decision made to exit Windows business**
  - Shutdown fiberglass windows business
  - Sold our fiberglass pultrusion portion of the business in the first quarter of fiscal year 2020
- **Product line discontinuation expenses** totaling US$3.5 million and US$24.1 million for Q4 FY19 and FY19, respectively
  - Impairment costs of US$12.9 million for FY19
  - Inventory adjustments of US$8.5 million for FY19
  - Other related closure costs of US$2.7 million for FY19

PRODUCT LINE DISCONTINUATION EXPENSES[1]

US$ Millions	Q1'19	Q2'19	Q3'19	Q4'19	Full Year FY19
North America Fiber Cement segment:					
Discontinuation of MCT	$ -	$ 3.6	$ -	$ -	$ 3.6
Discontinuation of certain ColorPlus® color palettes	-	1.8	-	-	1.8
Other Businesses segment:					
Discontinuation of Windows Business	-	15.8	4.8	3.5	24.1
Total product line discontinuation expenses	**$ -**	**$ 21.2**	**$ 4.8**	**$ 3.5**	**$ 29.5**

North America Fiber Cement Segment

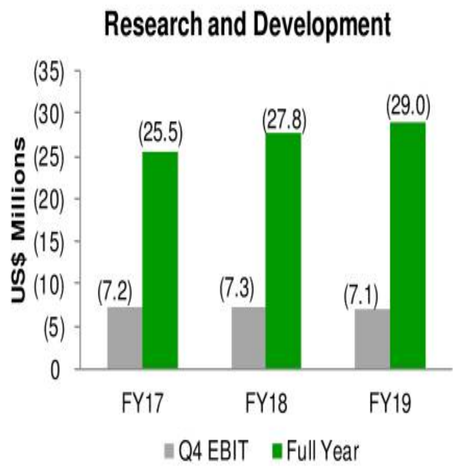
- In Q2'FY19 we made the decision to discontinue our MCT product line and certain ColorPlus® color palettes

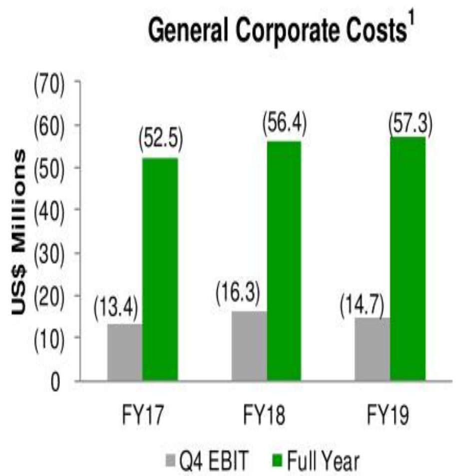
Other Businesses Segment

- In Q2'FY19 we decided to exit our Windows business
  - Fiberglass pultrusion business; and
  - Fiberglass windows assembly business
- In Q3'FY19 we shutdown fiberglass windows assembly business; production ceased
- In Q1'FY20 we sold our fiberglass pultrusion portion of the business

[1] *Excluded from Adjusted EBIT and Adjusted net operating profit*

SEGMENT EBIT – 4TH QUARTER FY19





[1] *Excludes asbestos related expenses and adjustments, and acquisition costs incurred prior to the close of Fermacell*

R&D

- On strategy to invest ~2-3% of net sales

General Corporate Costs

- Quarter decrease driven by a favorable settlement related to New Zealand weathertightness claims
- Full year increase driven by:
  - Non-recurring gain of US$3.4 million in the prior year from the sale of a storage building near our Fontana facility
  - New Zealand weathertightness claims of US$3.3 million
  - Partially offset by lower stock compensation expenses and favorable movements in recognized foreign exchange gains

INCOME TAX

Three Months and Full Year Ended 31 March				
US$ Millions	**Q4'19**	**Q4'18**	**FY19**	**FY18**
Operating profit (loss) before taxes	9.4	(103.2)	300.6	174.3
Asbestos adjustments[1]	73.3	192.6	21.5	156.4
Fermacell acquisition costs	-	5.3	-	10.0
Product line discontinuation	3.5	-	29.5	-
Loss on early debt extinguishment	-	-	1.0	26.1
Adjusted operating profit before income taxes	**86.2**	**94.7**	**352.6**	**366.8**
Adjusted income tax expense[2]	(12.4)	(13.6)	(52.1)	(75.5)
Adjusted effective tax rate	**14.4%**	**14.4%**	**14.8%**	**20.6%**
Income tax (expense) benefit	(8.6)	45.6	(71.8)	(28.2)
Income taxes paid			26.3	49.1
Income taxes payable[3]			38.6	29.1

14.8% adjusted effective tax rate for the full year

- Decrease in adjusted income tax expense driven by adjustments related to the ongoing accounting treatment of amortization of intangible assets, and a reduction in the US statutory corporate tax rate
- Income taxes are not currently paid or payable in Australia due to tax losses. Australian tax losses primarily result from deductions relating to contributions to AICF

[1] *Includes asbestos adjustments, AICF SG&A expenses and net AICF interest income*
[2] *Includes tax adjustments related to asbestos, the amortization benefit of certain US intangible assets and other tax adjustments*
[3] *Includes non-current US income taxes payable of US$25.2 million as of 31 March 2019 related to the deemed repatriation promulgated by the US Tax Cuts and Jobs Act and will be paid in annual installments through FY25*

James Hardie Q4 FY19 Results

CASH FLOWS[1]

US$ Millions	FY19	FY18	Change (%)
Net Income	**228.8**	**146.2**	**56**
Adjustment for non-cash items	199.8	219.7	(9)
Annual AICF contribution	(103.0)	(102.2)	(1)
Operating working capital[2]	(59.6)	(42.7)	(40)
Other net operating activities	22.6	75.2	(70)
AICF cash flow, net	(0.2)	(1.9)	89
Cash Flow from Operations	**288.4**	**294.3**	**(2)**
Purchases of property, plant and equipment[3]	(306.5)	(208.5)	(47)
Proceeds from sale of property, plant and equipment	-	7.9	
Acqusition of business, net of cash acquired	(558.7)	-	
Free Cash Flow[4]	**(576.8)**	**93.7**	
Dividends paid	(172.1)	(177.5)	3
Net repayments to credit facilities	50.0	(75.0)	
Proceeds from 364-day term loan facility	492.4	-	
Repayment on 364-day term loan facility	(458.8)	-	
Proceeds from unsecured notes, net	452.7	384.3	18
Repayment of NSW loan - Asbestos	-	(51.9)	
Other financing activities	-	(18.5)	
Free Cash Flow after Financing Activities	**(212.6)**	**155.1**	

[1] Derived from supplementary statement of cash flow
[2] Excludes AP related to capital expenditures
[3] Includes capitalized interest
[4] Distinct from the term defined by the AFFA for purposes of calculating our annual contribution to AICF

Decrease in net operating cash flow

- Decrease in other assets and liabilities as well as income tax payable
- Net cash outflow due to working capital
- Increase in net income adjusted for non-cash items

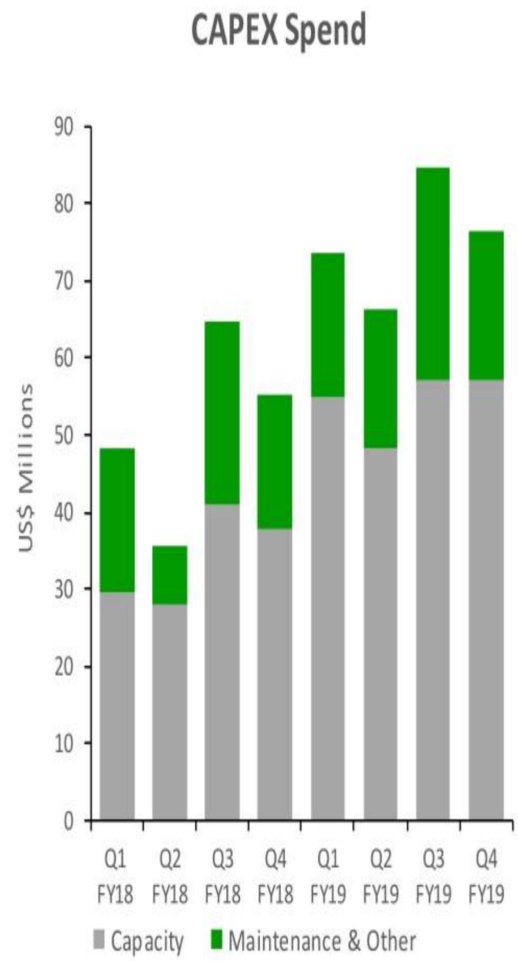
Higher investing activities

- Acquisition of Fermacell in Europe
- Increase in capacity expansion related capital expenditures

Cash provided by financing activities

- Driven by higher proceeds from unsecured notes and senior notes
- No NSW loan repayment by AICF in the current year

CAPITAL EXPENDITURES



YTD CAPEX spend of US$301.1 million increased US$97.4 million compared to pcp

- **North America capacity projects**
  - Continued start-up of Tacoma greenfield expansion
  - Continued construction of our Prattville facility
  - Continued expansion within our ColorPlus® product line
- **Asia Pacific capacity projects**
  - Completed start-up of additional Philippines capacity
  - Continued Carole Park brownfield expansion project

FINANCIAL MANAGEMENT FRAMEWORK

Strong Financial Management

- Strong margins and operating cash flows
- Strong governance and transparency
- Investment-grade financial management

Moody's	S&P	Fitch
Ba1	**BB**	**BBB-**
affirmed Sept'18 outlook stable	affirmed Mar'19 outlook stable	affirmed Mar'19 outlook stable

Disciplined Capital Allocation

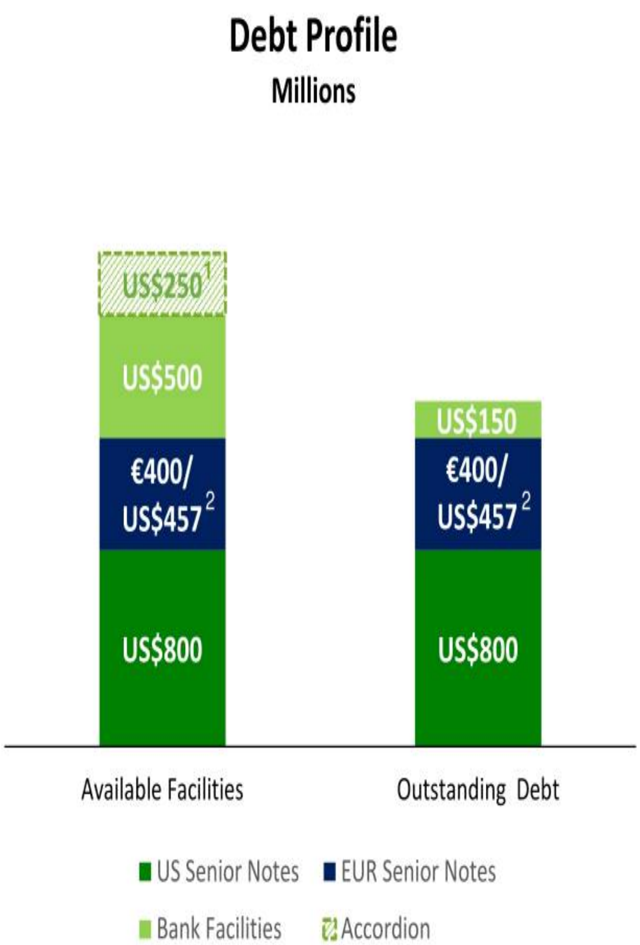
- Invest in R&D and capacity expansion to support organic growth
- Maintain ordinary dividends within the defined payout ratio
- Flexibility for:
  - Cyclical market volatility
  - Accretive and strategic inorganic opportunities or further shareholder returns, when appropriate

Liquidity and Funding

- Conservative leveraging of balance sheet at a target within 1-2 times Adjusted EBITDA excluding asbestos.
  - US$500 million unsecured revolving credit facility;
  - US$800m senior unsecured notes at Q4 FY19;
  - €400m (US$449.4m) senior unsecured notes at Q4 FY19;
  - At Q4 FY19, total debt had a weighted average maturity of 6.3 years and weighted average rate of 4.4%

Financial management consistent with investment grade credit
Ability to withstand market cycles and other unanticipated events

LIQUIDITY PROFILE AT 31 MARCH 2019



[1] *Incremental liquidity of up to US$250 million may be accessed via an accordion feature, which is provided for under the terms of the syndicated revolving credit facility agreement, but not credit approved*

[2] *Based on exchange rate as of 31 March 2019*

[3] *Includes debt issuance costs (US$19.1 million)*

Strong balance sheet

- US$78.7 million cash
- US$1,301.6 million net debt[3]
- US$340.5 million available on revolving credit facility

Corporate debt structure

- **US$400 million** 4.75% senior unsecured notes **maturing 2025**
- **US$400 million** 5.00% senior unsecured notes **maturing 2028**
- **€400 million** (US$457.2)[2] 3.625 % senior unsecured notes, **maturing 2026**
- **US$500 million** unsecured revolving credit facility, **maturing 2022**

Leverage strategy

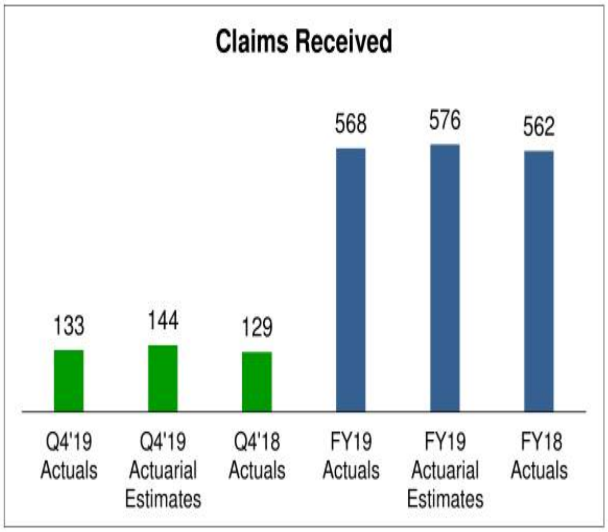
- ~2.4x net debt to Adjusted EBITDA excluding asbestos; temporarily outside of the 1-2x leverage target range

ASBESTOS COMPENSATION

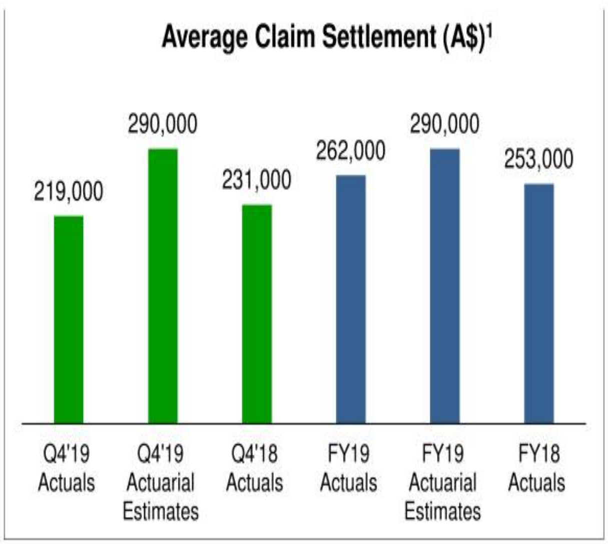
KEY POINTS

- Updated actuarial report completed as at 31 March 2019
- Undiscounted and uninflated estimate decreased to A$1,400 million from A$1,443 million
- Decrease in central estimate of A$43.1 million
    - Decrease due to net cash outflows of A$142.8 million
    - Partially offset by an increase in the actuarial estimate
- Total contributions of A$138.4 million (US$103.0 million) were made during FY2019 from our FY2018 free cash flow
- From the time AICF was established in February 2007, we have contributed approximately A$1,193 million to the fund
- We anticipate that we will make a further contribution of approximately US$100.9 million to AICF on 1 July 2019
    - This amount represents 35% of our free cash flows for fiscal year 2019, as defined by the AFFA

ASBESTOS CLAIMS DATA



- Full year claims received were 8% below actuarial estimates
- Full year claims received were 1% higher, compared to pcp
- Claims reporting during the full year for mesothelioma:
  - 4% lower than actuarial estimates
  - 5% lower than pcp



- Average claim settlement for the full year was 24% below actuarial estimates:
  - Average claim settlement sizes for most disease types, including mesothelioma for most age groups
  - Largely attributable to lower average claim settlement for non-mesothelioma claims

[1] *Average claim settlement is derived as the total amount paid divided by the number of non-nil claims*

SUMMARY

Adjusted Net Operating Profit[1]			
4th Qtr		Full Year	
US$73.8M	↓ 9%	US$300.5M	↑ 3%

Adjusted Diluted EPS[1]			
4th Qtr		Full Year	
US17 cents	↓ 9%	US68 cents	↑ 3%

Adjusted EBIT[2]			
4th Qtr		Full Year	
US$100.0M	↓ 3%	US$404.6M	↑ 2%

Net Operating Cash Flow	
Full Year	
US$287.6M	↓ 5%

- Good and disciplined financial performance in an inflationary market
  - Higher net sales in North America Fiber Cement and Asia Pacific Fiber Cement segments
  - Market penetration and category share gains in our Asia Pacific Fiber Cement segment
  - Positive first year results from our Europe Building Products segment
  - Disciplined capital allocation within a strong financial management framework

[1] *Excludes product line discontinuation costs, asbestos adjustments, tax adjustments, loss on early debt extinguishment, and acquisition costs incurred prior to the close of Fermacell*
[2] *Excludes product line discontinuation costs, asbestos adjustments and acquisition costs incurred prior to the close of Fermacell*

STRATEGY UPDATE – DR JACK TRUONG, CEO

LONG TERM VALUE CREATION

North America

- 35/90 with strong returns (20-25% EBIT margin)

Europe

- €1 billion business with 20+% EBIT margin

APAC

- Deliver growth above market with strong returns (20-25% EBIT margin)

STRATEGIC PRIORITIES : FY20 – FY22

North America	Europe	Asia Pacific
1 Accelerate Exteriors Growth	1 Gain market traction • current fiber cement • new, for Europe, fiber cement	1 Continue to drive growth above market
2 Drive Lean Transformation across all ten plants	2 Continue to drive fiber gypsum market penetration	2 Continue to drive Lean manufacturing across all four plants
3 Re-establish Interiors as a Growth Business	3 Continue to unlock existing manufacturing capacity in all five plants	

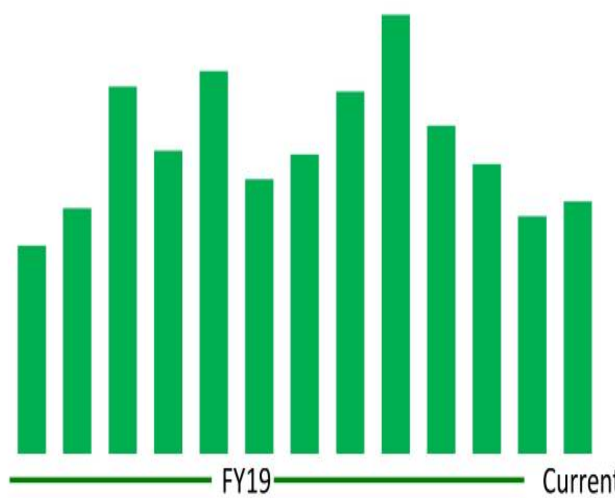


NA : LEAN TRANSFORMATION - UPDATE

- Lean transformation is off to a strong start
- Employee Engagement is high
- Standards implemented across all plants
- Hardie Manufacturing Operating System (HMOS) implemented in three plants
- Drive lean culture throughout manufacturing organization
- Key Focus areas
  - ↑ Roll Throughput Yield
  - ↑ Net available hours
  - ↓ Lower cost per square foot

US$100 Million in Cost Out Savings Over Three Years FY20 – FY22

North America - Cost to Manufacture per msf[1]



[1] *Excludes fixed costs and outbound freight*

NA : ACCELERATE EXTERIORS GROWTH - UPDATE

Win With Color

Statement & Dream Collections launched

Manufacturing scaling up

Partnering with channel to ensure Statement stocking positions are in place

Cost optimization underway

Statement Collection and Dream Collection homes in Nashville, Tennessee

Commercial Transformation

Pull & Push are both required to deliver PDG growth targets, consistently

Easier to do business with

Sales team structure in place

Key leaders and talent added

Statement Collection of homes in Boston, Massachusetts

EUROPE : TOP LINE GROWTH - UPDATE

Sales synergy of Fiber Cement Exteriors with Fiber Gypsum Interiors

Launch of Hardie Windbreaker, our first new Fiber Cement product introduction for Europe

- New Zealand – original product innovation
- Europe – market development
- US R&D – product innovation and adaptation specific to European market
- US manufacturing

HardiePanel fiber cement - exterior of Kindergarten in Brittany, France

Digital rendering of European home construction

Fermacell fiber gypsum - interior of Kindergarten in Brittany, France

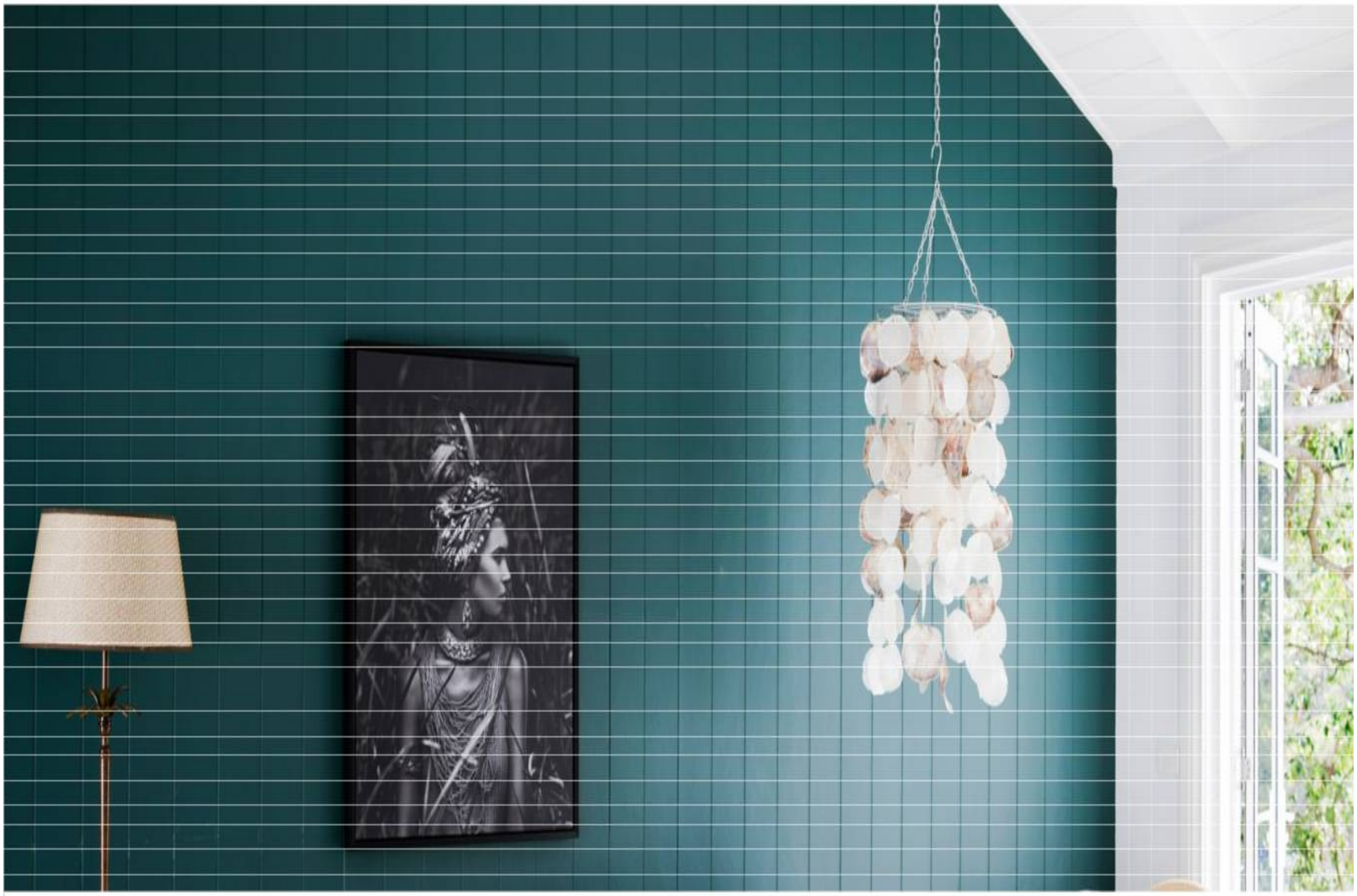
FY20 KEY ASSUMPTIONS & MARKET OUTLOOK

North America	Europe	Asia Pacific
Modest growth in the US housing market in FY20 US Residential Housing starts forecast between 1.2 and 1.3 million EBIT Margin in the top half of our stated range of 20 to 25%[1] Exteriors volume: 3-5% PDG	Slight housing market growth across addressable market Introduction of new fiber cement products for Europe EBIT Margin accretion[2]	Addressable housing market in Australia to decrease in FY20 APAC volume: 3-5% growth above the market EBIT Margin in the top half of our stated range of 20 to 25%[3]

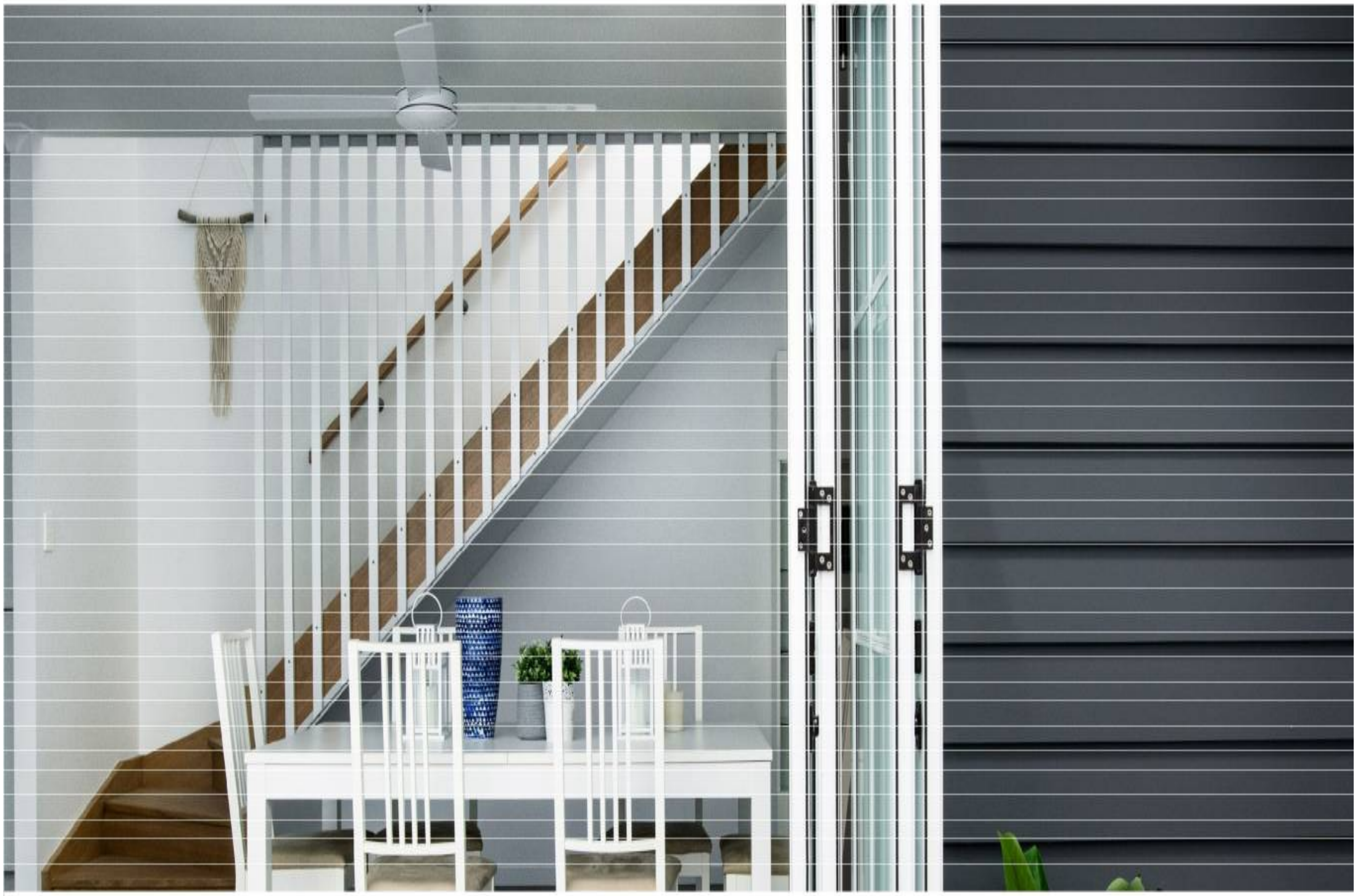
[1] *Expectation is based upon the Company continuing to improve operating performance in our plants, higher net average sales price and mix, continued inflation for input costs and modest underlying housing growth.*

[2] *Expectation is based upon the Company continuing to improve operating performance in our plants and slight underlying housing growth.*

[3] *Expectation is based upon the Company continuing to improve operating performance in our plants, higher net average sales price and mix, continued inflation for input costs and volume growth above a decreasing addressable housing market.*

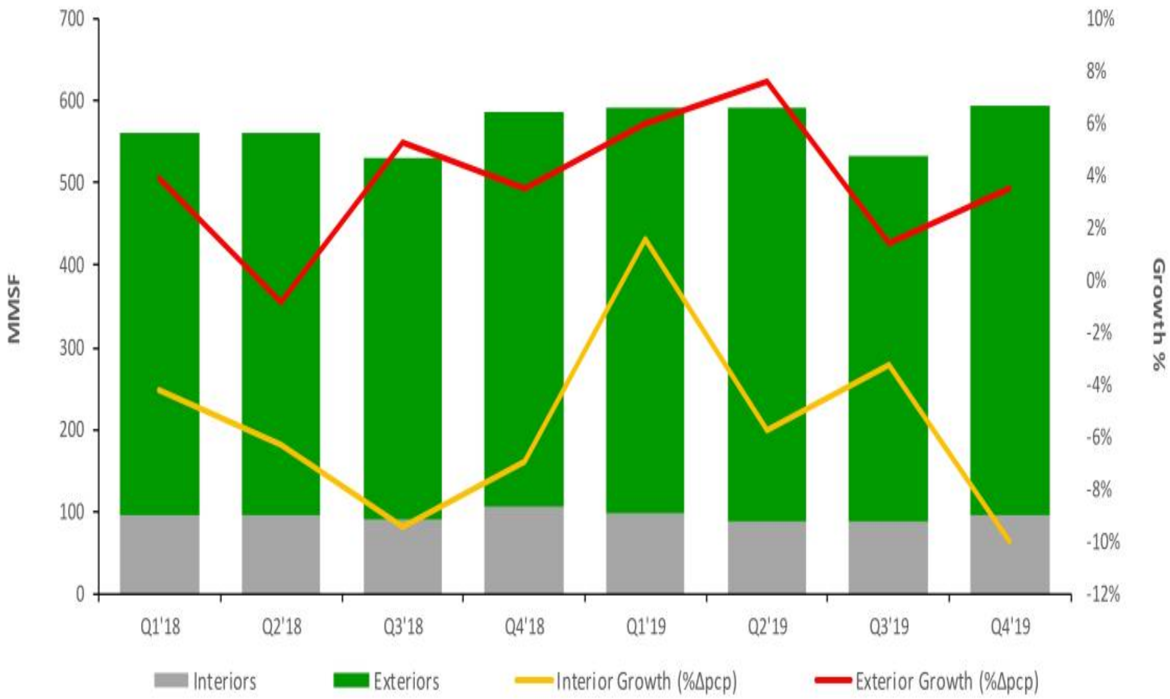


QUESTIONS



APPENDIX

NORTH AMERICA FIBER CEMENT VOLUME



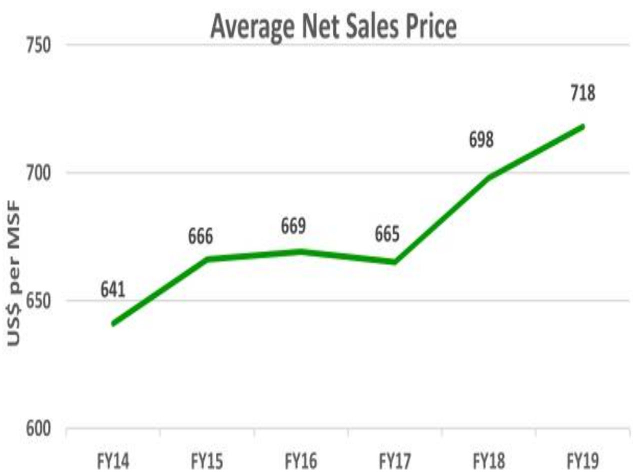
Exteriors

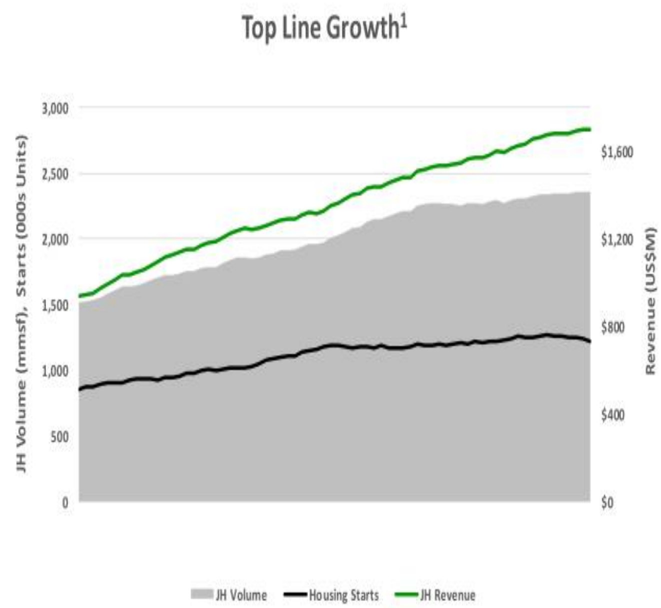
- Volume increased 3.5% and 4.7% for the quarter and full year, respectively, compared to pcp
- Focus is on transforming our commercial strategy and delivering higher PDG

Interiors

- Volume decreased 9.6% and 4.4% for the quarter and full year, respectively, compared to pcp

NORTH AMERICA FIBER CEMENT



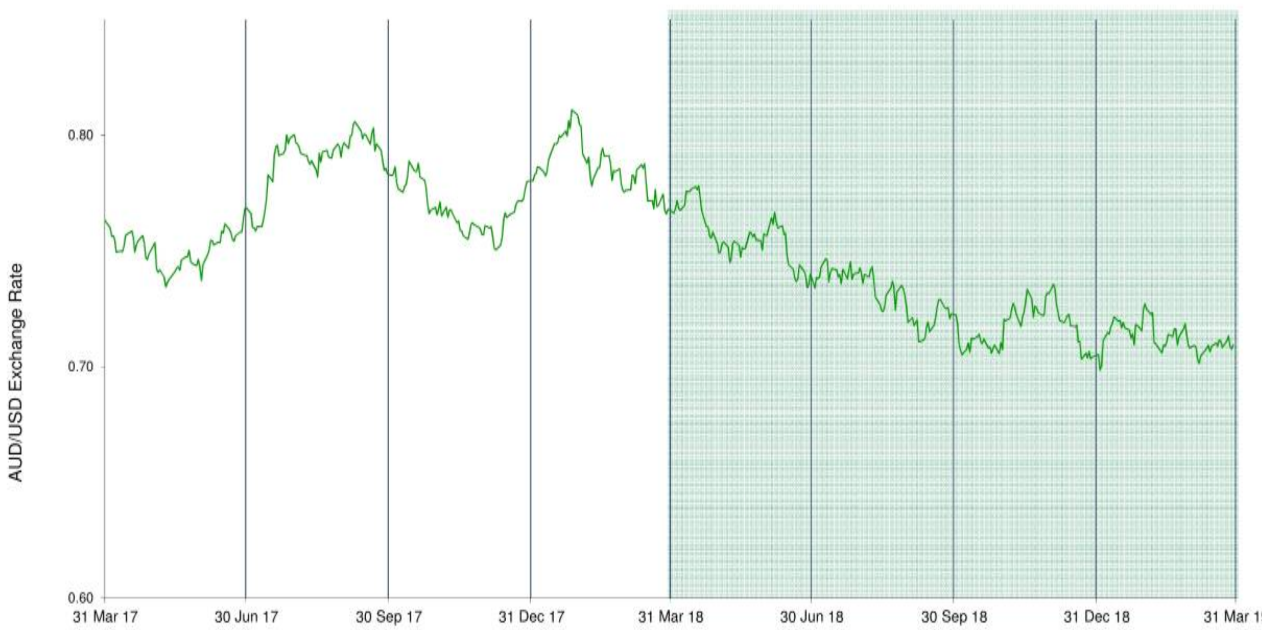


- FY19 strategic price increase effective April 2018
- Overall, satisfied with price positioning

- Softer market conditions remain across most geographies and customer segments

[1] *Rolling 12 month average of seasonally adjusted estimate of housing starts by US Census Bureau*

TRANSLATION IMPACT ON CONSOLIDATED RESULTS



	As Reported		Excluding Translation Impact [1]		Translation Impact [2]	
% Change	Q4 FY19	FY19	Q4 FY19	FY19	Q4 FY19	FY19
Net Sales	▲ 19%	▲ 22%	▲ 22%	▲ 23%	▼ 3%	▼ 1%
Gross Profit	▲ 10%	▲ 14%	▲ 12%	▲ 15%	▼ 2%	▼ 1%
Adjusted EBIT	▼ 3%	▲ 2%	▼ 3%	▲ 2%	-	-
Adjusted net operating profit	▼ 9%	▲ 3%	▼ 9%	▲ 3%	-	-

[1] *As reported Q4 FY19 and full year FY19 figures converted using Q4 FY18 and full year FY18 average exchange rates, respectively*

[2] *Reflects the difference between Q4 FY19 As Reported and Q4 FY19 using Q4 FY18 average exchange rates, as well as the difference between full year FY19 As Reported and full year FY19 using full year FY18 average exchange rates*

ASIA PACIFIC FIBER CEMENT RESULTS AUD vs USD

Three Months and Full Year Ended 31 March						
	Q4'19			Full Year FY19		
	Results in AUD	Results in USD	Impact of FX	Results in AUD	Results in USD	Impact of FX
Averge net sales price per unit (per msf)	+1%	-9%	**-10%**	+1%	-5%	**-6%**
Net sales	+7%	-3%	**-10%**	+11%	+5%	**-6%**
Gross profit	-7%	-16%	**-9%**	FLAT	-6%	**-6%**
EBIT	-14%	-22%	**-8%**	-2%	-8%	**-6%**

JamesHardie

EUROPE BUILDING PRODUCTS PRO FORMA[1]

	Q4'19	Full Year FY19
Net Sales	US$98.7M ↓ 1%[1]	US$368.3M ↑ 6%[1]
EBIT Excluding[2]	US$11.2M ↑ 15%	US$39.1M ↑ 35%
EBIT Margin Excluding[2]	11.3%	10.6%

Net sales decreased 1% and increased 6% for the quarter and full year, respectively, on a pro-forma basis compared to pcp

[1] *The unaudited pro forma information presents the results of operations of the Company as if the Fermacell acquisition and related financing was completed on 1 April 2017. The unaudited pro forma excludes transaction and integration costs of US$4.1 million and US$21.8 million for the quarter and full year, respectively, and the US$7.3 million inventory fair value adjustment in full year FY19*

[2] *Excludes transaction and integration costs and inventory fair value adjustment*

FINANCIAL SUMMARY

	Three Months and Full Year Ended 31 March					
US$ Millions	Q4'19	Q4'18	% Change	FY19	FY18	% Change
Net Sales						
North America Fiber Cement	$ 422.0	$ 410.1	3	$ 1,676.9	$ 1,578.1	6
Asia Pacific Fiber Cement	102.3	105.1	(3)	446.8	425.4	5
Europe Building Products	98.7	7.4		368.3	36.3	
Other Businesses	1.8	3.3	(45)	14.6	14.7	(1)
Total Net Sales	**$ 624.8**	**$ 525.9**	**19**	**$ 2,506.6**	**$ 2,054.5**	**22**
EBIT						
North America Fiber Cement[1]	$ 95.1	$ 103.4	(8)	$ 387.9	$ 381.9	2
Asia Pacific Fiber Cement	20.5	26.3	(22)	99.8	108.1	(8)
Europe Building Products[2]	7.1	(0.3)		10.0	0.3	
Other Businesses[1]	(0.9)	(2.8)	68	(6.8)	(8.6)	21
Research & Development	(7.1)	(7.3)	3	(29.0)	(27.8)	(4)
General Corporate[3]	(14.7)	(16.3)	10	(57.3)	(56.4)	(2)
Adjusted EBIT	**$ 100.0**	**$ 103.0**	**(3)**	**$ 404.6**	**$ 397.5**	**2**
Net interest expense[4]	$ (13.8)	$ (8.8)	(57)	$ (52.1)	$ (31.4)	(66)
Other income	-	0.5		0.1	0.7	
Adjusted income tax expense	(12.4)	(13.6)	9	(52.1)	(75.5)	31
Adjusted net operating profit	**$ 73.8**	**$ 81.1**	**(9)**	**$ 300.5**	**$ 291.3**	**3**

[1] *Excludes product line discontinuation expenses*
[2] *Includes Europe transaction and integration costs and inventory fair value adjustment*
[3] *Excludes Asbestos related expenses and adjustments, and acquisition costs incurred prior to the close of Fermacell*
[4] *Excludes AICF interest income*

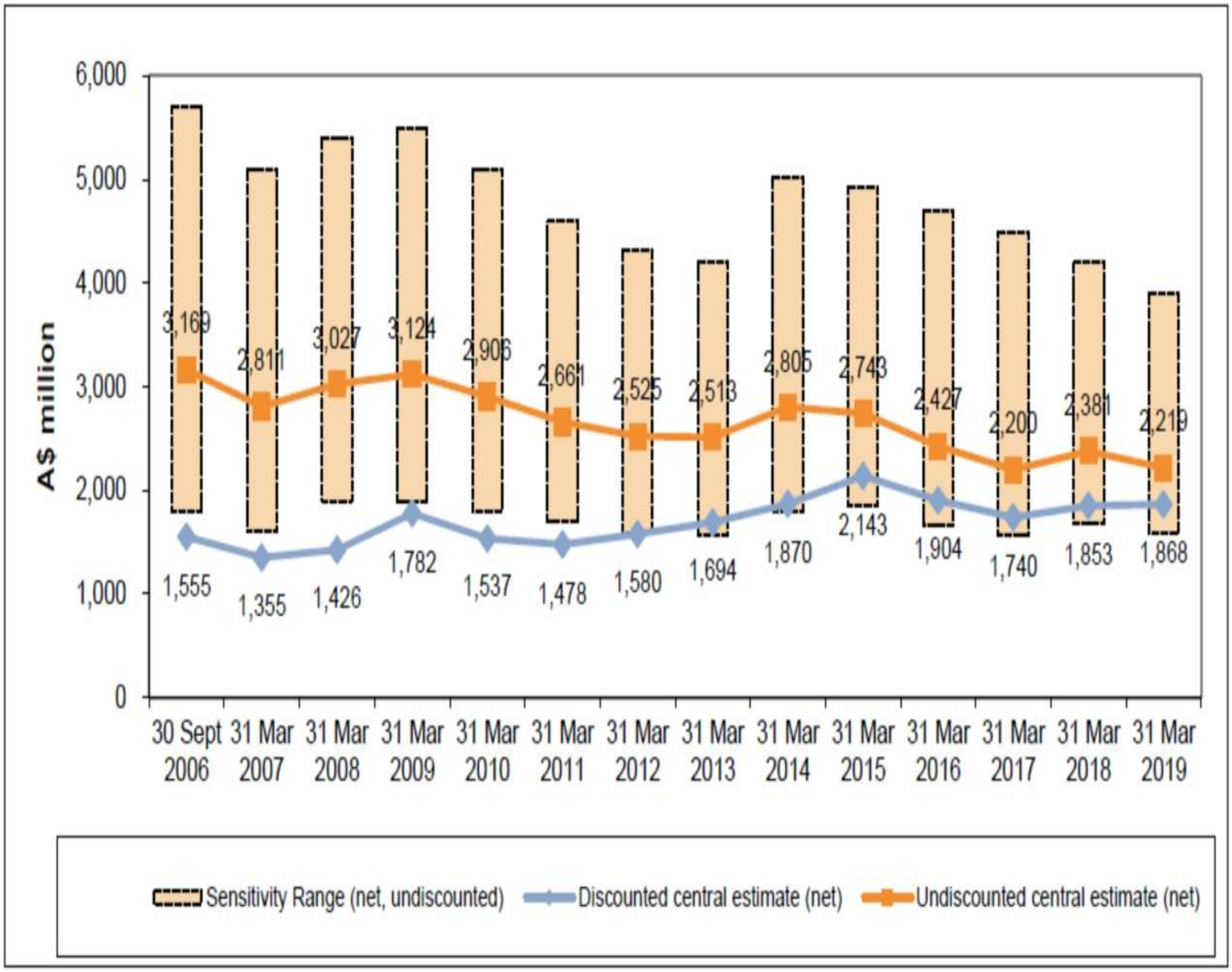
NET POST-TAX UNFUNDED ASBESTOS LIABILITY

A$ millions (except where stated)	FY19	FY18
Central Estimate - Undiscounted and Uninflated	$ 1,399.8	$ 1,442.9
Provision for claims handling costs of AICF	28.5	30.1
Cross claims and other	35.1	33.8
Net assets of AICF	(78.2)	(81.9)
Effect of tax	(528.0)	(526.0)
Net post-tax unfunded liability in A$ millions	$ 857.2	$ 898.9
Exchange rate A$ to US$	0.7096	0.7681
Net post-tax unfunded liability in US$ millions	**$ 608.4**	**$ 690.4**

ASBESTOS CASH MOVEMENTS FOR FULL YEAR

A$ millions		
AICF cash and investments - 31 March 2018	$	84.6
Contributions to AFFA by James Hardie		138.4
Insurance recoveries		6.6
Interest income, net		2.7
Claims paid		(147.5)
Operating costs		(3.7)
AICF cash and investments - 31 March 2019	**$**	**81.1**

UPDATED ACTUARIAL ESTIMATE



DEPRECIATION AND AMORTIZATION

US$ Millions	Three Months and Full Year Ended 31 March			
	Q4'19	Q4'18	FY19	FY18
Depreciation and amortization				
North America Fiber Cement	$ 21.7	$ 18.4	$ 80.2	$ 72.5
Asia Pacific Fiber Cement	3.0	3.2	12.8	12.6
Europe Building Products	4.5	-	18.7	0.1
Other Businesses	0.6	0.5	2.3	2.1
Research and Development	0.3	1.0	1.1	1.4
General Corporate	0.6	0.3	4.3	3.3
Total depreciation and amortization	**$ 30.7**	**$ 23.4**	**$ 119.4**	**$ 92.0**

INCOME TAXES

- **How ETR is calculated under US GAAP changed in FY19**
  - Recorded a net deferred tax asset of US$1,160.3 million arising from all previous intragroup transfers, including an internal restructuring which took place in Q4 FY18 to align certain intangible assets with our US business
  - Effective 1 April 2018, amortization of these intangible assets reduces the deferred tax asset instead of reducing income tax expense

- **Economic (cash taxes paid) impact of tax expected to remain constant or improve**
  - Future Adjusted ETR may be more volatile because of:
    - New US GAAP standards
    - Ongoing impacts of US Tax Reform

NON-US GAAP FINANCIAL MEASURES AND TERMS

This Management Presentation forms part of a package of information about the company's results. It should be read in conjunction with the other parts of this package, including the Management's Analysis of Results, Media Release and Consolidated Financial Statements

Definitions

EBIT – Earnings before interest and taxes

EBIT margin – EBIT margin is defined as EBIT as a percentage of net sales

Sales Volumes

mmsf – million square feet, where a square foot is defined as a standard square foot of 5/16" thickness

msf – thousand square feet, where a square foot is defined as a standard square foot of 5/16" thickness

Non-financial Terms

AFFA – Amended and Restated Final Funding Agreement

AICF – Asbestos Injuries Compensation Fund Ltd

Legacy New Zealand weathertightness claims ("New Zealand weathertightness") – Expenses arising from defending and resolving claims in New Zealand that allege poor building design, inadequate certification of plans, inadequate construction review and compliance certification and deficient work by sub-contractors

New South Wales loan facility ("NSW Loan") – AICF has access to a secured loan facility made available by the New South Wales Government, which can be used by AICF to fund the payment of asbestos claims and certain operating and legal costs

NON-US GAAP FINANCIAL MEASURES

Financial Measures – US GAAP equivalents

This document contains financial statement line item descriptions that are considered to be non-US GAAP, but are consistent with those used by Australian companies. Because the company prepares its Consolidated Financial Statements under US GAAP, the following table cross-references each non-US GAAP line item description, as used in Management's Analysis of Results and Media Release, to the equivalent US GAAP financial statement line item description used in the company's Consolidated Financial Statements:

Management's Analysis of Results and Media Release	Consolidated Statements of Operations and Other Comprehensive Income (Loss) (US GAAP)
Net sales	Net sales
Cost of goods sold	Cost of goods sold
Gross profit	Gross profit
Selling, general and administrative expenses	Selling, general and administrative expenses
Research and development expenses	Research and development expenses
Asbestos adjustments	Asbestos adjustments
EBIT*	Operating income (loss)
Net interest income (expense)*	Sum of interest expense and interest income
Other income (expense)	Other income (expense)
Operating profit (loss) before income taxes*	Income (loss) before income taxes
Income tax (expense) benefit	Income tax (expense) benefit
Net operating profit (loss)*	Net income (loss)

*- Represents non-US GAAP descriptions used by Australian companies

NON-US GAAP FINANCIAL MEASURES

Financial Measures – US GAAP equivalents

Adjusted EBIT

US$ Millions	Three Months and Full Year Ended 31 March			
	Q4'19	Q4'18	FY19	FY18
EBIT	**$ 22.7**	**$ (95.8)**	**$ 351.6**	**$ 229.2**
Asbestos:				
Asbestos adjustments	73.4	192.9	22.0	156.4
AICF SG&A expenses	0.4	0.6	1.5	1.9
Fermacell acquisition costs	-	5.3	-	10.0
Product line discontinuation	3.5	-	29.5	-
Adjusted EBIT	**$ 100.0**	**$ 103.0**	**$ 404.6**	**$ 397.5**
Net sales	624.8	525.9	2,506.6	2,054.5
Adjusted EBIT margin	**16.0%**	**19.6%**	**16.1%**	**19.3%**

Adjusted net operating profit

US$ Millions	Three Months and Full Year Ended 31 March			
	Q4'19	Q4'18	FY19	FY18
Net operating profit	**$ 0.8**	**$ (57.6)**	**$ 228.8**	**$ 146.1**
Asbestos:				
Asbestos adjustments	73.4	192.9	22.0	156.4
AICF SG&A expenses	0.4	0.6	1.5	1.9
AICF interest income, net	(0.5)	(0.9)	(2.0)	(1.9)
Loss on early debt extinguishment	-	-	1.0	26.1
Fermacell acquisition costs	-	5.3	-	10.0
Product line discontinuation	3.5	-	29.5	-
Tax adjustments[1]	(3.8)	(59.2)	19.7	(47.3)
Adjusted net operating profit	**$ 73.8**	**$ 81.1**	**$ 300.5**	**$ 291.3**

[1] *Includes tax adjustments related to the amortization benefit of certain US intangible assets, asbestos, product line discontinuation, loss on early debt extinguishment, and other tax adjustments*

NON-US GAAP FINANCIAL MEASURES

North America Fiber Cement Segment Adjusted EBIT excluding product line discontinuation

US$ Millions	Three Months and Full Year Ended 31 March	
	Q4'19	FY19
EBIT	$ 95.1	$ 382.5
Product line discontinuation	-	5.4
North America Fiber Cement Segment Adjusted EBIT excluding product line discontinuation	$ 95.1	$ 387.9
North America Fiber Cement Segment net sales	422.0	1,676.9
North America Fiber Cement Segment Adjusted EBIT margin excluding product line discontinuation	22.5%	23.1%

Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition

US$ Millions	Three Months and Full Year Ended 31 March	
	Q4'19	FY19
EBIT	$ 7.1	$ 10.0
Inventory fair value adjustment	-	7.3
Transaction costs	-	7.2
Integration costs	4.1	14.6
Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition	$ 11.2	$ 39.1
Europe Building Products Segment net sales	98.7	368.3
Europe Building Products Segment Adjusted EBIT margin excluding costs associated with the acquisition	11.3%	10.6%

NON-US GAAP FINANCIAL MEASURES

Adjusted diluted earnings per share

	Three Months and Full Year Ended 31 March			
	Q4'19	Q4'18	FY19	FY18
Adjusted net operating profit (US$ Millions)	$ 73.8	$ 81.1	$ 300.5	$ 291.3
Weighted average common shares outstanding - Diluted (millions)	443.4	443.0	443.0	442.3
Adjusted diluted earnings per share (US cents)	17	18	68	66

Adjusted effective tax rate

US$ Millions	Three Months and Full Year Ended 31 March			
	Q4'19	Q4'18	FY19	FY18
Operating profit before income taxes	$ 9.4	$ (103.2)	$ 300.6	$ 174.3
Asbestos:				
Asbestos adjustments	73.4	192.9	22.0	156.4
AICF SG&A expenses	0.4	0.6	1.5	1.9
AICF interest income, net	(0.5)	(0.9)	(2.0)	(1.9)
Fermacell acquisition costs	-	5.3	-	10.0
Product line discontinuation	3.5	-	29.5	-
Loss on early debt extinguishment	-	-	1.0	26.1
Adjusted operating profit before income taxes	$ 86.2	$ 94.7	$ 352.6	$ 366.8
Income tax expense	(8.6)	45.6	(71.8)	(28.2)
Tax adjustments[1]	(3.8)	(59.2)	19.7	(47.3)
Adjusted income tax expense	$ (12.4)	$ (13.6)	$ (52.1)	$ (75.5)
Effective tax rate	91.5%	44.2%	23.9%	16.2%
Adjusted effective tax rate	14.4%	14.4%	14.8%	20.6%

[1] *Includes tax adjustments related to the amortization benefit of certain US intangible assets, asbestos, product line discontinuation, loss on early debt extinguishment, and other tax adjustments*

NON-US GAAP FINANCIAL MEASURES

Adjusted EBITDA excluding Asbestos

US$ Millions	Three Months and Full Year Ended 31 March			
	Q4'19	Q4'18	FY19	FY18
EBIT	$ 22.7	$ (95.8)	$ 351.6	$ 229.2
Depreciation and amortization	30.7	23.4	119.4	92.0
Adjusted EBITDA	$ 53.4	$ (72.4)	$ 471.0	$ 321.2
Asbestos:				
Asbestos adjustments	73.4	192.9	22.0	156.4
AICF SG&A expenses	0.4	0.6	1.5	1.9
Adjusted EBITDA excluding Asbestos	$ 127.2	$ 121.1	$ 494.5	$ 479.5

Adjusted selling, general and administrative expenses ("Adjusted SG&A")

US$ Millions	Three Months and Full Year Ended 31 March			
	Q4'19	Q4'18	FY19	FY18
SG&A expenses	$ 102.3	$ 85.1	$ 403.6	$ 311.3
Excluding:				
AICF SG&A expenses	(0.4)	(0.6)	(1.5)	(1.9)
Fermacell acquisition costs	-	(5.3)	-	(10.0)
Product line discontinuation	(0.7)	-	(2.1)	-
Adjusted SG&A expenses	$ 101.2	$ 79.2	$ 400.0	$ 299.4
Net sales	624.8	525.9	2,506.6	2,054.5
SG&A expenses as a percentage of net sales	16.4%	16.2%	16.1%	15.2%
Adjusted SG&A expenses as a percentage of net sales	16.2%	15.1%	16.0%	14.6%

NON-US GAAP FINANCIAL MEASURES

Adjusted Return on Capital Employed ("Adjusted ROCE")

US$ Millions	Full Year Ended 31 March[1]	
	FY19	FY18
Numerator		
Adjusted EBIT	**$ 404.6**	**$ 397.5**
Denominator		
Gross capital employed (GCE)	1,492.7	1,272.0
Adjustment to GCE	(77.4)	(24.3)
Adjusted gross capital employed	**$ 1,415.3**	**$ 1,247.7**
Adjusted Return on Capital Employed	**28.6%**	**31.9%**

Q4 FY19 MANAGEMENT PRESENTATION

21 May 2019

JamesHardie™

James Hardie Industries plc

Consolidated Financial Statements
as of and for the Period Ended 31 March 2019

James Hardie Industries plc
Index

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of James Hardie Industries plc

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of James Hardie Industries plc (the Company) as of 31 March 2019 and 2018, and the related consolidated statements of operations and comprehensive income, changes in shareholders' equity (deficit), and cash flows for each of the three years in the period ended 31 March 2019, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at 31 March 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended 31 March 2019, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2008.
Irvine, California
21 May 2019

James Hardie Industries plc
Consolidated Balance Sheets

(Millions of US dollars)	**31 March 2019**	31 March 2018
Assets		
Current assets:		
Cash and cash equivalents	**$ 78.7**	$ 281.6
Restricted cash and cash equivalents	**5.1**	5.0
Restricted cash and cash equivalents - Asbestos	**39.8**	26.6
Restricted short-term investments - Asbestos	**17.7**	38.4
Accounts and other receivables, net of provision for doubtful trade debts of US$2.9 million and US$1.3 million as of 31 March 2019 and 31 March 2018	**254.6**	202.7
Inventories	**317.4**	255.7
Prepaid expenses and other current assets	**31.3**	25.4
Insurance receivable - Asbestos	**7.5**	5.1
Workers' compensation - Asbestos	**2.0**	2.1
Total current assets	**754.1**	842.6
Property, plant and equipment, net	**1,388.4**	992.1
Goodwill	**201.1**	4.9
Intangible assets, net	**174.4**	12.3
Insurance receivable - Asbestos	**43.7**	52.8
Workers' compensation - Asbestos	**25.8**	28.8
Deferred income taxes	**1,092.9**	29.9
Deferred income taxes - Asbestos	**349.3**	382.9
Other assets	**2.9**	4.7
Total assets	**$ 4,032.6**	$ 2,351.0
Liabilities and Shareholders' Equity (Deficit)		
Current liabilities:		
Accounts payable and accrued liabilities	**$ 255.5**	$ 193.3
Accrued payroll and employee benefits	**84.9**	61.8
Accrued product warranties	**6.8**	7.3
Income taxes payable	**13.4**	3.2
Asbestos liability	**110.5**	114.1
Workers' compensation - Asbestos	**2.0**	2.1
Other liabilities	**9.9**	12.8
Total current liabilities	**483.0**	394.6
Long-term debt	**1,380.3**	884.4
Deferred income taxes	**80.4**	66.4
Accrued product warranties	**39.8**	45.5
Income taxes payable	**25.2**	25.9
Asbestos liability	**979.1**	1,101.0
Workers' compensation - Asbestos	**25.8**	28.8
Other liabilities	**44.6**	25.9
Total liabilities	**3,058.2**	2,572.5
Commitments and contingencies (Note 14)		
Shareholders' equity (deficit):		
Common stock, Euro 0.59 par value, 2.0 billion shares authorized; 442,269,905 shares issued and outstanding at 31 March 2019 and 441,524,118 shares issued and outstanding at 31 March 2018	**230.0**	229.5
Additional paid-in capital	**197.6**	185.6
Accumulated equity (deficit)	**577.1**	(635.3)
Accumulated other comprehensive loss	**(30.3)**	(1.3)
Total shareholders' equity (deficit)	**974.4**	(221.5)
Total liabilities and shareholders' equity (deficit)	**$ 4,032.6**	$ 2,351.0

The accompanying notes are an integral part of these consolidated financial statements.

James Hardie Industries plc
Consolidated Statements of Operations and Comprehensive Income

	Years Ended 31 March		
(Millions of US dollars, except per share data)	**2019**	2018	2017
Net sales	**$ 2,506.6**	$ 2,054.5	$ 1,921.6
Cost of goods sold	**(1,675.6)**	(1,324.3)	(1,246.9)
Gross profit	**831.0**	730.2	674.7
Selling, general and administrative expenses	**(403.6)**	(311.3)	(291.6)
Research and development expenses	**(37.9)**	(33.3)	(30.3)
Asset impairments	**(15.9)**	—	—
Asbestos adjustments	**(22.0)**	(156.4)	40.4
Operating income	**351.6**	229.2	393.2
Interest expense, net of capitalized interest	**(54.2)**	(32.9)	(28.5)
Interest income	**4.1**	3.4	1.0
Loss on early debt extinguishment	**(1.0)**	(26.1)	—
Other income	**0.1**	0.7	1.3
Income before income taxes	**300.6**	174.3	367.0
Income tax expense	**(71.8)**	(28.2)	(90.5)
Net income	**$ 228.8**	$ 146.1	$ 276.5
Income per share:			
Basic	**$ 0.52**	$ 0.33	$ 0.62
Diluted	**$ 0.52**	$ 0.33	$ 0.62
Weighted average common shares outstanding (Millions):			
Basic	**441.9**	441.2	442.7
Diluted	**443.0**	442.3	443.9
Comprehensive income, net of tax:			
Net income	**$ 228.8**	$ 146.1	$ 276.5
Cash flow hedges	**(0.1)**	—	—
Currency translation adjustments	**(28.9)**	0.9	(3.0)
Comprehensive income	**$ 199.8**	$ 147.0	$ 273.5

The accompanying notes are an integral part of these consolidated financial statements.

James Hardie Industries plc
Consolidated Statements of Cash Flows

(Millions of US dollars)	Years Ended 31 March 2019	2018	2017
Cash Flows From Operating Activities			
Net income	**$ 228.8**	$ 146.1	$ 276.5
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	**119.4**	92.0	83.2
Deferred income taxes	**12.7**	(76.8)	26.0
Stock-based compensation	**12.5**	11.1	9.3
Asbestos adjustments	**22.0**	156.4	(40.4)
Excess tax benefits from share-based awards	**—**	(0.8)	(3.0)
Asset impairments	**15.9**	—	—
Loss on early debt extinguishment	**1.0**	26.1	—
Other, net	**16.3**	12.6	15.0
Changes in operating assets and liabilities:			
Accounts and other receivables	**(18.1)**	(2.0)	(28.4)
Inventories	**(28.6)**	(51.7)	(9.7)
Prepaid expenses and other assets	**(1.7)**	(2.8)	(2.1)
Insurance receivable - Asbestos	**4.8**	7.3	93.3
Accounts payable and accrued liabilities	**(12.9)**	14.2	39.6
Claims and handling costs paid - Asbestos	**(108.8)**	(104.4)	(91.8)
Income taxes payable	**8.8**	26.9	(2.7)
Other accrued liabilities	**15.5**	47.8	17.7
Net cash provided by operating activities	**$ 287.6**	$ 302.0	$ 382.5
Cash Flows From Investing Activities			
Purchases of property, plant and equipment	**$ (301.1)**	$ (203.7)	$ (101.9)
Proceeds from sale of property, plant and equipment	**—**	7.9	—
Capitalized interest	**(5.4)**	(4.8)	(2.0)
Acquisition of business, net of cash acquired	**(558.7)**	—	—
Acquisition of assets	**—**	—	(5.1)
Purchase of restricted short-term investments - Asbestos	**(89.1)**	(78.4)	—
Proceeds from restricted short-term investments - Asbestos	**106.3**	40.0	—
Net cash used in investing activities	**$ (848.0)**	$ (239.0)	$ (109.0)
Cash Flows From Financing Activities			
Proceeds from credit facilities	**$ 230.0**	$ 380.0	$ 395.0
Repayments of credit facilities	**(180.0)**	(455.0)	(410.0)
Proceeds from 364-day term loan facility	**492.4**	—	—
Repayments of 364-day term loan facility	**(458.8)**	—	—
Proceeds from senior unsecured notes	**458.8**	800.0	77.3
Debt issuance costs	**(6.1)**	(15.7)	(1.7)
Repayment of senior unsecured notes	**—**	(400.0)	—
Call redemption premium paid to note holders	**—**	(19.5)	—
Proceeds from issuance of shares	**—**	0.2	0.3
Excess tax benefits from share-based awards	**—**	—	3.0
Common stock repurchased and retired	**—**	—	(99.8)
Dividends paid	**(172.1)**	(177.5)	(176.8)
Proceeds from NSW Loan - Asbestos	**—**	—	77.0
Repayments of NSW Loan - Asbestos	**—**	(51.9)	(74.3)
Net cash provided by (used in) financing activities	**$ 364.2**	$ 60.6	$ (210.0)
Effects of exchange rate changes on cash and cash equivalents, restricted cash and restricted cash - Asbestos	**$ 6.6**	$ (3.2)	$ 0.2
Net (decrease) increase in cash and cash equivalents, restricted cash and restricted cash - Asbestos	**(189.6)**	120.4	63.7
Cash and cash equivalents, restricted cash and restricted cash - Asbestos at beginning of period	**313.2**	192.8	129.1
Cash and cash equivalents, restricted cash and restricted cash - Asbestos at end of period	**$ 123.6**	$ 313.2	$ 192.8
Supplemental Disclosure of Cash Flow Activities			
Cash paid during the year for interest	**$ 57.0**	$ 26.3	$ 26.2
Cash paid during the year for income taxes, net	**$ 26.3**	$ 49.1	$ 51.5
Cash paid to AICF	**$ 103.0**	$ 102.2	$ 91.1

The accompanying notes are an integral part of these consolidated financial statements.

James Hardie Industries plc

Consolidated Statements of Changes in Shareholders' Equity (Deficit)

(Millions of US dollars)	Common Stock	Additional Paid-in Capital	Accumulated (Deficit) Equity	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total
Balances as of 31 March 2016	**$ 231.4**	**$ 164.4**	**$ (621.8)**	**$ —**	**$ 0.8**	**$ (225.2)**
Net income	—	—	276.5	—	—	276.5
Other comprehensive loss	—	—	—	—	(3.0)	(3.0)
Stock-based compensation	0.9	8.4	—	—	—	9.3
Tax benefit from stock options exercised	—	3.0	—	—	—	3.0
Equity awards exercised	—	0.3	—	—	—	0.3
Dividends declared	—	—	(173.3)	—	—	(173.3)
Treasury stock purchased	—	—	—	(99.8)	—	(99.8)
Treasury stock retired	(3.2)	(2.3)	(94.3)	99.8	—	—
Balances as of 31 March 2017	**$ 229.1**	**$ 173.8**	**$ (612.9)**	**$ —**	**$ (2.2)**	**$ (212.2)**
Net income	—	—	146.1	—	—	146.1
Other comprehensive income	—	—	—	—	0.9	0.9
Stock-based compensation	0.4	11.6	(0.9)	—	—	11.1
Equity awards exercised	—	0.2	—	—	—	0.2
Dividends declared	—	—	(167.6)	—	—	(167.6)
Balances as of 31 March 2018	**$ 229.5**	**$ 185.6**	**$ (635.3)**	**$ —**	**$ (1.3)**	**$ (221.5)**
Net income	—	—	228.8	—	—	228.8
Other comprehensive loss	—	—	—	—	(29.0)	(29.0)
Stock-based compensation	0.5	12.0	—	—	—	12.5
Adoption of ASU 2016-16	—	—	1,160.3	—	—	1,160.3
Dividends declared	—	—	(176.7)	—	—	(176.7)
Balances as of 31 March 2019	**$ 230.0**	**$ 197.6**	**$ 577.1**	**$ —**	**$ (30.3)**	**$ 974.4**

The accompanying notes are an integral part of these consolidated financial statements.

1. Background and Basis of Presentation

Nature of Operations

James Hardie Industries plc ("JHI plc") manufactures and sells fiber cement, fiber gypsum and cement-bonded building products for interior and exterior building construction applications, primarily in the United States, Australia, Europe, New Zealand, the Philippines and Canada. On 3 April 2018, JHI plc completed the acquisition of German-based XI (DL) Holdings GmbH (n/k/a James Hardie Europe Holdings 2) and its subsidiaries (including, but not limited to, Fermacell GmbH (n/k/a James Hardie Europe GmbH)) (collectively, "Fermacell"). Fermacell manufactures and sells fiber gypsum and cement-bonded building products primarily in continental Europe.

Basis of Presentation

The consolidated financial statements represent the financial position, results of operations and cash flows of JHI plc and its wholly-owned subsidiaries and variable interest entity ("VIE"). Unless the context indicates otherwise, JHI plc and its direct and indirect wholly-owned subsidiaries and VIE (as of the time relevant to the applicable reference) are collectively referred to as "James Hardie", the "James Hardie Group" or the "Company". The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP"). The US dollar is used as the reporting currency.

Reporting Segments

During the first quarter of fiscal year 2019, the Company changed its reportable operating segments in conjunction with how information is evaluated by the Chief Operating Decision Maker ("CODM") for the purpose of assessing segment performance and allocation of resources. The Company has revised its historical segment information at 31 March 2018 and for the years ended 31 March 2018 and 2017 to be consistent with the current reportable segment structure. The change in reportable segments had no effect on the Company's financial position, results of operations or cash flows for the periods presented. See Note 18 for further details on segment reporting.

2. Summary of Significant Accounting Policies

Reclassifications

Within the consolidated balance sheet at 31 March 2018, the Company reclassified the *Intangible Assets, Net* and *Goodwill* balances of US$12.3 million and US$4.9 million, respectively, which were previously included in *Other Assets,* to conform to the current presentation.

Within the operating activities section of the consolidated statement of cash flows for the year ended 31 March 2017, the Company reclassified the change in the *Income Tax Payable* balance of US$2.7 million which was previously included within a change in *Other Accrued Liabilities*, and separated these costs in the change in *Income Tax Payable* line item, to conform to the current presentation.

The Company adopted Accounting Standards Update ("ASU") No. 2016-18 starting with the fiscal year beginning 1 April 2018, which required *Restricted Cash and Restricted Cash - Asbestos* to be included in the starting and ending cash balances on the consolidated statements of cash flows. See Recent Accounting Pronouncements later in this footnote for further details on this accounting standard update, including all reclassifications made to the consolidated statements of cash flows for the years ended 31 March 2018 and 2017.

Principles of Consolidation

The consolidated financial statements of the Company include the accounts of JHI plc, its wholly-owned subsidiaries and VIE. All intercompany balances and transactions have been eliminated in consolidation.

A VIE is an entity that is evaluated for consolidation using more than a simple analysis of voting control. The analysis is based on: (i) what party has the power to direct the most significant activities of the VIE that impact its economic performance; and (ii) what party has rights to receive benefits or is obligated to absorb losses that are significant to the VIE. The analysis of the party that consolidates a VIE is a continual assessment.

In February 2007, the Company's shareholders approved the Amended and Restated Final Funding Agreement (the "AFFA"), an agreement pursuant to which the Company provides long-term funding to Asbestos Injuries Compensation Fund ("AICF"), a special purpose fund that provides compensation for the Australian-related personal injuries for which certain former subsidiary companies of James Hardie in Australia (being Amaca Pty Ltd ("Amaca"), Amaba Pty Ltd ("Amaba") and ABN 60 Pty Limited ("ABN 60") (collectively, the "Former James Hardie Companies")) are found liable. JHI plc owns 100% of James Hardie 117 Pty Ltd (the "Performing Subsidiary"), which, under the terms of the AFFA, has an obligation to make payments to AICF on an annual basis subject to the provisions of the AFFA. JHI plc guarantees the Performing Subsidiary's obligation. Additionally, the Company appoints three AICF directors and the New South Wales ("NSW") Government appoints two AICF directors.

Although the Company has no ownership interest in AICF, for financial reporting purposes, the Company consolidates AICF, which is a VIE as defined under US GAAP, due to its pecuniary and contractual interests in AICF as a result of the funding arrangements outlined in the AFFA. The Company's consolidation of AICF results in AICF's assets and liabilities being recorded on its consolidated balance sheets and AICF's income and expense transactions being recorded in the consolidated statements of operations and comprehensive income. These items are Australian dollar-denominated and are subject to remeasurement into US dollars at each reporting date.

For the fiscal years ended 31 March 2019, 2018 and 2017, the Company did not provide financial or other support to AICF that it was not previously contractually required to provide.

Use of Estimates

The preparation of financial statements in conformity with US GAAP requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Foreign Currency Translation/Remeasurement

All assets and liabilities are translated or remeasured into US dollars at current exchange rates while revenues and expenses are translated or remeasured at average exchange rates in effect for the period. The effects of foreign currency translation adjustments are included directly in other comprehensive income in shareholders' equity (deficit). Gains and losses arising from foreign currency transactions are recognized in income currently.

The Company has recorded on its balance sheet certain foreign assets and liabilities, including asbestos-related assets and liabilities under the terms of the AFFA, that are denominated in foreign currencies and subject to translation (foreign entities) or remeasurement (AICF entity and Euro denominated debt) into US dollars at each reporting date. Unless otherwise noted, the Company converts foreign currency denominated assets and liabilities into US dollars at the spot rate at the end of the reporting period; while revenues and expenses are converted using an average exchange rate for the period. Gains or losses resulting from transactions denominated in foreign currencies are included in *Selling, general and administrative expenses* in the consolidated statements of operations and comprehensive income, and may be offset by other transactions. The Company recorded a foreign exchange gain relating to its Euro denominated debt which was economically offset by a foreign exchange loss on loans between subsidiaries, resulting in a net translation gain of US$2.9 million for the year ended 31 March 2019, which was recorded in *Selling, general and administrative expenses* in the consolidated statements of operations and comprehensive income.

Restricted Cash and Cash Equivalents

Restricted cash and cash equivalents generally relate to amounts subject to letters of credit with insurance companies, which restrict the cash from use for general corporate purposes.

Inventories

Inventories are valued at the lower of cost or net realizable value. Cost is generally determined under the first-in, first-out method, except that the cost of raw materials and supplies is determined using actual or average costs. Cost includes the costs of materials, labor and applied factory overhead. On a regular basis, the Company evaluates its inventory balances for excess quantities and obsolescence by analyzing demand, inventory on hand, sales levels and other information. Based on these evaluations, inventory costs are adjusted to net realizable value, if necessary.

Property, Plant and Equipment

Property, plant and equipment are stated at cost. Property, plant and equipment of businesses acquired are recorded at their estimated fair value at the date of acquisition. Depreciation of property, plant and equipment is computed using the straight-line method over the following estimated useful lives:

	Years
Buildings	10 to 50
Buildings Improvements	3 to 25
Leasehold Improvements	5 to 40
Machinery and Equipment	1 to 30

During the year ended 31 March 2019, the Company recorded impairment charges to Property, Plant and Equipment of US$9.1 million.

See Note 8 for additional information.

Depreciation and Amortization

The Company records depreciation and amortization under both *Cost of goods sold* and *Selling, general and administrative* expenses, depending on the asset's business use. All depreciation and amortization related to plant building, machinery and equipment is recorded in *Cost of goods sold*.

Goodwill and Other Intangible Assets

Goodwill is the excess of purchase price over the fair value of tangible and identifiable intangible net assets acquired in various business combinations. Goodwill is not amortized but is tested at the reporting unit level for impairment annually, or more often if indicators of impairment exist. Factors that could cause an impairment in the future could include, but are not limited to, adverse macroeconomic conditions, deterioration in industry or market conditions, decline in revenue and cash flows or increases in costs and capital expenditures compared to projected results. A goodwill impairment charge is recorded for the amount by which the carrying value of the reporting unit exceeds the fair value of the reporting unit. During the year ended 31 March 2019, the Company recorded a goodwill impairment charge of US$4.6 million in the Other Businesses segment due to the Company's decision to cease production of its fiberglass windows business. The Company did not record any goodwill impairment charges for the years ended 31 March 2018 and 2017.

Intangible assets from acquired businesses are recognized at their estimated fair values at the date of acquisition and consist of trademarks, customer relationships and other intangible assets. Finite-lived intangibles are amortized to expense over the applicable useful lives, ranging from 2 to 13 years, based on the nature of the asset and the underlying pattern of economic benefit as reflected by future net cash inflows. The Company performs an impairment test of intangibles annually, or whenever events or changes in circumstances indicate their carrying value may be impaired. During the year ended 31 March 2019, the Company recorded total impairment charges on amortizable intangible assets of US$2.6 million. The Company did not record any intangible asset impairment charges for the years ended 31 March 2018 and 2017.

See Note 7 for additional information.

Impairment of Long-Lived Assets

Long-lived assets, such as property, plant and equipment, are evaluated each quarter for events or changes in circumstances that indicate that an asset might be impaired because the carrying amount of the asset may not be recoverable. These include, without limitation, a significant adverse change in the extent or manner in which a long-lived asset or asset group is being used, a current period operating or cash flow loss combined with a history of operating or cash flow losses, a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset or asset group and/or a current expectation that it is more likely than not that a long lived asset or asset group will be sold or otherwise disposed of significantly before the end of its previously estimated useful life.

When such indicators of potential impairment are identified, recoverability is tested by grouping long-lived assets that are used together and represent the lowest level for which cash flows are identifiable and distinct from the cash flows of other long-lived assets, which is typically at the production line or plant facility level, depending on the type of long-lived asset subject to an impairment review.

Recoverability is measured by a comparison of the carrying amount of the asset group to the estimated undiscounted future cash flows expected to be generated by the asset group. If the carrying amount exceeds the estimated undiscounted future cash flows, an impairment charge is recognized at the amount by which the carrying amount exceeds the estimated fair value of the asset group.

The methodology used to estimate the fair value of the asset group is based on a discounted cash flow analysis that considers the asset group's highest and best use that would maximize the value of the asset group. In addition, the estimated fair value of an asset group also considers, to the extent practicable, a market participant's expectations and assumptions in estimating the fair value of the asset group. If the estimated fair value of the asset group is less than the carrying value, an impairment loss is recognized at an amount equal to the excess of the carrying value over the estimated fair value of the asset group.

See Notes 7 and 8 for additional information.

Accrued Product Warranties

An accrual for estimated future warranty costs is recorded based on an analysis by the Company, which includes the historical relationship of warranty costs to installed product at an estimated remediation cost per standard foot. Based on this analysis and other factors, the adequacy of the Company's warranty provision is adjusted as necessary.

Debt

The Company's debt consists of an unsecured revolving credit facility and senior unsecured notes. Each of the Company's debt instruments is recorded at cost, net of any original issue discount or premium, where applicable. The related original issue discount, premium and debt issuance costs are amortized over the term of each respective borrowing using the effective interest method. Debt is presented as current if the liability is due to be settled within 12 months after the balance sheet date, unless the Company has the ability and intention to refinance on a long term basis in accordance with US GAAP. Readers are referred to the discussion later in this footnote under Fair Value Measurements and Note 10 for the Company's fair value considerations.

In addition, the Company consolidates AICF which has a loan facility. Readers are referred to the discussion later in this footnote under Asbestos-related Accounting Policies.

Revenue Recognition

The Company recognizes revenues when the requisite performance obligation has been met, that is, when the Company transfers control of its products to customers, which depending on the terms of the underlying contract, is generally upon delivery. The Company records estimated reductions in sales for customer rebates and discounts including volume, promotional, cash and other discounts. Rebates and discounts are recorded based on management's best estimate when products are sold. The estimates are based on historical experience for similar programs and products. Management reviews these rebates and discounts on an ongoing basis and the related accruals are adjusted, if necessary, as additional information becomes available.

A portion of the Company's revenue is made through distributors under a vendor managed inventory agreement whereby revenue is recognized upon the transfer of title and risk of loss to the distributors.

See Note 3 for additional information.

Income Taxes

The Company accounts for income taxes under the asset and liability method. Under this method, deferred income taxes are recognized by applying enacted statutory rates applicable to future years to differences between the tax bases and financial reporting amounts of existing assets and liabilities. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. The realization of the US deferred tax assets is affected primarily by the continued profitability of the US business. A valuation allowance is provided when it is more likely than not that all or some portion of deferred tax assets will not be realized. Interest and penalties related to uncertain tax positions are recognized in Income tax expense on the consolidated statements of operations and comprehensive income. Readers are referred to Note 15 for further discussion of income taxes.

Financial Instruments

The Company calculates the fair value of financial instruments and includes this additional information in the notes to the consolidated financial statements. The estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies. However, considerable judgment is required in interpreting market data to develop the estimates of fair value. Accordingly, the estimates presented herein are not necessarily indicative of the amounts that the Company could realize in a current market exchange. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts.

Periodically, interest rate swaps, commodity swaps and forward exchange contracts are used to manage market risks and reduce exposure resulting from fluctuations in interest rates, commodity prices and foreign currency exchange rates. Changes in the fair value of financial instruments that are not designated as hedges are recorded in earnings within *Other income* at each measurement date. The Company does not use derivatives for trading purposes. Readers are referred to Note 13 for further discussion on financial instruments.

Fair Value Measurements

Assets and liabilities of the Company that are carried or disclosed at fair value are classified in one of the following three categories:

Level 1 Quoted market prices in active markets for identical assets and liabilities that the Company has the ability to access at the measurement date;

Level 2 Observable market-based inputs or unobservable inputs that are corroborated by market data for the asset or liability at the measurement date;

Level 3 Unobservable inputs that are not corroborated by market data used when there is minimal market activity for the asset or liability at the measurement date.

Fair value measurements of assets and liabilities are assigned a level within the fair value hierarchy based on the lowest level of any input that is significant to the fair value measurement in its entirety.

The carrying amounts of Cash and Cash Equivalents, Restricted cash and cash equivalents, Trade receivables, Trade payables and the Revolving Credit Facility approximates their respective fair values due to the short-term nature of these instruments.

Stock-based Compensation

Stock-based compensation expense represents the estimated fair value of equity-based and liability-classified awards granted to employees and is recognized as an expense over the vesting period. Stock-based compensation expense is included in the line item *Selling, general and administrative* expenses on the consolidated statements of operations and comprehensive income.

Equity awards with vesting based solely on a service condition are typically subject to graded vesting, in that the awards primarily vest 25% after the first year, 25% after the second year and 50% after the third year. For equity awards subject to graded vesting, the Company has elected to use the accelerated recognition method. Accordingly, each vesting tranche is valued separately, and the recognition of stock-based compensation expense is more heavily weighted earlier in the vesting period. Stock-based compensation expense for equity awards that are subject to performance or market vesting conditions are based upon an estimate of the number of awards that are expected to vest and typically recognized ratably over the vesting period. The Company issues new shares to award recipients when the vesting condition for restricted stock units ("RSU's") has been satisfied.

For RSU's subject to a service vesting condition, the fair value is equal to the market value of the Company's common stock on the date of grant, adjusted for the fair value of estimated dividends as the restricted stock holder is not entitled to dividends over the vesting period. For RSU's subject to a scorecard performance vesting condition, the fair value is adjusted for changes in JHI plc's common stock price at each balance sheet date until the end of the performance period. For RSU's subject to a market vesting condition, the fair value is estimated using a Monte Carlo Simulation.

Compensation expense recognized for liability-classified awards is based upon an estimate of the number of awards that are expected to vest and on the fair market value of JHI plc's common stock on the date of the grant. A corresponding liability is recorded and adjusted for subsequent changes in JHI plc's common stock price at each balance sheet date.

Earnings Per Share

The Company discloses basic and diluted earnings per share ("EPS"). Basic EPS is calculated using net income divided by the weighted average number of common shares outstanding during the period. Diluted EPS is similar to basic EPS except that the weighted average number of common shares outstanding is increased to include the number of additional common shares calculated using the treasury method that would have been outstanding if the dilutive potential common shares, such as stock options and RSUs, had been issued.

Basic and dilutive common shares outstanding used in determining net income per share are as follows:

	Years Ended 31 March		
(Millions of shares)	**2019**	2018	2017
Basic common shares outstanding	**441.9**	441.2	442.7
Dilutive effect of stock awards	**1.1**	1.1	1.2
Diluted common shares outstanding	**443.0**	442.3	443.9

(US dollars)	**2019**	2018	2017
Net income per share - basic	**0.52**	0.33	0.62
Net income per share - diluted	**0.52**	0.33	0.62

There were no potential common shares which would be considered anti-dilutive for the years ended 31 March 2019, 2018 and 2017.

Unless they are anti-dilutive, RSU's which vest solely based on continued employment are considered to be outstanding as of their issuance date for purposes of computing diluted EPS and are included in the calculation of diluted EPS using the Treasury Method. Once these RSU's vest, they are included in the basic EPS calculation on a weighted-average basis.

RSU's which vest based on performance or market conditions are considered contingent shares. At each reporting date prior to the end of the contingency period, the Company determines the number of contingently issuable shares to include in the diluted EPS calculation, as the number of shares that would be issuable under the terms of the RSU arrangement, if the end of the reporting period were the end of the contingency period. Once these RSU's vest, they are included in the basic EPS calculation on a weighted-average basis.

Potential common shares of 2.2 million, 1.6 million and 1.8 million for the years ended 31 March 2019, 2018 and 2017, respectively, have been excluded from the calculation of diluted common shares outstanding as they are considered contingent shares which are not expected to vest.

Asbestos-related Accounting Policies

Asbestos Liability

The amount of the asbestos liability has been recognized by reference to (but not exclusively based upon) the most recent actuarial estimate of projected future cash flows as calculated by KPMG Actuarial ("KPMGA"), who are engaged and appointed by AICF under the terms of the AFFA. Based on their assumptions, KPMGA arrived at a range of possible total future cash flows and calculated a central estimate, which is intended to reflect a probability-weighted expected outcome of those actuarially estimated future cash flows projected by KPMGA to occur through 2072.

The Company recognizes the asbestos liability in the consolidated financial statements by reference to (but not exclusively based upon) the undiscounted and uninflated central estimate. The Company considered discounting when determining the best estimate under US GAAP. The Company has recognized the asbestos liability by reference to (but not exclusively based upon) the central estimate as undiscounted on the basis that the timing and amounts of such cash flows are not fixed or readily determinable. The Company considered inflation when determining the best estimate under US GAAP. It is the Company's view that there are material uncertainties in estimating an appropriate rate of inflation over the extended period of the AFFA. The Company views the undiscounted and uninflated central estimate as the best estimate under US GAAP.

Adjustments in the asbestos liability due to changes in the actuarial estimate of projected future cash flows and changes in the estimate of future operating costs of AICF are reflected in the consolidated statements of operations and comprehensive income during the period in which they occur. Claims paid by AICF and claims-handling costs incurred by AICF are treated as reductions in the Asbestos liability balances.

Insurance Receivable

The insurance receivable recorded by the Company has been recognized by reference to (but not exclusively based upon) the most recent actuarial estimate of recoveries expected from insurance policies and insurance companies with exposure to the asbestos claims, as calculated by KPMGA. The assessment of recoveries is based on the expected pattern of claims against such policies less an allowance for credit risk based on credit agency ratings. The insurance receivable generally includes these cash flows as undiscounted and uninflated, however, where the timing of recoveries has been agreed with the insurer, the receivables are recorded on a discounted basis. The Company records insurance receivables that are deemed probable of being realized.

Adjustments in the insurance receivable due to changes in the actuarial estimate, or changes in the Company’s assessment of recoverability are reflected in the consolidated statements of operations and comprehensive income during the period in which they occur. Insurance recoveries are treated as a reduction in the insurance receivable balance.

Workers’ Compensation

An estimate of the liability related to workers’ compensation claims is prepared by KPMGA as part of the annual actuarial assessment. This estimate contains two components - amounts that will be met by a workers’ compensation scheme or policy, and amounts that will be met by the Former James Hardie Companies.

The estimated liability is included as part of the asbestos liability and adjustments to the estimate are reflected in the consolidated statements of operations and comprehensive income during the period in which they occur. Amounts that are expected to be paid by the workers’ compensation schemes or policies are recorded as workers’ compensation receivable. Adjustments to the workers’ compensation liability result in an equal adjustment in the workers’ compensation receivable recorded by the Company and have no effect on the consolidated statements of operations and comprehensive income.

Restricted Cash and Cash Equivalents

Cash and cash equivalents of AICF are reflected as restricted assets, as the use of these assets is restricted to the settlement of asbestos claims and payment of the operating costs of AICF. Since cash and cash equivalents are highly liquid, the Company classifies these amounts as a current asset on the consolidated balance sheets.

Restricted Short-Term Investments

Short-term investments of AICF consist of highly liquid investments held in the custody of major financial institutions. All short-term investments are classified as available for sale and are recorded in the financial statements at fair value. The fair value of restricted short-term investments is based on quoted market prices using the specific identification method. Unrealized gains and losses on the fair value of these investments are included as a separate component of *Accumulated other comprehensive loss*. Realized gains and losses on short-term investments are recognized in *Other income* on the consolidated statements of operations and comprehensive income.

Short-Term Debt

AICF has access to a secured loan facility (the “AICF Loan Facility”) made available by the NSW Government, which can be used by AICF to fund the payment of asbestos claims and certain operating and legal costs of AICF and Former James Hardie Companies (together, the “Obligors”).

Interest accrues daily on amounts outstanding, is calculated based on a 365-day year and is payable monthly. AICF may, at its discretion, elect to accrue interest payable on amounts outstanding under the AICF Loan Facility on the date interest becomes due and payable.

Deferred Income Taxes

The Performing Subsidiary is able to claim a tax deduction for its contributions to AICF over a five-year period commencing in the year the contribution is incurred. Consequently, a deferred tax asset has been recognized equivalent to the anticipated tax benefit over the life of the AFFA.

Adjustments are made to the deferred income tax asset as adjustments to the asbestos-related assets and liabilities are recorded.

Asbestos Adjustments

The *Asbestos adjustments* reflected in the consolidated statements of operations and comprehensive income reflect the net change in the actuarial estimate of the asbestos liability and insurance receivables, and the change in the estimate of AICF claims handling costs. Additionally, as the asbestos-related assets and liabilities are denominated in Australian dollars, the reported values of these asbestos-related assets and liabilities in the Company's consolidated balance sheets in US dollars are subject to adjustment depending on the closing exchange rate between the two currencies at the balance sheet dates, the effect of which is also included in *Asbestos adjustments* in the consolidated statements of operations and comprehensive income.

Asbestos Impact on Statement of Cash Flows

Restricted cash and cash equivalents - Asbestos

The *Restricted cash and cash equivalents* held by AICF as recorded on the consolidated balance sheets was included in the total beginning and ending cash balance in the consolidated statements of cash flows. The movement in *Restricted cash and cash equivalents - Asbestos* was reflected in either the cash flows from operating activities, cash flows from investing activities or cash flows from financing activities sections of the consolidated statements of cash flows as described in detail below.

Asbestos Adjustments

The *Asbestos adjustments* as recorded on the consolidated statements of operations and comprehensive income (as described above) is presented as a reconciling item from net income to cash flows from operating activities in the consolidated statements of cash flows.

Asbestos Insurance Receivable

Proceeds from insurance claims by AICF are reflected in the cash flows from operating activities section of the consolidated statements of cash flows.

Asbestos Claims Paid

Asbestos claims paid by AICF are reflected in the cash flows from operating activities section of the consolidated statements of cash flows.

Restricted Short-Term Investments

Purchases or proceeds from short-term investments, made by AICF, are reflected in the cash flows from investing activities section of the consolidated statements of cash flows.

AICF Loan Facility

Any drawings, repayments, or payments of accrued interest under the AICF Loan Facility, made by AICF, are reflected in the cash flows from financing activities section of the consolidated statements of cash flows.

Business combinations

The Company accounts for acquired businesses using the acquisition method of accounting. This method requires that the purchase price be allocated to the identifiable assets acquired and liabilities assumed at their estimated fair values at the date of acquisition. The excess of the purchase price over the identifiable assets acquired and liabilities assumed is recorded as goodwill.

The fair values are determined by management, taking into consideration information supplied by management of the acquired entities, and other relevant information. Such information typically includes valuations obtained from independent appraisal experts, which management reviews and considers in its estimates of fair values. The valuations are generally based upon future cash flow projections for the acquired assets, discounted to present value. The determination of fair values requires significant judgment by management, particularly with respect to the value of identifiable intangible assets. This judgment could result in either a higher or lower value assigned to amortizable or depreciable assets. The impact could result in either higher or lower amortization and/or depreciation expense. Management's estimates of fair value are based upon assumptions believed to be reasonable, but due to the inherent uncertainty during the measurement period, which may be up to one year from the acquisition date, the Company records adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-09, which provides guidance requiring companies to recognize revenue depicting the transfer of goods or services to customers in amounts that reflect the payment to which a company expects to be entitled in exchange for those goods or services. ASU No. 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU No. 2014-09 was effective for annual reporting periods beginning after 15 December 2017, and interim periods within those years, with early adoption permitted for annual reporting periods beginning after 15 December 2016. The Company adopted ASU No. 2014-09 (and related clarifying guidance issued by the FASB) starting with the fiscal year beginning 1 April 2018 using a modified retrospective approach. As a result of adopting ASU No. 2014-09, the Company recorded no adjustment to the opening retained earnings as of 1 April 2018. The impact to revenues and related deferred revenue balances as a result of applying ASU No. 2014-09 was not material as of and for the year ended 31 March 2019. See Note 3 for further details.

In February 2016, the FASB issued ASU No. 2016-02, which provides guidance on the amount, timing, and uncertainty of cash flows arising from leases. The standard requires lessees to recognize lease assets and lease liabilities on the balance sheet and requires expanded disclosures about leasing arrangements. Lessor accounting will remain largely unchanged from current guidance, however ASU No. 2016-02 will provide improvements that are intended to align lessor accounting with the lessee model and with updated revenue recognition guidance. The amendments in ASU No. 2016-02 shall be applied on a modified retrospective basis, and are effective for fiscal years and interim periods within those years, beginning after 15 December 2018, with early adoption permitted. In July 2018, the FASB issued ASU No. 2018-11, which provided a second accepted transition method, which would allow companies to adopt the new lease standard as a cumulative-effect adjustment to the opening balance of retained earnings as of the beginning of the period of adoption, rather than at the beginning of the earliest period presented. The Company is in process implementing this guidance, including obtaining copies of all active leases, extracting and documenting key components of each lease, educating and training key stakeholders on this new accounting guidance and performing steps to ensure the population of leases is complete. The Company will adopt ASU No. 2016-02 (and related clarifying guidance issued by the FASB) starting with the fiscal year beginning 1 April 2019, using the second modified retrospective transition method outlined in ASU No. 2018-11, and is currently evaluating the impact of the guidance on its consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, which requires entities to recognize the income tax consequences of intra-entity transfers of assets other than inventory when the transfer occurs. The amendments in ASU No. 2016-16 are effective for fiscal years and interim periods within those years, beginning after 15 December 2017, with early adoption permitted. The amendments in ASU No. 2016-16 shall be applied on a modified retrospective basis, wherein the beginning retained earnings in the period in which the guidance is adopted should include a cumulative-effect adjustment to reflect the effects of applying the new guidance. The Company adopted ASU No. 2016-16 starting with the fiscal year beginning 1 April 2018, and recorded an increase in gross deferred income tax assets of US$1,313.0 million, a valuation allowance of US$148.2 million, a decrease in other assets of US$4.5 million and a corresponding cumulative retained earnings adjustment of US$1,160.3 million, resulting from the internal restructuring transaction implemented during the year ended 31 March 2018 relating to the alignment of certain intangible assets with its US business and from other internal restructuring transactions undertaken in prior years. The internal restructuring implemented during the year ended 31 March 2018 resulted in the establishment of US ownership of certain of the Company's fiber cement related trademarks, tradenames, patents, product and manufacturing technology and know-how, and other related intellectual property rights (collectively, intellectual property), owned and predominantly developed by one of the Company's Irish subsidiaries, and represent the primary fiber cement business value drivers of which the Company's US fiber cement business is a majority economic beneficiary. As a result of this internal restructure, the tax basis of this intellectual property was recognized at fair market value and is subject to amortization for US income tax purposes. The Company established a valuation allowance against the deferred tax asset for the intellectual property that has an indefinite life for US income tax purposes and is not subject to tax amortization.

In November 2016, the FASB issued ASU No. 2016-18, which requires the statement of cash flows to explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. The Company adopted ASU No. 2016-18 starting with the fiscal year beginning 1 April 2018 and the amendments in ASU No. 2016-18 were applied on a retrospective basis for each period presented. In accordance with disclosure requirements of this new accounting standard, the impact of adoption on the consolidated statements of cash flows was as follows:

	Year ended 31 March 2018		
(Millions of US dollars)	As reported	ASU 2016-18 Adjustment	As adjusted
Cash and cash equivalents at the beginning of the period	$ 78.9	$ 113.9	$ 192.8
Cash and cash equivalents at the end of the period	281.6	31.6	313.2
Restricted cash - Asbestos	95.2	(95.2)	—
Payment to AICF	(102.2)	102.2	—
Asbestos liability	(104.4)	104.4	—
Asbestos claims paid	—	(104.4)	(104.4)
Net cash provided by operating activities	295.0	7.0	302.0
Purchase of investments - Asbestos	—	(78.4)	(78.4)
Proceeds from investments - Asbestos	—	40.0	40.0
Net cash used in investing activities	(200.6)	(38.4)	(239.0)
Repayments of NSW Loan - Asbestos	—	(51.9)	(51.9)
Net cash used in financing activities	112.5	(51.9)	60.6
Effects of exchange rate changes on cash	(4.2)	1.0	(3.2)

	Year ended 31 March 2017		
(Millions of US dollars)	As reported	ASU 2016-18 Adjustment	As adjusted
Cash and cash equivalents at the beginning of the period	$ 107.1	$ 22.0	$ 129.1
Cash and cash equivalents at the end of the period	78.9	113.9	192.8
Restricted cash - Asbestos	0.9	(0.9)	—
Payment to AICF	(91.1)	91.1	—
Asbestos liability	(92.0)	92.0	—
Asbestos claims paid	—	(91.8)	(91.8)
Net cash provided by operating activities	292.1	90.4	382.5
Proceeds from NSW Loan - Asbestos	—	77.0	77.0
Repayments of NSW Loan - Asbestos	—	(74.3)	(74.3)
Net cash used in financing activities	(212.7)	2.7	(210.0)
Effects of exchange rate changes on cash	1.4	(1.2)	0.2

In January 2017, the FASB issued ASU No. 2017-01, which clarifies the definition of a business to assist entities with evaluating whether transactions should be accounted for as acquisitions or disposals of either assets or of businesses. The Company adopted ASU No. 2017-01 starting with the fiscal year beginning 1 April 2018 and the adoption of this standard did not have a material impact on the consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, which removes step 2 from the goodwill impairment test. Under the new guidance, if a reporting unit's carrying amount exceeds it fair value, an entity will record an impairment charge based on that difference. The impairment charge will be limited to the amount of goodwill allocated to that reporting unit. The Company adopted ASU No. 2017-04 prospectively on 1 April 2018, and the adoption of this standard did not have a material impact on the consolidated financial statements.

In March 2018, the FASB issued ASU No. 2018-05, which provides the U.S. Securities and Exchange Commission Staff's guidance when preparing the initial accounting for the income tax effects of the US Tax Cuts and Jobs Act ("TCJ Act"), which was enacted on 22 December 2017. The staff guidance addresses the specific situation in which the initial accounting for certain income tax effects of the TCJ Act will not be complete at the time that financial statements are issued. ASU No. 2018-05 is effective for financial statements that include the reporting period in which the TCJ Act was enacted. Therefore, the Company implemented the guidance in ASU No. 2018-05 in its financial statements for the fiscal year ending 31 March 2018. The Company finalized the accounting for the effects of the TCJ Act during the quarter ended 31 December 2018, and recognized a discrete tax benefit of US$1.8 million as a result of additional guidance provided by the Internal Revenue Service in respect to the application of Internal Revenue Code Section 162 (m). The Company also recognized insignificant tax effects due to the finalization of the one-time transition tax, the re-measurement of deferred tax assets and liabilities, and other impacts of the TCJ Act. The Company is electing to account for Global Intangible Low Tax Income in the year the tax is incurred.

In June 2018, the FASB issued ASU No. 2018-07, which expands the scope of Topic 718, Compensation-Stock Compensation (which currently only includes share-based payments to employees) to include share-based payments issued to nonemployees for goods or services. Consequently, the accounting for share-based payments to nonemployees and employees will be substantially aligned. The amendments in this ASU are effective for fiscal years beginning after 15 December 2018, and interim periods within that fiscal year, with early adoption permitted. The Company adopted ASU No. 2018-07 prospectively on 1 January 2019, and the adoption of this standard did not have a material impact on the Company's consolidated financial statements.

In July 2018, the FASB issued ASU No. 2018-09, which clarifies, corrects errors in, and makes minor improvements to a wide variety of topics in the Accounting Standards Codification ("ASC"). The transition and effective date of this guidance is based on the facts and circumstances of each amendment. Some of the amendments in ASU No. 2018-09 do not require transition guidance and were effective upon issuance of ASU No. 2018-09. The Company adopted these specific amendments during the three months ended 30 June 2018 and noted no material impact on its consolidated financial statements. However, many of the amendments do have transition guidance with effective dates for annual periods beginning after 15 December 2018. For these specific amendments, the Company will follow the specific transition guidance for each relevant amendment, and does not expect the adoption of these amendments to have a material impact on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Change to the Disclosure Requirements for Fair Value Measurement*. ASU No. 2018-13 modifies the disclosure requirements by adding, removing, and modifying certain required disclosures for fair value measurements for assets and liabilities disclosed within the fair value hierarchy. The amendments in the ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after 15 December 2019, with early adoption permitted. The Company adopted ASU No. 2018-13 starting with fiscal year beginning 1 April 2018 and the adoption of this standard did not have a material impact on the Company's consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, which clarifies the accounting treatment for implementation costs incurred in a cloud computing arrangement that is a service contract. ASU No. 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The guidance provides criteria for determining which implementation costs to capitalize as an asset related to the service contract and which costs to expense. The amendments in ASU No. 2018-15 should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption, and are effective for fiscal years and interim periods within those years, beginning after 15 December 2019, with early adoption permitted. The Company adopted ASU No. 2018-15 on 1 July 2018 based on the prospective transition method, and the adoption of the standard did not have a material impact on the consolidated financial statements.

3. Revenues

The following represents the Company's disaggregated revenues for the years ended 31 March 2019, 2018 and 2017:

	Year Ended 31 March 2019				
(Millions of US dollars)	North America Fiber Cement	Asia Pacific Fiber Cement	Europe Building Products	Other Businesses	Consolidated
Fiber cement revenues	$ 1,676.9	$ 446.8	$ 35.8	$ —	$ 2,159.5
Fiber gypsum revenues	—	—	332.5	—	332.5
Other revenues	—	—	—	14.6	14.6
Total revenues	$ 1,676.9	$ 446.8	$ 368.3	$ 14.6	$ 2,506.6

	Year Ended 31 March 2018				
(Millions of US dollars)	North America Fiber Cement	Asia Pacific Fiber Cement	Europe Building Products	Other Businesses	Consolidated
Fiber cement revenues	$ 1,578.1	$ 425.4	$ 36.3	$ —	$ 2,039.8
Fiber gypsum revenues	—	—	—	—	—
Other revenues	—	—	—	14.7	14.7
Total revenues	$ 1,578.1	$ 425.4	$ 36.3	$ 14.7	$ 2,054.5

	Year Ended 31 March 2017				
(Millions of US dollars)	North America Fiber Cement	Asia Pacific Fiber Cement	Europe Building Products	Other Businesses	Consolidated
Fiber cement revenues	$ 1,493.4	$ 370.6	$ 41.2	$ —	$ 1,905.2
Fiber gypsum revenues	—	—	—	—	—
Other revenues	—	—	—	16.4	16.4
Total revenues	$ 1,493.4	$ 370.6	$ 41.2	$ 16.4	$ 1,921.6

The process by which the Company recognizes revenues is similar across each of the Company's reportable segments and is described in further detail below. Fiber cement and fiber gypsum revenues are primarily generated from the sale of siding and various boards used in internal and external applications, as well as accessories. Fiber gypsum revenues also includes the sale of cement-bonded boards in the Europe Building Products segment. Other revenues in the Other Businesses segment are generated from the sale of fiberglass products and windows in North America.

The Company recognizes revenues when the requisite performance obligation has been met, that is, when the Company transfers control of its products to customers, which depending on the terms of the underlying contract, is generally upon delivery. The Company considers shipping and handling activities that it performs as activities to fulfill the sales of its products, with amounts billed for such costs included in net sales and the associated costs incurred for such services recorded in cost of sales, in accordance with the practical expedient provided by ASC 606.

Certain of the Company's customers receive discounts and rebates as sales incentives, amounts which are recorded as a reduction to revenue at the time the revenue is recognized. These amounts are an estimate recorded by the Company based on historical experience and contractual obligations, the underlying assumptions of which are periodically reviewed and adjusted by the Company as necessary.

The Company’s contracts are generally short-term in nature, generally not exceeding twelve months, with payment terms varying by the type and location of products or services offered; however, the period of time between invoicing and when payment is due is not significant.

4. Cash and Cash Equivalents, Restricted Cash and Restricted Cash - Asbestos

The following table provides a reconciliation of *Cash and cash equivalents, Restricted cash and Restricted cash - Asbestos* reported within the consolidated balance sheets that sum to the total of the same such amounts shown in the consolidated statements of cash flows:

	31 March	
(Millions of US dollars)	**2019**	2018
Cash and cash equivalents	**$ 78.7**	$ 281.6
Restricted cash	**5.1**	5.0
Restricted cash - Asbestos	**39.8**	26.6
Total cash and cash equivalents, restricted cash and restricted cash - Asbestos	**$ 123.6**	$ 313.2

Included in *Restricted cash* is US$5.1 million and US$5.0 million related to an insurance policy at 31 March 2019 and 2018, respectively, which restricts the cash from general corporate purposes.

Included in *Restricted cash - Asbestos* is US$39.8 million and US$26.6 million at 31 March 2019 and 2018, respectively. The use of these assets is restricted to the settlement of asbestos claims and for the payment of the operating costs of AICF.

5. Accounts and Other Receivables

Accounts and other receivables consist of the following components:

	31 March	
(Millions of US dollars)	**2019**	2018
Trade receivables	**$ 245.5**	$ 196.9
Other receivables and advances	**12.0**	7.1
Provision for doubtful trade debts	**(2.9)**	(1.3)
Total accounts and other receivables	**$ 254.6**	$ 202.7

The collectability of accounts receivable, consisting mainly of trade receivables, is reviewed on an ongoing basis. A provision for doubtful trade debts is provided for known and estimated bad debts by analyzing specific customer accounts and assessing the risk of uncollectability based on insolvency, disputes or other collection issues.

The following are changes in the provision for doubtful trade debts:

	31 March		
(Millions of US dollars)	**2019**	2018	2017
Balance at beginning of period	**$ 1.3**	$ 0.9	$ 1.1
Adjustment to provision	**2.8**	0.6	(0.1)
Write-offs, net of recoveries	**(1.2)**	(0.2)	(0.1)
Balance at end of period	**$ 2.9**	$ 1.3	$ 0.9

6. Inventories

Inventories consist of the following components:

	31 March	
(Millions of US dollars)	**2019**	2018
Finished goods	**$ 235.0**	$ 190.3
Work-in-process	**7.3**	8.1
Raw materials and supplies	**88.8**	65.3
Provision for obsolete finished goods and raw materials	**(13.7)**	(8.0)
Total inventories	**$ 317.4**	$ 255.7

As of 31 March 2019 and 2018, US$32.9 million and US$30.2 million, respectively, of the Company's finished goods inventory balance was held at vendor managed inventory locations.

7. Goodwill and Other Intangible Assets

Intangible assets from acquired businesses are recognized at their estimated fair values at the date of acquisition and consist of trademarks, customer relationships and other intangible assets. Finite-lived intangibles are amortized to expense over the applicable useful lives, ranging from 2 to 13 years, based on the nature of the asset and the underlying pattern of economic benefit as reflected by future net cash inflows. The Company performs an impairment test of intangibles annually, or whenever events or changes in circumstances indicate their carrying value may be impaired.

Indefinite-Lived Intangible Assets

The following are the changes in the carrying value of indefinite-lived intangible assets for the year ended 31 March 2019:

(Millions of US dollars)	Goodwill[1]	Trade names[2]	Other[3]
Balance - 31 March 2018	$ 4.9	$ —	$ 7.4
Acquired during the period	220.0	126.8	—
Impairment	(4.6)	—	—
Foreign exchange impact	(19.2)	(10.7)	—
Balance - 31 March 2019	$ 201.1	$ 116.1	$ 7.4

1 At 31 March 2019, Goodwill of US$200.8 million and US$0.3 million was included in the Europe Building Products segment and Asia Pacific Fiber Cement segment, respectively. At 31 March 2018, Goodwill of US $4.6 million and US$0.3 million was included in the Other Businesses segment and the Asia Pacific Fiber Cement segment, respectively. During the year ended 31 March 2019, the Company recorded a US$4.6 million goodwill impairment charge in the Other Businesses segment due to the Company's decision to cease production of its fiberglass windows business. The Company did not record any goodwill impairment charges for the years ended 31 March 2018 and 2017.

2 Trade names are included in the Europe Building Products segment at 31 March 2019.

3 Other indefinite-lived intangible assets are included in the North America Fiber Cement segment at 31 March 2019 and 2018.

Amortizable Intangible Assets

The following are the changes in the carrying value of amortizable intangible assets primarily held in the Europe Building Products segment for the year ended 31 March 2019:

(Millions of US dollars)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships:			
Balance - 31 March 2018	$ —	$ —	$ —
Acquired during the period	57.8	—	57.8
Amortization	—	(4.8)	(4.8)
Foreign exchange impact	(5.8)	0.5	(5.3)
Balance - 31 March 2019	$ 52.0	$ (4.3)	$ 47.7

(Millions of US dollars)	Gross Carrying Amount	Accumulated Amortization and Impairment	Net Carrying Amount
Other intangibles:			
Balance - 31 March 2018	$ 9.7	$ (4.8)	$ 4.9
Acquired during the period	2.4	—	2.4
Amortization	—	(1.3)	(1.3)
Impairment	—	(2.6)	(2.6)
Foreign exchange impact	(0.3)	0.1	(0.2)
Balance - 31 March 2019	$ 11.8	$ (8.6)	$ 3.2

The amortization of intangible assets was US$6.1 million, US$0.9 million and US$0.8 million for the years ended 31 March 2019, 2018 and 2017, respectively.

During the year ended 31 March 2019, the Company recorded total impairment charges on amortizable intangible assets of US$2.6 million. An impairment charge of US$2.2 million was recorded to the intangible assets associated with the Other Businesses segment due to the Company's decision to cease production of its fiberglass windows business in the second quarter of fiscal year 2019. Also, the Company made the decision to exit its MCT product line, and as such, recorded an impairment charge in the North America Fiber Cement segment of US$0.4 million on intangible assets associated with this product line. The Company did not record any intangible asset impairment charges for the years ended 31 March 2018 and 2017.

At 31 March 2019 and 2018, the weighted-average remaining useful life of the Company's amortizable intangible assets is as follows:

(In Years)	31 March 2019	31 March 2018
Customer Relationships	**12.0**	—
Other Intangibles	**7.5**	6.1
Total	**11.7**	6.1

At 31 March 2019, the estimated future amortization of intangible assets is as follows:

Years ended 31 March (Millions of US dollars):	
2020	$ 3.2
2021	2.8
2022	3.6
2023	4.4
2024	4.7

8. Property, Plant and Equipment

Property, plant and equipment consist of the following components:

(Millions of US dollars) **Cost or valuation:**	Land	Buildings	Machinery and Equipment	Construction in Progress [1]	Total
At 31 March 2017	$ 69.5	$ 344.5	$ 1,175.7	$ 56.6	$ 1,646.3
Additions [2]	—	7.9	83.8	126.1	217.8
Disposals[3]	(1.4)	(5.6)	(24.3)	(3.6)	(34.9)
Exchange differences	0.1	—	0.9	(0.2)	0.8
At 31 March 2018	$ 68.2	$ 346.8	$ 1,236.1	$ 178.9	$ 1,830.0
Additions	1.6	58.9	203.6	76.7	340.8
Acquisitions	19.2	44.1	159.5	7.5	230.3
Transfers[4]	—	(6.0)	2.2	(6.5)	(10.3)
Disposals[3]	(0.2)	(5.9)	(48.1)	(1.2)	(55.4)
Exchange differences	(5.0)	(5.1)	(45.7)	1.8	(54.0)
At 31 March 2019	$ 83.8	$ 432.8	$ 1,507.6	$ 257.2	$ 2,281.4
Accumulated depreciation:					
At 31 March 2017	$ —	$ (128.0)	$ (639.3)	$ —	$ (767.3)
Charge for the year	—	(11.3)	(77.6)	—	(88.9)
Disposals[3]	—	1.9	16.6	—	18.5
Exchange differences	—	—	(0.2)	—	(0.2)
At 31 March 2018	$ —	$ (137.4)	$ (700.5)	$ —	$ (837.9)
Charge for the year	—	(14.6)	(95.0)	—	(109.6)
Transfers[4]	—	0.8	3.7	—	4.5
Disposals[3]	—	4.1	23.3	—	27.4
Exchange differences	—	3.2	19.4	—	22.6
At 31 March 2019	$ —	$ (143.9)	$ (749.1)	$ —	$ (893.0)
Net book amount:					
At 31 March 2018	$ 68.2	$ 209.4	$ 535.6	$ 178.9	$ 992.1
At 31 March 2019	$ 83.8	$ 288.9	$ 758.5	$ 257.2	$ 1,388.4

1 Construction in progress is presented net of assets transferred into service.

2 Additions include US$5.4 million and US$4.8 million of capitalized interest for the years ended 31 March 2019 and 2018, respectively.

3 The US$28.0 million net book value of disposals in fiscal year 2019 includes US$13.7 million of usage of replacement parts, US$6.1 million of impairment due to the Company's decision to cease production of its fiberglass windows business, US$2.6 million of impairment related to the discontinuance of its MCT product line, US$0.4 million of impairment charges on individual assets and US$5.2 million of disposals of assets no longer in use. The US$16.4 million net book value of disposals in fiscal year 2018 includes US$13.9 million of usage of replacement parts and US$0.7 million of impairment charges on individual assets. The remaining net book value of disposals of US$1.8 million is related to the disposal of assets no longer in use.

4 Transfers include the net book value of *Property, plant and equipment, net* associated with our fiberglass windows business, which was classified as held for sale at 31 March 2019. This net book value of US$5.8 million was removed from *Property, plant and equipment, net* and was included in the *Prepaid expenses and other current assets* on the consolidated balance sheets at 31 March 2019.

Depreciation expense for the years ended 31 March 2019, 2018 and 2017 was US$109.6 million, US$88.9 million and US$80.3 million, respectively.

Impairment of Long-Lived Assets

The Company performs an asset impairment review on a quarterly basis in connection with its assessment of production capabilities and the Company's ability to meet market demand.

During the years ended 31 March 2019, 2018 and 2017, the Company recorded total impairment charges on property, plant and equipment of US$9.1 million, US$0.7 million and US$0.5 million, respectively. An impairment charge of US$8.7 million was recorded during the year ended 31 March 2019 associated with the Company's decision to cease production of its fiberglass windows business and to discontinue its MCT product line, which is included in *Asset impairments* on the consolidated statements of operations and comprehensive income. Other impairment charges related to individual assets of US$0.4 million, US$0.7 million and US$0.5 million during years ended 31 March 2019, 2018 and 2017, respectively, were included in *Cost of goods sold* on the consolidated statements of operations and comprehensive income.

9. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities consist of the following components:

	31 March	
(Millions of US dollars)	**2019**	2018
Trade creditors	**$ 142.4**	$ 111.8
Accrued interest	**8.8**	12.5
Other creditors and accruals	**104.3**	69.0
Total accounts payable and accrued liabilities	**$ 255.5**	$ 193.3

10. Long-Term Debt

At 31 March 2019, the Company held two forms of debt: an unsecured revolving credit facility and senior unsecured notes due 2025, 2026 and 2028. At 31 March 2018, the Company had three forms of debt: an unsecured revolving credit facility; a 364-day term loan facility (the "Term Loan Facility"); and senior unsecured notes due 2025 and 2028. The effective weighted average interest rate on the Company's total debt was 4.4% and 4.7% at 31 March 2019 and 31 March 2018, respectively. The weighted average term of the unsecured revolving credit facility and senior unsecured notes, including undrawn facilities, was 6.3 years and 6.9 years at 31 March 2019 and 2018, respectively.

Unsecured Revolving Credit Facility

In December 2015, James Hardie International Finance Designated Activity Company ("JHIF") and James Hardie Building Products Inc. ("JHBP"), each a wholly-owned subsidiary of JHI plc, entered into a US$500.0 million unsecured revolving credit facility (the "Revolving Credit Facility") with certain commercial banks and HSBC Bank USA, National Association, as administrative agent. The Revolving Credit Facility was initially set to expire in December 2020, however, in December 2017, the Revolving Credit Facility was amended to, among other things, extend the maturity date to December 2022. The size of the Revolving Credit Facility may be increased by up to US$250.0 million through the exercise of an accordion option.

Debt issuance costs in connection with the Revolving Credit Facility are recorded as an offset to *Long-Term Debt* in the Company's consolidated balance sheets and are being amortized as interest expense using the effective interest method over the stated term of 5 years. At 31 March 2019 and 2018, the Company's total debt issuance costs have an unamortized balance of US$2.6 million and US$3.3 million, respectively.

The amount drawn under the Revolving Credit Facility was US$150.0 million and US$100.0 million at 31 March 2019 and 2018, respectively.

The effective weighted average interest rate on the Company's total outstanding Revolving Credit Facility was 4.3% and 3.2% at 31 March 2019 and 2018, respectively.

Borrowings under the Revolving Credit Facility bear interest at per annum rates equal to, at the borrower's option, either: (i) the London Interbank Offered Rate ("LIBOR") plus an applicable margin for LIBOR loans; or (ii) a base rate plus an applicable margin for base rate loans. The base rate is calculated as the highest of (x) the rate that the administrative agent announces from time to time as its prime lending rate, as in effect from time to time, (y) 1/2 of 1% in excess of the overnight Federal Funds Rate, and (z) LIBOR for an interest period of one month plus 1.00%. The applicable margin is calculated based on a pricing grid that in each case is linked to our consolidated net leverage ratio. For LIBOR Loans, the applicable margin ranges from 1.25% to 2.00%, and for base rate loans it ranges from 0.25% to 1.00%. The Company also pays a commitment fee of between 0.20% and 0.35% on the actual daily amount of the unutilized revolving loans. The applicable commitment fee percentage is based on a pricing grid linked to the Company's consolidated net leverage ratio.

In the event that JHIF's or James Hardie International Group Limited's ("JHIGL"), as applicable, long-term senior unsecured non-credit enhanced rating from each of Standard & Poor's Ratings Services ("S&P"), and Moody's Investors Service, Inc. ("Moody's") is at least BBB- from S&P, and at least Baa3 from Moody's, at JHIF's election, for new borrowings under the Revolving Credit Facility, an alternate applicable rate may be applied with respect to the commitment fee of 0.25% per annum and an alternative margin may be applied with respect to: (a) LIBOR Loans, 1.50%; and (b) base rate loans, 0.50%.

The Revolving Credit Facility is guaranteed by each of JHIGL and James Hardie Technology Limited ("JHTL"), each of which are wholly-owned subsidiaries of JHI plc.

The Revolving Credit Facility agreement contains certain covenants that, among other things, restrict JHIGL and its restricted subsidiaries' ability to incur indebtedness and grant liens other than certain types of permitted indebtedness and permitted liens, make certain restricted payments, and undertake certain types of mergers or consolidations actions. In addition, the Company: (i) must not exceed a maximum ratio of net debt to earnings before interest, tax, depreciation and amortization, excluding all asbestos-related liabilities, assets, income, gains, losses and charges other than AICF payments, all AICF selling, general and administrative ("SG&A") expenses, all Australian Securities and Investment Commission ("ASIC")-related expenses, all recoveries and asset impairments, and all New Zealand product liability expenses and (ii) must meet or exceed a minimum ratio of earnings before interest, tax, depreciation and amortization to interest charges, excluding all income, expense and other profit and loss statement impacts of asbestos income, gains, losses and charges, all AICF SG&A expenses, all ASIC-related expenses, all recoveries and asset impairments, and all New Zealand product liability expenses. At 31 March 2019, the Company was in compliance with all covenants contained in the Revolving Credit Facility agreement.

Term Loan Facility

In December 2017, JHIF and JHBP entered into the Term Loan Facility with certain commercial banks and HSBC Bank USA, National Association, as administrative agent. On 3 April 2018, the Company drew €400.0 million (US$492.4 million based on the exchange rate on 3 April 2018) on this Term Loan Facility, and used these funds to complete the Fermacell acquisition. On 3 October 2018, JHIF repaid all €400.0 million aggregate principal amount and accrued interest of its Term Loan Facility following the completion of the sale of€400.0 million (US$458.8 million, based on the exchange rate at 3 October 2018) aggregate principal amount of3.625% senior unsecured notes due 2026. In connection with this repayment, the Company recorded a loss on early debt extinguishment of US$1.0 million during the year ended 31 March 2019 associated with the unamortized portion of the deferred financing fees.

2026 Senior Notes

In October 2018, JHIF completed the sale of €400.0 million (US$449.4 million, based on the exchange rate at 31 March 2019) aggregate principal amount of senior unsecured notes due 1 October 2026 (the "2026 Notes"). The 2026 Notes were issued at par and the proceeds from the offering were used to repay the outstanding borrowings under the Term Loan Facility, and to pay related transaction fees and expenses.

Debt issuance costs in connection with the 2026 Notes are recorded as an offset to *Long-Term Debt* on the Company's consolidated balance sheet.

Debt issuance costs in connection with the 2026 Notes have an unamortized balance of US$5.7 million at 31 March 2019. The debt issuance costs are being amortized as interest expense using the effective interest method over the stated term of 8 years. Interest is payable semi-annually in arrears on 1 October and 1 April of each year at a rate of 3.625% with first payment made on 1 April 2019.

The 2026 Notes are guaranteed by JHIGL, JHBP and JHTL, each of which are wholly-owned subsidiaries of JHI plc.

The indenture governing the 2026 Notes contains covenants that, among other things, limit the ability of the guarantors and their restricted subsidiaries to incur liens on assets, make certain restricted payments, engage in certain sale and leaseback transactions and merge or consolidate with or into other companies. These covenants are subject to certain exceptions and qualifications as described in the indenture. At 31 March 2019, the Company was in compliance with all of its requirements under the indenture related to the 2026 Notes.

The Company's 2026 Notes have an estimated fair value of US$456.9 million (based on EUR/USD exchange rate at 31 March 2019) based on the trading price observed in the market at or near the balance sheet date and are categorized as Level 1 within the fair value hierarchy.

2023 Senior Notes

In February 2015, JHIF completed the sale of US$325.0 million aggregate principal amount of 5.875% senior unsecured notes due 15 February 2023.

In July 2016, JHIF completed the re-offering and sale of an additional US$75.0 million aggregate principal amount of its 5.875% senior notes due 2023. Following the completion of this re-offering, the aggregate principal amount of senior notes due in 2023 was US$400.0 million.

In December 2017, JHIF redeemed all US$400.0 million aggregate principal amount of its 5.875% senior notes due 2023. In connection with this redemption, the Company recorded a loss on early debt extinguishment of US$26.1 million during the year ended 31 March 2018, which included US$19.5 million of call redemption premiums and US$6.6 million of unamortized financing costs associated with these notes.

2025 and 2028 Senior Notes

In December 2017, JHIF completed the sale of US$800.0 million aggregate principal amount of senior unsecured notes. The sale of the senior notes were issued at par with US$400.0 million due 15 January 2025 (the "2025 Notes") and the remaining US$400.0 million due 15 January 2028 (the "2028 Notes").

The proceeds from the offering were used for general corporate purposes, including funding the redemption of all US$400.0 million aggregate principal amount of its 2023 senior unsecured notes and the payment of related transaction fees and expenses, the repayment of outstanding borrowings under the Revolving Credit Facility and capital expenditures. The Company also used part of the net proceeds from this offering to finance a portion of the Fermacell acquisition. Refer to Note 20 for further details on the Fermacell acquisition.

Debt issuance costs in connection with the 2025 and 2028 Notes are recorded as an offset to *Long-Term Debt* on the Company's consolidated balance sheets.

Debt issuance costs in connection with the 2025 Notes have an unamortized balance of US$5.2 million and US$6.1 million at 31 March 2019 and 2018, respectively. The debt issuance costs are being amortized as interest expense using the effective interest method over the stated term of 7 years. Interest is payable semi-annually in arrears on 15 January and 15 July of each year at a rate of 4.75% with first payment made on 15 July 2018.

Debt issuance costs in connection with the 2028 Notes have an unamortized balance of US$5.6 million and US$6.2 million at 31 March 2019 and 2018, respectively. The debt issuance costs are being amortized as interest expense using the effective interest method over the stated term of 10 years. Interest is payable semi-annually in arrears on 15 January and 15 July of each year at a rate of 5.00% with first payment made on 15 July 2018.

The 2025 and 2028 Notes are guaranteed by JHIGL, JHBP and JHTL, each of which are wholly-owned subsidiaries of JHI plc.

The indenture governing the 2025 and 2028 Notes contains covenants that, among other things, limit the ability of the guarantors and their restricted subsidiaries to incur liens on assets, make certain restricted payments, engage in certain sale and leaseback transactions and merge or consolidate with or into other companies. These covenants are subject to certain exceptions and qualifications as described in the indenture. At 31 March 2019, the Company was in compliance with all of its requirements under the indenture related to the 2025 and 2028 Notes.

The Company's 2025 and 2028 Notes have an estimated fair value of US$774.0 million at 31 March 2019, based on the trading price observed in the market at or near the balance sheet date and are categorized as Level 1 within the fair value hierarchy.

Off Balance Sheet Arrangements

As of 31 March 2019, the Company had a total borrowing base capacity under the Revolving Credit Facility of US$500.0 million with outstanding borrowings of US$150.0 million, and US$9.5 million of drawn letters of credit and bank guarantees. These letters of credit and bank guarantees relate to various operational matters including insurance, performance bonds and other items, leaving the Company with US$340.5 million of available borrowing capacity under the Revolving Credit Facilities.

Global Exchange Market Listing

On 7 February 2019, the 2026 Notes of€400.0 million were admitted to listing on the Global Exchange Market ("GEM") which is operated by Euronext Dublin. Interest paid on the senior notes quoted on the GEM is not subject to Irish withholding tax.

On 25 April 2018, the 2025 and 2028 Notes of US$800.0 million were admitted to listing on the GEM. Interest paid on the senior notes quoted on the GEM is not subject to Irish withholding tax. On 19 January 2018, the 5.875% senior notes due 2023 (issued on 10 February 2015 and redeemed in December 2017) were delisted from the GEM.

11. Product Warranties

The Company offers various warranties on its products, including a 30-year limited warranty on certain fiber cement siding products in the United States. A typical warranty program requires the Company to replace defective products within a specified time period from the date of sale. It is possible that future warranty costs could differ from those estimates.

The following are the changes in the product warranty provision:

	31 March		
(Millions of US dollars)	**2019**	2018	2017
Balance at beginning of period	**$ 52.8**	$ 46.6	$ 45.3
(Decrease) increase for product warranties accrual	**(0.8)**	13.1	17.0
Acquired during the period	**0.5**	—	—
Settlements made in cash or in kind	**(5.9)**	(6.9)	(15.7)
Balance at end of period	**$ 46.6**	$ 52.8	$ 46.6

12. Asbestos

The AFFA was approved by shareholders in February 2007 to provide long-term funding to AICF. For a discussion of the AFFA and the accounting policies utilized by the Company related to the AFFA and AICF, see Note 2.

Asbestos Adjustments

The *Asbestos adjustments* included in the consolidated statements of operations and comprehensive income comprise the following:

	Years Ended 31 March		
(Millions of US dollars)	**2019**	2018	2017
Change in estimates:			
Change in actuarial estimate - asbestos liability	**$ (73.8)**	$ (152.1)	$ 44.7
Change in actuarial estimate - insurance receivable	**—**	1.2	(8.2)
Change in estimate - AICF claims-handling costs	**1.1**	(0.5)	2.1
Subtotal - Change in estimates	**(72.7)**	(151.4)	38.6
Effect of foreign exchange on Asbestos net liabilities	**49.5**	(5.3)	2.8
(Loss) gain on foreign currency forward contracts	**(0.8)**	1.4	(1.0)
Adjustments in insurance receivable	**2.0**	—	—
Asbestos research and education contribution	**—**	(1.1)	—
Total Asbestos Adjustments	**$ (22.0)**	$ (156.4)	$ 40.4

In December 2017, the Company, AICF and the NSW Government executed an AFFA Amending Deed which in effect excludes the recovery of gratuitous services costs (colloquially referred to as Sullivan v Gordon damages) that arose following the promulgation of the Wrongs (Part VB) (Dust and Tobacco-Related Claims) Regulation 2016 by the State of Victoria. As a result of the amendment, AICF reduced the Asbestos liability by A$56.8 million (US$43.6 million based upon the exchange rate at 31 March 2018) in the third quarter of fiscal year 2018. This adjustment is reflected in *Asbestos adjustments* in the consolidated statements of operations and comprehensive income during the year ended 31 March 2018.

Actuarial Study; Claims Estimate

AICF commissioned an updated actuarial study of potential asbestos-related liabilities as of 31 March 2019. Based on KPMGA's assumptions, KPMGA arrived at a range of possible total cash flows and calculated a central estimate, which is intended to reflect a probability-weighted expected outcome of those actuarially estimated future cash flows.

The following table sets forth the central estimates, net of insurance recoveries, calculated by KPMGA as of 31 March 2019:

	Year Ended 31 March 2019	
(Millions of US and Australian dollars, respectively)	**US$**	**A$**
Central Estimate – Discounted and Inflated	1,325.9	1,868.4
Central Estimate – Undiscounted but Inflated	1,574.3	2,218.5
Central Estimate – Undiscounted and Uninflated	993.3	1,399.8

The asbestos liability has been revised to reflect the most recent undiscounted and uninflated actuarial estimate prepared by KPMGA as of 31 March 2019.

In estimating the potential financial exposure, KPMGA has made a number of assumptions, including, but not limited to, assumptions related to the total number of claims that are reasonably estimated to be asserted through 2072, the typical cost of settlement (which is sensitive to, among other factors, the industry in which a plaintiff claims exposure, the alleged disease type, the age of the claimant and the jurisdiction in which the action is brought), the legal costs incurred in the litigation of such claims, the rate of receipt of claims, the settlement strategy in dealing with outstanding claims and the timing of settlements.

Due to inherent uncertainties in the legal and medical environment, the number and timing of future claim notifications and settlements, the recoverability of claims against insurance contracts, and estimates of future trends in average claim awards, as well as the extent to which the above named entities will contribute to the overall settlements, the actual liability could differ materially from that which is currently recorded.

The potential range of costs as estimated by KPMGA is affected by a number of variables such as nil settlement rates, peak year of claims, past history of claims numbers, average settlement rates, past history of Australian asbestos-related medical injuries, current number of claims, average defense and plaintiff legal costs, base wage inflation and superimposed inflation. The potential range of losses disclosed includes both asserted and unasserted claims.

A sensitivity analysis performed by KPMGA to determine how the actuarial estimates would change if certain assumptions (i.e., the rate of inflation and superimposed inflation, the average costs of claims and legal fees, and the projected numbers of claims) were different from the assumptions used to determine the central estimates. The sensitivity analysis performed in the actuarial report is specifically in regards to the discounted but inflated central estimate and the undiscounted but inflated central estimate. This analysis shows that the discounted (but inflated) central estimates could be in a range of A$1.4 billion (US$1.0 billion) to A$3.1 billion (US$2.2 billion). The undiscounted (but inflated) estimates could be in a range of A$1.6 billion (US$1.1 billion) to A$3.9 billion (US$2.8 billion) as of 31 March 2019. The actual cost of the liabilities could be outside of that range depending on the results of actual experience relative to the assumptions made.

During fiscal year 2019, mesothelioma claims reporting activity was favorable compared to actuarial expectations and the prior corresponding period. One of the more significant assumptions is the estimated peak period of mesothelioma disease claims, which was assumed to have occurred during the period 1 April 2014 through 31 March 2017. In fiscal year 2018, KPMGA formed the view that the increases in the mesothelioma claims reporting seen in recent years was a permanent effect, and therefore increased the projected number of future mesothelioma claims at 31 March 2018. The revised KPMGA modeling approach for mesothelioma claims considered the claimant's age which resulted in a higher number of projected claims, partially offset by a reduction in projected average claim size.

At 31 March 2019, KPMGA has formed the view that although the mix of claimants by age was slightly favorable relative to expectations, at this time it is too early to reflect changes to the valuation adjustments given that 2018/2019 was the first year of the new model. However, changes to the valuation assumptions may be necessary in future periods should mesothelioma claims reporting escalate or decline.

Potential variation in the estimated peak period of claims has an impact much greater than the other assumptions used to derive the discounted central estimate. In performing the sensitivity assessment of the estimated incidence pattern reporting for mesothelioma, if the pattern of incidence was shifted by two years, the central estimate could increase by approximately 19% on a discounted basis.

Claims Data

The following table shows the activity related to the numbers of open claims, new claims and closed claims during each of the past five years and the average settlement per settled claim and case closed:

	For the Years Ended 31 March				
	2019	2018	2017	2016	2015
Number of open claims at beginning of period	**336**	352	426	494	466
Number of new claims	**568**	562	557	577	665
Number of closed claims	**572**	578	631	645	637
Number of open claims at end of period	**332**	336	352	426	494
Average settlement amount per settled claim	**A$262,108**	A$253,431	A$223,535	A$248,138	A$254,209
Average settlement amount per case closed	**A$234,156**	A$217,038	A$167,563	A$218,900	A$217,495
Average settlement amount per settled claim	**US$191,236**	US$196,093	US$168,300	US$182,763	US$222,619
Average settlement amount per case closed	**US$170,842**	US$167,934	US$126,158	US$161,229	US$190,468

Under the terms of the AFFA, the Company has rights of access to actuarial information produced for AICF by the actuary appointed by AICF, which is currently KPMGA. The Company's disclosures with respect to claims statistics are subject to it obtaining such information, however, the AFFA does not provide the Company an express right to audit or otherwise require independent verification of such information or the methodologies to be adopted by the approved actuary. As such, the Company relies on the accuracy and completeness of the information provided by AICF to the approved actuary and the resulting information and analysis of the approved actuary when making disclosures with respect to claims statistics.

Asbestos-Related Assets and Liabilities

The Company has included on its consolidated balance sheets the asbestos-related assets and liabilities of AICF under the terms of the AFFA. These amounts are detailed in the table below, and the net total of these asbestos-related assets and liabilities is referred to by the Company as the "Net AFFA Liability."

	31 March	
(Millions of US dollars)	**2019**	2018
Asbestos liability – current	**$ (110.5)**	$ (114.1)
Asbestos liability – non-current	**(979.1)**	(1,101.0)
Asbestos liability – Total	**(1,089.6)**	(1,215.1)
Insurance receivable – current	**7.5**	5.1
Insurance receivable – non-current	**43.7**	52.8
Insurance receivable – Total	**51.2**	57.9
Workers' compensation asset – current	**2.0**	2.1
Workers' compensation asset – non-current	**25.8**	28.8
Workers' compensation liability – current	**(2.0)**	(2.1)
Workers' compensation liability – non-current	**(25.8)**	(28.8)
Workers' compensation – Total	**—**	—
Other net liabilities	**(2.1)**	(2.2)
Restricted cash and cash equivalents of AICF	**39.8**	26.6
Restricted short-term investments of AICF	**17.7**	38.4
Net Unfunded AFFA liability	**$ (983.0)**	$ (1,094.4)
Deferred income taxes – non-current	**349.3**	382.9
Income tax payable	**25.3**	21.1
Net Unfunded AFFA liability, net of tax	**$ (608.4)**	$ (690.4)

The following is a detailed rollforward of the Net Unfunded AFFA liability, net of tax, for the year ended 31 March 2019:

(Millions of US dollars)	Asbestos Liability	Insurance Receivables	Restricted Cash and Investments	Other Assets and Liabilities	Net Unfunded AFFA Liability	Deferred Tax Assets	Income Tax Payable	Net Unfunded AFFA Liability, net of tax
Opening Balance - 31 March 2018	$ (1,215.1)	$ 57.9	$ 65.0	$ (2.2)	$ (1,094.4)	$ 382.9	$ 21.1	$ (690.4)
Asbestos claims paid[1]	107.6	—	(107.6)	—	—	—	—	—
Payment received in accordance with AFFA[2]	—	—	103.0	—	103.0	—	—	103.0
AICF claims-handling costs incurred (paid)	1.2	—	(1.2)	—	—	—	—	—
AICF operating costs paid - non claims-handling	—	—	(1.5)	—	(1.5)	—	—	(1.5)
Change in actuarial estimate	(73.9)	—	—	—	(73.9)	—	—	(73.9)
Change in claims handling cost estimate	1.1	—	—	—	1.1	—	—	1.1
Impact on deferred income tax due to change in actuarial estimate	—	—	—	—	—	21.2	—	21.2
Insurance recoveries	—	(2.5)	4.8	—	2.3	—	—	2.3
Movement in income tax payable	—	—	—	—	—	(26.0)	5.2	(20.8)
Other movements	—	—	1.6	—	1.6	(0.2)	(0.3)	1.1
Effect of foreign exchange	89.5	(4.2)	(6.6)	0.1	78.8	(28.6)	(0.7)	49.5
Closing Balance - 31 March 2019	**$ (1,089.6)**	**$ 51.2**	**$ 57.5**	**$ (2.1)**	**$ (983.0)**	**$ 349.3**	**$ 25.3**	**$ (608.4)**

1 Claims paid of US$107.6 million reflects A$147.5 million converted at the average exchange rate for the period based on the assumption that these transactions occurred evenly throughout the period.

2 The payment received in accordance with AFFA of US$103.0 million reflects the US dollar equivalent of the A$138.4 million payment, translated at the exchange rate set five days before the day of payment.

AICF Funding

We anticipate that we will make a contribution of approximately US$100.9 million to AICF on 1 July 2019. This amount represents 35% of our free cash flow which is equivalent to our operating cash flows of US$287.6 million plus an adjustment of US$0.8 million, resulting in free cash flow of US$288.4 million for fiscal year 2019, as defined by the AFFA.

The following table summarizes the AICF contributions during the fiscal years 2019, 2018 and 2017:

Payment Date	Payment Amount A$ Millions	Payment Amount US$ Millions	Operating Cash flow US$ Millions	Free Cash Flow US$ Millions
2 July 2018	138.4	103.0	295.0	294.2
3 July 2017	135.1	102.2	292.1	292.1
1 July 2016	120.7	91.1	260.4	260.4

Restricted Short-Term Investments

In July 2017, AICF invested A$100.0 million of its excess cash in time deposits. During the year ended 31 March 2018, A$50.0 million of these time deposits matured and were reclassified to *Restricted cash and cash equivalents - Asbestos* on the consolidated balance sheet. During the year ended 31 March 2019, the remaining time deposits of A$50.0 million matured and were reclassified to *Restricted cash and cash equivalents - Asbestos* on the consolidated balance sheets.

In July 2018, AICF invested A$120.0 million of its excess cash in time deposits. During the year ended 31 March 2019, A$95.0 million of these time deposits matured and were classified to *Restricted cash and cash equivalents - Asbestos* on the consolidated balance sheet. The remaining time deposits of A$25.0 million (US$17.7 million, based on the exchange rate at 31 March 2019) bear a fixed interest rate of 2.5% and mature on 31 May 2019. These time deposits are reflected within *Restricted short-term investments - Asbestos* on the consolidated balance sheet as of 31 March 2019 and have been classified as available-for-sale. At 31 March 2019, AICF's short-term investments were revalued resulting in a mark-to-market fair value adjustment of nil.

AICF – NSW Government Secured Loan Facility

AICF may borrow, subject to certain conditions, up to an aggregate amount of A$320.0 million (US$227.1 million, based on the exchange rate at 31 March 2019). The AICF Loan Facility is available to be drawn for the payment of claims through 1 November 2030, at which point, all outstanding borrowings must be repaid. Borrowings made under the AICF Loan Facility are classified as current, as AICF intends to repay the debt within one year.

At 31 March 2019 and 2018, AICF had an outstanding balance under the AICF Loan Facility of nil.

To the extent the NSW Government sources funding for the AICF Loan Facility from the Commonwealth of Australia (the "Commonwealth"), the interest rate on the AICF Loan Facility is calculated by reference to the cost of NSW's borrowings from the Commonwealth for that purpose, being calculated with reference to the Commonwealth Treasury fixed coupon bond rate for a period determined as appropriate by the Commonwealth.

To the extent that NSW's source of funding is not from the Commonwealth, the interest rate on drawings under the AICF Loan Facility is calculated as (i) during the period to (but excluding) 1 May 2020, a yield percent per annum calculated at the time of the first drawdown of the AICF Loan Facility by reference to the NSW Treasury Corporation's 6% 1/05/2020 Benchmark Bonds, (ii) during the period after 1 May 2020, a yield percent per annum calculated by reference to NSW Treasury Corporation bonds on issue at that time and maturing in 2030, or (iii) in any case, if the relevant bonds are not on issue, a yield percent per annum in respect of such other source of funding for the AICF Loan Facility determined by the NSW Government in good faith to be used to replace those bonds, including any guarantee fee payable to the Commonwealth in respect of the bonds (where the bonds are guaranteed by the Commonwealth) or other source of funding.

Under the AICF Loan Facility, the Former James Hardie Companies each guarantee the payment of amounts owed by AICF and AICF's performance of its obligations under the AICF Loan Facility. Each Obligor has granted the NSW Government a security interest in certain property including cash accounts, proceeds from insurance claims, payments remitted by the Company to AICF and contractual rights under certain documents including the AFFA. Each Obligor may not deal with the secured property until all amounts outstanding under the AICF Loan Facility are paid, except as permitted under the terms of the security interest.

Under the terms of the AICF Loan Facility, each Obligor must, upon receipt of proceeds from insurance claims and payments remitted by the Company under the AFFA, apply all of such proceeds in repayment of amounts owing under the AICF Loan Facility. NSW may, at its sole discretion, waive or postpone (in such manner and for such period as it determines) the requirement for the Obligors to apply proceeds of insurance claims and payments remitted by the Company to repay amounts owed under the AICF Loan Facility to ensure AICF has sufficient liquidity to meet its future cash flow needs.

The Obligors are subject to certain operating covenants under the AICF Loan Facility and the terms of the security interest, including, without limitation, (i) positive covenants relating to providing corporate reporting documents, providing particular notifications and complying with the terms of the AFFA, and (ii) negative covenants restricting them from voiding, cancelling, settling, or adversely affecting existing insurance policies, disposing of assets and granting security to secure any other financial indebtedness, other than in accordance with the terms and conditions of the AICF Loan Facility.

Upon an event of default, NSW may cancel the commitment and declare all amounts outstanding as immediately due and payable. The events of default include, without limitation, failure to pay or repay amounts due in accordance with the AICF Loan Facility, breach of covenants, misrepresentation, cross default by an Obligor and an adverse judgment (other than a personal asbestos or Marlew claim) against an Obligor.

13. Derivative Instruments

Interest Rate Swaps

The fair value of interest rate swap contracts is calculated based on the fixed rate, notional principal, settlement date and present value of the future cash inflows and outflows based on the terms of the agreement and the future floating interest rates as determined by a future interest rate yield curve. The model used to value the interest rate swap contracts is based upon well recognized financial principles, and interest rate yield curves can be validated through readily observable data by external sources. Although readily observable data is used in the valuations, different valuation methodologies could have an effect on the estimated fair value. Accordingly, the interest rate swap contracts are categorized as Level 2 within the fair value hierarchy.

For interest rate swap contracts, the Company has agreed to pay fixed interest rates while receiving a floating interest rate. At 31 March 2019 and 2018, the Company had interest rate swap contracts with total notional principal of US$75.0 million and US$100.0 million, respectively.

At 31 March 2019, the weighted average fixed interest rate of these contracts is 2.2% and the weighted average remaining life is 0.8 years. These contracts have a fair value of US$0.3 million at 31 March 2019, and US$0.4 million at 31 March 2018, which are included in *Accounts and other receivables*. For the years ended 31 March 2019, 2018 and 2017, the Company included in *Other income* an unrealized gain of nil, US$1.5 million and US$2.6 million, respectively, on interest rate swap contracts. Also included in *Other income* for the years ended 31 March 2019, 2018 and 2017 was a realized gain on interest rate swap contracts of US$0.1 million, a realized loss of US$0.8 million and a realized loss US$1.3 million, respectively.

Foreign Currency Forward Contracts

The Company's foreign currency forward contracts are valued using models that maximize the use of market observable inputs including interest rate curves and both forward and spot prices for currencies and are categorized as Level 2 within the fair value hierarchy. At 31 March 2019, the Company did not have any foreign currency forward contracts.

For the years ended 31 March 2019 and 2018, the forward contracts not designated as a cash flow hedging arrangement had an unrealized gain of nil.

The notional amount of interest rate swap contracts and foreign currency forward contracts represents the basis upon which payments are calculated and are reported on a net basis when a legal and enforceable right of set-off exists. The following table sets forth the total outstanding notional amount and the fair value of the Company's derivative instruments held at 31 March 2019 and 2018.

(Millions of US dollars)	Notional Amount		Fair Value as of 31 March 2019		Fair Value as of 31 March 2018	
	31 March 2019	31 March 2018	Assets	Liabilities	Assets	Liabilities
Derivatives not accounted for as hedges						
Interest rate swap contracts	$ 75.0	$ 100.0	$ 0.3	$ —	$ 0.4	$ —
Foreign currency forward contracts	—	0.8	—	—	—	—
Total	**$ 75.0**	**$ 100.8**	**$ 0.3**	**$ —**	**$ 0.4**	**$ —**

14. Commitments and Contingencies

The Company is involved from time to time in various legal proceedings and administrative actions related to the normal conduct of its business, including general liability claims, putative class action lawsuits and litigation concerning its products.

Although it is impossible to predict the outcome of any pending legal proceeding, management believes that such proceedings and actions should not, individually or in the aggregate, have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows, except as they relate to asbestos and New Zealand product liability claims as described in these consolidated financial statements.

New Zealand Weathertightness Claims

Since fiscal year 2002, the Company's New Zealand subsidiaries have been joined in a number of weathertightness claims in New Zealand that relate to residential buildings (single dwellings and apartment complexes) and a small number of non-residential buildings, primarily constructed from 1998 to 2004. The claims often involve multiple parties and allege that losses were incurred due to excessive moisture penetration of the buildings' structures. The claims typically include allegations of poor building design, inadequate certification of plans, inadequate construction review and compliance certification and deficient work by sub-contractors.

The Company recognizes a liability for asserted New Zealand weathertightness claims in the period in which the loss becomes probable and estimable. The amount of reasonably possible loss is dependent on a number of factors including, without limitation, the specific facts and circumstances unique to each claim brought against the Company's subsidiaries, the existence of any co-defendants involved in defending the claim, the solvency of such co-defendants (including the ability of such co-defendants to remain solvent until the related claim is ultimately resolved), the availability of claimant compensation under a government compensation scheme, the amount of loss estimated to be allocable to the Company's subsidiaries and the extent to which the co-defendants and the Company's subsidiaries have access to third-party recoveries to cover a portion of the costs incurred in defending and resolving such actions. In addition to the above limitations, the total loss incurred is also dependent on the manner and extent to which statutory limitation periods will apply to any received claims.

Historically, the Company's New Zealand subsidiaries have been joined to these claims as one of several co-defendants, including local government entities responsible for enforcing building codes and practices, resulting in the Company's New Zealand subsidiaries becoming liable for only a portion of each claim. In addition, the Company's New Zealand subsidiaries have had access to third-party recoveries to defray a portion of the costs incurred in resolving such claims. However, in 2015 the Company's New Zealand subsidiaries were named as the sole defendants in four claims on behalf of multiple defendants, each of which allege that the New Zealand subsidiaries' products were inherently defective. In two of these claims, three non-New Zealand Subsidiaries and the Company were named as defendants along with the two New Zealand subsidiaries and their direct New Zealand holding company.

The Company has established a provision for asserted New Zealand weathertightness claims within the current portion of *Other liabilities*, with a corresponding estimated receivable for third-party recoveries being recognized within *Accounts and other receivables*.

To the extent that it is probable and estimable, the estimated loss for these matters, net of estimated third-party recoveries, incorporates assumptions that are subject to the foregoing uncertainties and are principally derived from, but not exclusively based on, historical claims experience together with facts and circumstances unique to each claim. If the nature and extent of the resolution of claims in future periods differ from the historical claims experience, then the actual amount of loss may be materially higher or lower than estimated losses accrued at 31 March 2019.

Environmental and Legal

The operations of the Company, like those of other companies engaged in similar businesses, are subject to a number of laws and regulations on air and water quality, waste handling and disposal. The Company's policy is to accrue for environmental costs when it is determined that it is probable that an obligation exists and the amount can be reasonably estimated.

Operating Leases and Commitments

The following table summarizes contractual obligations and commitments as of 31 March 2019:

Years ending 31 March (Millions of US dollars):	2020	2021	2022	2023	2024	Thereafter	Total
Operating leases[1]	$ 18.4	$ 15.3	$ 11.7	$ 7.5	$ 5.1	$ 8.2	$ 66.2
Purchase commitments[2]	0.4	0.4	0.4	0.4	0.4	8.2	10.2
Capital commitments[3]	5.2	—	—	—	—	—	5.2

[1] Future lease payments for non-cancellable operating leases having a remaining term in excess of one year at 31 March 2019. As the lessee, the Company principally enters into property, building and equipment leases.

[2] Represents unconditional purchase obligations that include agreements to purchase goods or services, primarily gypsum, that are enforceable and legally binding on us and that specify all significant terms, including fixed or minimum quantities to be purchased, fixed, minimum or variable price provisions, and approximate timing of the transaction. Purchase obligations exclude agreements that are cancellable without penalty.

[3] Represents total outstanding purchase obligations under purchase orders as of 31 March 2019 in connection with future capital expenditures in connection with our capacity expansion projects.

Rental expense amounted to US$30.7 million, US$20.6 million and US$18.4 million for the years ended 31 March 2019, 2018 and 2017, respectively.

15. Income Taxes

Income tax expense includes income taxes currently payable and those deferred because of temporary differences between the financial statement and tax bases of assets and liabilities. Income tax expense consists of the following components:

	Years Ended 31 March		
(Millions of US dollars)	**2019**	2018	2017
Income before income taxes:			
Domestic	**$ 196.4**	$ 155.1	$ 172.2
Foreign	**104.2**	19.2	194.8
Income before income taxes:	**$ 300.6**	$ 174.3	$ 367.0
Income tax expense:			
Current:			
Domestic	**$ (26.6)**	$ (14.8)	$ (15.2)
Foreign	**(6.5)**	(69.4)	(36.0)
Current income tax expense	**(33.1)**	(84.2)	(51.2)
Deferred:			
Domestic	**(1.3)**	(1.8)	(4.0)
Foreign	**(37.4)**	57.8	(35.3)
Deferred income tax (expense) benefit	**(38.7)**	56.0	(39.3)
Total income tax expense	**$ (71.8)**	$ (28.2)	$ (90.5)

Income tax expense computed at the statutory rates represents taxes on income applicable to all jurisdictions in which the Company conducts business, calculated at the statutory income tax rate in each jurisdiction multiplied by the pre-tax income attributable to that jurisdiction.

Income tax expense is reconciled to the tax at the statutory rates as follows:

	Years Ended 31 March		
(Millions of US dollars)	**2019**	2018	2017
Income tax expense computed at the statutory tax rates	**$ (48.9)**	$ (24.6)	$ (84.4)
US state income taxes, net of the federal benefit	**(3.1)**	(4.3)	(3.0)
Asbestos - effect of foreign exchange	**14.9**	(1.8)	0.8
Expenses not deductible	**(4.9)**	(4.7)	(2.5)
US manufacturing deduction	**—**	2.5	2.2
Foreign taxes on domestic income	**(34.5)**	(34.2)	(2.1)
Amortization of intangibles	**—**	12.4	2.8
Taxes on foreign income	**4.5**	(3.0)	(5.4)
Net deferred tax liability revaluation	**0.2**	27.7	—
Other items	**—**	1.8	1.1
Total income tax expense	**$ (71.8)**	$ (28.2)	$ (90.5)
Effective tax rate	**23.9%**	16.2%	24.7%

Deferred tax balances consist of the following components:

(Millions of US dollars)	31 March 2019	2018
Deferred tax assets:		
Intangible assets	**$ 1,209.8**	$ —
Asbestos liability	**349.3**	382.9
Other provisions and accruals	**55.6**	37.7
Net operating loss carryforwards	**69.9**	25.5
Foreign and research tax credit carryforwards	**115.5**	126.1
Total deferred tax assets	**1,800.1**	572.2
Valuation allowance	**(267.6)**	(129.6)
Total deferred tax assets net of valuation allowance	**1,532.5**	442.6
Deferred tax liabilities:		
Depreciable and amortizable assets	**(132.2)**	(81.6)
Other	**(38.5)**	(14.6)
Total deferred tax liabilities	**(170.7)**	(96.2)
Total deferred taxes, net	**$ 1,361.8**	$ 346.4

The Company adopted ASU No. 2016-16 starting with the fiscal year beginning 1 April 2018, and recorded an increase in gross deferred income tax assets of US$1,313.0 million, a valuation allowance of US$148.2 million and a decrease in other assets of US$4.5 million. The deferred income tax asset is a result of the internal restructuring transaction implemented during the year ended 31 March 2018 relating to the alignment of certain intangible assets with its US business and other transactions involving intangible assets undertaken in prior years. Intangible assets have an amortizable life of 15 years for US federal tax purposes. At 31 March 2019 the Company had a valuation allowance against the intangible related deferred tax asset which has an indefinite life for US income tax purposes.

Deferred income taxes include net operating loss carry-forwards. At 31 March 2019, the Company had US tax loss carry-forwards of approximately US$37.0 million, Australian tax loss carry-forwards of approximately US$23.7 million and European tax loss carry-forwards of approximately US$9.2 million that are available to offset future taxable income in the respective jurisdiction. The Company establishes a valuation allowance against a deferred tax asset if it is more likely than not that some portion or all of the deferred tax asset will not be realized.

At 31 March 2019, the Company had a valuation allowance against a portion of the European tax loss carry-forwards in respect of which realization is not more likely than not. At 31 March 2019, the Company had European tax loss carry-forwards of approximately US$5.7 million which will never expire and approximately US$3.5 million which will expire in fiscal years 2020 through 2028.

The Australian tax loss carry-forwards primarily result from current and prior year tax deductions for contributions to AICF. James Hardie 117 Pty Limited, the performing subsidiary under the AFFA, is able to claim a tax deduction for its contributions to AICF over a five-year period commencing in the year the contribution is incurred. At 31 March 2019, the Company recognized a tax deduction of US$86.9 million (A$119.1 million) for the current year relating to total contributions to AICF of US$472.1 million (A$595.3 million) incurred in tax years 2015 through 2019.

At 31 March 2019, the Company had foreign tax credit carry-forwards of US$114.6 million and research credits of US$0.9 million that are available to offset future taxes payable. At 31 March 2019, the Company had a 100% valuation allowance against the foreign tax credit carry-forwards.

In determining the need for and the amount of a valuation allowance in respect of the Company's asbestos related deferred tax asset, management reviewed the relevant empirical evidence, including the current and past core earnings of the Australian business and forecast earnings of the Australian business considering current trends. Although realization of the deferred tax asset will occur over the life of the AFFA, which extends beyond the forecast period for the Australian business, Australia provides an unlimited carry-forward period for tax losses. Based upon managements' review, the Company believes that it is more likely than not that the Company will realize its asbestos related deferred tax asset and that no valuation allowance is necessary as of 31 March 2019. In the future, based on review of the empirical evidence by management at that time, if management determines that realization of its asbestos related deferred tax asset is not more likely than not, the Company may need to provide a valuation allowance to reduce the carrying value of the asbestos related deferred tax asset to its realizable value.

Income taxes payable represents taxes currently payable which are computed at statutory income tax rates applicable to taxable income derived in each jurisdiction in which the Company conducts business.

At 31 March 2019, the Company had income taxes payable of US$38.6 million, after taking into account total income tax and withholding tax paid, net of refunds received, during the year ended 31 March 2019 of US$26.3 million.

Due to the size and nature of its business, the Company is subject to ongoing reviews by taxing jurisdictions on various tax matters. The Company accrues for tax contingencies based upon its best estimate of the taxes ultimately expected to be paid, which it updates over time as more information becomes available. Such amounts are included in taxes payable or other non-current liabilities, as appropriate. If the Company ultimately determines that payment of these amounts is unnecessary, the Company reverses the liability and recognizes a tax benefit during the period in which the Company determines that the liability is no longer necessary. The Company records additional tax expense in the period in which it determines that the recorded tax liability is less than the ultimate assessment it expects.

The Company or its subsidiaries files income tax returns in various jurisdictions including Ireland, the United States, Germany, the Netherlands, Spain, Australia, New Zealand and the Philippines. The Company is no longer subject to US federal examinations by the US Internal Revenue Service ("IRS") for tax years prior to tax year 2016 and Australian federal examinations by the Australian Taxation Office ("ATO"), for tax years prior to tax year 2015.

Taxing authorities from various jurisdictions in which the Company operates are in the process of reviewing and auditing the Company's respective jurisdictional tax returns for various ranges of years. The Company accrues tax liabilities in connection with ongoing audits and reviews based on knowledge of all relevant facts and circumstances, taking into account existing tax laws, its experience with previous audits and settlements, the status of current tax examinations and how the tax authorities view certain issues.

Unrecognized Tax Benefits

A reconciliation of the beginning and ending amount of unrecognized tax benefits and interest and penalties are as follows:

(Millions of US Dollars)	Unrecognized tax benefits	Interest and Penalties
Balance at 31 March 2016	**$ 0.7**	**$ —**
Additions for tax positions of the current year	0.1	—
Reductions in tax positions of prior year	(0.1)	—
Balance at 31 March 2017	**$ 0.7**	**$ —**
Additions for tax positions of the current year	—	—
Reductions in tax positions of prior year	—	—
Balance at 31 March 2018	**$ 0.7**	**$ —**
Additions for tax positions of the current year	0.1	0.1
Reductions in tax positions of prior year	—	—
Reductions applicable to lapse of statute of limitations	(0.2)	—
Balance at 31 March 2019	**$ 0.6**	**$ 0.1**

At 31 March 2019, the total amount of unrecognized tax benefits and the total amount of interest and penalties accrued by the Company related to unrecognized tax benefits that, if recognized, would affect the tax expense is US$0.6 million and US$0.1 million, respectively.

The Company recognizes penalties and interest accrued related to unrecognized tax benefits in *Income tax expense*. During the years ended 31 March 2019, 2018 and 2017, income of US$0.1 million, nil and nil, respectively, relating to interest and penalties was recognized within income tax expense arising from movements in unrecognized tax benefits.

The liabilities associated with uncertain tax benefits are included in *Other liabilities* on the Company's consolidated balance sheets.

A number of years may elapse before an uncertain tax position is audited or ultimately resolved. It is difficult to predict the ultimate outcome or the timing of resolution for uncertain tax positions. It is reasonably possible that the amount of unrecognized tax benefits could significantly increase or decrease within the next twelve months. These changes could result from the completion of ongoing examinations, the expiration of the statute of limitations, or other circumstances. At this time, an estimate of the range of the reasonably possible change cannot be made.

16. Stock-Based Compensation

Total stock-based compensation expense consists of the following:

	Years Ended 31 March		
(Millions of US dollars)	**2019**	2018	2017
Liability Awards (Income) Expense	**$ (0.6)**	$ 5.6	$ 5.4
Equity Awards Expense	**12.5**	11.1	9.3
Total stock-based compensation expense	**$ 11.9**	$ 16.7	$ 14.7

As of 31 March 2019, the unrecorded future stock-based compensation expense related to outstanding equity awards was US$18.3 million and will be recognized over an estimated weighted average amortization period of 2.2 years.

2001 Equity Incentive Plan

Under the Company's 2001 Equity Incentive Plan (the "2001 Plan"), the Company can grant equity awards in the form of nonqualified stock options, performance awards, restricted stock grants, stock appreciation rights, dividend equivalent rights, phantom stock or other stock-based benefits such as restricted stock units. The 2001 Plan was first approved by the Company's shareholders in 2001 and was reapproved to continue until September 2021 at the 2011 Annual General Meeting. The Company is authorized to issue 45,077,100 shares under the 2001 Plan.

Under the 2001 Plan, grants have been made at fair market value to management and other employees of the Company. Each grant confers the right to subscribe for one ordinary share in the capital of JHI plc. Primarily, the grants may be exercised as follows: 25% after the first year; 25% after the second year; and 50% after the third year.

Restricted stock units may not be sold, transferred, assigned, pledged or otherwise encumbered so long as such units remain restricted. The Company determines the conditions or restrictions of any restricted stock units, which include requirements of continued employment. At 31 March 2019, there were 910,386 restricted stock units outstanding under this plan.

Long-Term Incentive Plan 2006

At the 2006 Annual General Meeting, the Company's shareholders approved the establishment of a Long-Term Incentive Plan 2006 (the "LTIP") to provide incentives to certain members of senior management ("Executives"). The shareholders also approved, in accordance with certain LTIP rules, the issue of options in the Company to executives of the Company. At the Company's 2008 Annual General Meeting, the shareholders amended the LTIP to also allow restricted stock units to be granted under the LTIP. The LTIP was re-approved by the Company's shareholders with certain amendments at each of the 2008, 2012, 2015 and 2018 Annual General Meetings.

As of 31 March 2019, the Company had granted 13,571,439 restricted stock units under the LTIP. These restricted stock units may not be sold, transferred, assigned, pledged or otherwise encumbered so long as such units remain restricted. The Company determines the conditions or restrictions of any restricted stock awards, which may include requirements of continued employment, individual performance or the Company's financial performance or other criteria. Restricted stock units either vest or expire as set out in the grant documents or LTIP rules. At 31 March 2019, there were 4,261,508 restricted stock units outstanding under the LTIP.

The following table summarizes the Company's shares available for grant as options, restricted stock units or other equity instruments under the LTIP and 2001 Plan at 31 March 2019, 2018 and 2017:

	Shares Available for Grant
Balance at 31 March 2017	**27,238,814**
Granted	(1,779,904)
Balance at 31 March 2018	**25,458,910**
Granted	(1,714,094)
Balance at 31 March 2019	**23,744,816**

Stock Options

There were no stock options granted during the years ended 31 March 2019 and 2018. The following table summarizes the Company's stock options activity during the noted periods:

	Outstanding Options	
	Number	Weighted Average Exercise Price (A$)
Balance at 31 March 2017	**48,896**	**6.38**
Exercised	(48,896)	6.38
Balance at 31 March 2018	**—**	
Exercised	—	
Balance at 31 March 2019	**—**	

The total intrinsic value of stock options exercised was nil and A$0.8 million for the years ended 31 March 2019 and 2018, respectively.

Windfall tax benefits realized in the United States from stock options exercised and included in cash flows from financing activities in the consolidated statements of cash flows were nil, nil and US$3.0 million for the years ended 31 March 2019, 2018 and 2017, respectively.

<u>Restricted Stock Units</u>

The Company estimates the fair value of restricted stock units on the date of grant and recognizes this estimated fair value as compensation expense over the periods in which the restricted stock vests.

The following table summarizes the Company's restricted stock unit activity during the noted period:

	Restricted Stock Units	Weighted Average Fair Value at Grant Date (A$)
Non-vested at 31 March 2017	**3,340,245**	**14.80**
Granted	1,779,904	14.04
Vested	(615,334)	12.05
Forfeited	(367,223)	14.12
Non-vested at 31 March 2018	**4,137,592**	**14.63**
Granted	1,714,094	14.12
Vested	(745,787)	15.53
Forfeited	(844,391)	13.71
Non-vested at 31 March 2019	**4,261,508**	**14.47**

Restricted Stock Units – service vesting

During fiscal year 2019 and 2018, 617,793 and 332,262 restricted stock units (service vesting) were granted to employees under the 2001 Plan, respectively. The fair value of each restricted stock unit (service vesting) is equal to the market value of the Company's common stock on the date of the grant, adjusted for the fair value of estimated dividends as the restricted stock unit holder is not entitled to dividends over the vesting period.

During fiscal year 2019 and 2018, 242,964 and 237,480 restricted stock units (service vesting) that were previously granted as part of the 2001 Plan became fully vested and the underlying common stock was issued, respectively.

Restricted Stock Units – performance vesting

The Company granted 357,797 and 515,249 restricted stock units with a performance vesting condition under the LTIP to senior executives and managers of the Company on 17 August 2018 and 21 August 2017, respectively. The Company also granted 25,385 restricted stock units with a performance vesting condition under the LTIP to senior executives and managers of the Company on 6 September 2018. The vesting of the restricted stock units is subject to a return on capital employed ("ROCE") performance hurdle being met and is subject to negative discretion by the Board. The Board's discretion will reflect the Board's judgment of the quality of the returns balanced against management's delivery of market share growth and a scorecard of key qualitative and quantitative performance objectives. During fiscal year 2019, after exercise of negative discretion by the Board, 284,350 restricted stock units (performance vesting) that were granted on 16 September 2015 as part of the fiscal year 2016 long-term incentive award became fully vested and the underlying common stock was issued. The remaining 199,162 unvested restricted stock units from this grant were cancelled on 17 September 2018.

When the Board reviews the awards and determines whether any negative discretion should be applied at the vesting date, the award recipients may receive all, some, or none of their awards. The Board may only exercise negative discretion and may not enhance the maximum award that was originally granted to the award recipient.

The fair value of each restricted stock unit (performance vesting) is adjusted for changes in JHI plc's common stock price at each balance sheet date and for the fair value of estimated dividends as the restricted stock unit holder is not entitled to dividends over the vesting period until the performance conditions are applied at the vesting date.

Restricted Stock Units – market condition

Under the terms of the LTIP, the Company granted 663,738 and 932,393 restricted stock units (market condition) to senior executives and managers of the Company on 17 August 2018 and 21 August 2017, respectively. The Company also granted 49,381 restricted stock units (market condition) to senior executives and managers of the Company on 6 September 2018. The vesting of these restricted stock units is subject to a market condition as outlined in the relevant notice of meeting.

The fair value of each of these restricted stock units (market condition) granted under the LTIP is estimated using a binomial lattice model that incorporates a Monte Carlo simulation (the "Monte Carlo" method). The following table includes the assumptions used for restricted stock grants (market condition) valued during the year ended 31 March 2019 and 2018, respectively:

Vesting Condition:	**Market**	**Market**	**Market**
	FY19	FY19	FY18
Date of grant	6 Sep 2018	17 Aug 2018	21 Aug 2017
Dividend yield (per annum)	3.0 %	3.0 %	3.0 %
Expected volatility	26.8 %	28.1 %	30.1 %
Risk free interest rate	2.7 %	2.7 %	1.5 %
Expected life in years	2.9	3.0	3.3
JHX stock price at grant date (A$)	20.87	22.00	17.91
Number of restricted stock units	49,381	663,738	932,393

During fiscal year 2019, 218,473 restricted stock units (market condition) that were previously granted became fully vested and the underlying common stock was issued. During fiscal year 2018, 156,812 restricted stock units (market condition) that were previously granted became fully vested and the underlying common stock was issued.

Scorecard LTI – cash settled units

Under the terms of the LTIP, the Company granted awards equivalent to 1,073,396 and 1,545,750 Scorecard LTI units on 17 August 2018 and 21 August 2017, respectively. The Company also granted awards equivalent to 76,155 on 6 September 2018 and 28,558 on 31 January 2019. These awards provide recipients a cash incentive based on an average 20 trading-day closing price of JHI plc's common stock price and each executive's scorecard rating. The vesting of awards is measured on individual performance conditions based on certain performance measures. Compensation expense recognized for awards are based on the fair market value of JHI plc's common stock on the date of grant and recorded as a liability. The expense is recognized ratably over the vesting period and the liability is adjusted for subsequent changes in JHI plc's common stock price at each balance sheet date adjusted for the fair value of estimated dividends as the restricted stock unit holder is not entitled to dividends over the vesting period.

On 17 August 2018, 153,667 of the 456,995 Scorecard LTI units that were previously granted on 16 September 2015 as part of the FY2016 long-term incentive award became fully vested and the balance cancelled as a result of the Board's determination of management's performance against the FY2016-18 Scorecard. The cash amount paid to award recipients was based on an average 20 trading-day closing price of JHI plc's common stock price.

On 18 September 2017, 197,800 of the 454,179 Scorecard LTI units that were previously granted on 16 September 2014 as part of the FY2015 long-term incentive award became fully vested and the balance cancelled as a result of the Board's determination of management's performance against the FY2015-17 Scorecard. The cash amount paid to award recipients was based on an average 20 trading-day closing price of JHI plc's common stock price.

17. Capital Management and Dividends

The following table summarizes the dividends paid during the fiscal years 2019, 2018 and 2017:

(Millions of US dollars)	US Cents/Security	US$ Millions Total Amount	Announcement Date	Record Date	Payment Date
FY 2019 first half dividend	0.10	43.6	8 November 2018	12 December 2018	22 February 2019
FY 2018 second half dividend	0.30	128.5	22 May 2018	7 June 2018	3 August 2018
FY 2018 first half dividend	0.10	46.2	9 November 2017	13 December 2017	23 February 2018
FY 2017 second half dividend	0.28	131.3	18 May 2017	8 June 2017	4 August 2017
FY 2017 first half dividend	0.10	46.6	17 November 2016	21 December 2016	24 February 2017
FY 2016 second half dividend	0.29	130.2	19 May 2016	9 June 2016	5 August 2016

During fiscal year 2017, the Company announced a share buyback program (the "fiscal 2017 program") to acquire up to US$100.0 million of its issued capital in the twelve months through May 2017. Under this program, the Company repurchased and cancelled 6,090,133 shares of its common stock during the second quarter of fiscal year 2017. The aggregate cost of the shares repurchased and cancelled was A$131.4 million (US$99.8 million), at an average market price of A$21.58 (US$16.40).

Subsequent to 31 March 2019, the Company announced an ordinary dividend of US26.0 cents per security, with a record date of 6 June 2019 and a payment date of 2 August 2019.

18. Operating Segment Information and Concentrations of Risk

During the first quarter of fiscal year 2019, the Company changed its reportable operating segments. Previously, the Company maintained four operating segments: (i) North America Fiber Cement; (ii) International Fiber Cement; (iii) Other Businesses; and (iv) Research and Development. Beginning in the first quarter of fiscal year 2019, the Company replaced the International Fiber Cement segment with two new segments: (i) Asia Pacific Fiber Cement; and (ii) Europe Building Products. There were no changes to the North America Fiber Cement; Other Businesses; and Research and Development segments. The Company has revised its historical segment information at 31 March 2018 and for the years ended 31 March 2018 and 2017 to be consistent with the current reportable segment structure. The change in reportable segments had no effect on the Company's financial position, results of operations or cash flows for the periods presented.

The Company has reported its operating segment information in the format that the operating segment information is available to and evaluated by the CODM. The North America Fiber Cement segment manufactures fiber cement interior linings, exterior siding products and related accessories in the United States; these products are sold in the United States and Canada. The Asia Pacific Fiber Cement segment includes all fiber cement products manufactured in Australia, New Zealand and the Philippines, and sold in Australia, New Zealand, Asia, the Middle East and various Pacific Islands. The Europe Building Products segment includes the newly acquired Fermacell business and fiber cement product manufactured in the United States that is sold in Europe. The Other Businesses segment includes certain non-fiber cement manufacturing and sales activities in North America, including fiberglass windows. The Research and Development segment represents the cost incurred by the research and development centers. General Corporate costs primarily consist of *Asbestos adjustments*, officer and employee compensation and related benefits, professional and legal fees, administrative costs and rental expense, net of rental income, on the Company's corporate offices.

Operating Segments

The following is the Company's operating segment information:

	Net Sales to Customers Years Ended 31 March		
(Millions of US dollars)	**2019**	2018	2017
North America Fiber Cement	**$ 1,676.9**	$ 1,578.1	$ 1,493.4
Asia Pacific Fiber Cement	**446.8**	425.4	370.6
Europe Building Products	**368.3**	36.3	41.2
Other Businesses	**14.6**	14.7	16.4
Worldwide total	**$ 2,506.6**	$ 2,054.5	$ 1,921.6

	Income Before Income Taxes Years Ended 31 March		
(Millions of US dollars)	**2019**	2018	2017
North America Fiber Cement[1,10]	**$ 382.5**	$ 381.9	$ 343.9
Asia Pacific Fiber Cement[1]	**99.8**	108.1	93.8
Europe Building Products[1,7]	**10.0**	0.3	1.3
Other Businesses[10]	**(30.9)**	(8.6)	(6.7)
Research and Development[1]	**(29.0)**	(27.8)	(25.5)
Segments total	**432.4**	453.9	406.8
General Corporate[2,6]	**(80.8)**	(224.7)	(13.6)
Total operating income	**351.6**	229.2	393.2
Net interest expense[3]	**(50.1)**	(29.5)	(27.5)
Loss on early debt extinguishment	**(1.0)**	(26.1)	—
Other income	**0.1**	0.7	1.3
Worldwide total	**$ 300.6**	$ 174.3	$ 367.0

	Total Identifiable Assets 31 March	
(Millions of US dollars)	**2019**	2018
North America Fiber Cement	**$ 1,280.2**	$ 1,070.7
Asia Pacific Fiber Cement	**328.8**	328.8
Europe Building Products	**717.7**	22.8
Other Businesses	**10.9**	30.1
Research and Development	**8.1**	7.5
Segments total	**2,345.7**	1,459.9
General Corporate [4,5]	**1,686.9**	891.1
Worldwide total	**$ 4,032.6**	$ 2,351.0

The following is the Company's geographical information:

(Millions of US dollars)	Net Sales to Customers Years Ended 31 March 2019	2018	2017
North America[9]	**$ 1,691.5**	$ 1,592.8	$ 1,509.9
Australia	**315.1**	301.1	252.5
Germany	**137.1**	2.1	2.7
New Zealand	**79.1**	76.8	73.3
Other Countries[8]	**283.8**	81.7	83.2
Worldwide total	**$ 2,506.6**	$ 2,054.5	$ 1,921.6

(Millions of US dollars)	Total Identifiable Assets 31 March 2019	2018
North America[9]	**$ 1,294.6**	$ 1,103.6
Australia	**235.4**	242.6
Germany	**512.3**	0.5
New Zealand	**39.2**	34.8
Other Countries[8]	**264.2**	78.4
Segments total	**2,345.7**	1,459.9
General Corporate[4,5]	**1,686.9**	891.1
Worldwide total	**$ 4,032.6**	$ 2,351.0

1 Research and development expenditures are expensed as incurred and are summarized by segment in the following table:

(Millions of US dollars)	Years Ended 31 March 2019	2018	2017
North America Fiber Cement	**$ 6.5**	$ 6.1	$ 6.2
Asia Pacific Fiber Cement	**2.1**	1.8	1.5
Europe Building Products	**2.6**	—	—
Research and Development[a]	**26.7**	25.4	22.6
	$ 37.9	$ 33.3	$ 30.3

[a] The Research and Development segment also included *Selling, general and administrative* expenses of US$2.3 million, US$2.4 million and US$2.9 million in fiscal years 2019, 2018 and 2017, respectively.

2 The principal components of General Corporate costs are officer and employee compensation and related benefits, professional and legal fees, administrative costs, and rental expense on the Company's corporate offices. Also included in General Corporate costs are the following:

(Millions of US dollars)	Years Ended 31 March 2019	2018	2017
Asbestos adjustments	**$ (22.0)**	$ (156.4)	$ 40.4
AICF SG&A expenses	**(1.5)**	(1.9)	(1.5)
Gain on sale of Fontana building	**—**	3.4	—
Fermacell acquisition costs	**—**	10.0	—

3 The Company does not report net interest expense for each operating segment as operating segments are not held directly accountable for interest expense. Included in net interest expense is net AICF interest (income) expense of US$(2.0) million, US$(1.9) million and US$1.1 million in fiscal years 2019, 2018 and 2017, respectively.

4 Included in General Corporate costs are deferred tax assets for each operating segment that are not held directly accountable for deferred income taxes.

5 Asbestos-related assets at 31 March 2019 and 2018 are US$486.8 million and US$537.7 million, respectively, and are included in the General Corporate costs.

6 Included in the General Corporate costs are New Zealand weathertightness legal costs of US$3.3 million, nil and nil for the years ended 31 March 2019, 2018 and 2017, respectively.

7 Included in the Europe Building Products segment are Fermacell transaction and integration costs of US$21.8 million and the amortization of the inventory fair value adjustment of US$7.3 million for the year ended 31 March 2019. As this inventory was sold during the first quarter of fiscal year 2019, the entire adjustment was recognized into cost of goods sold during the same period.

8 Included are all other countries that account for less than 5% of net sales and total identifiable assets individually, primarily in the Philippines, Switzerland and other European countries.

9 The amounts disclosed for North America are substantially all related to the USA.

10 The following table summarizes asset impairment costs by segment:

	Years Ended 31 March		
(Millions of US dollars)	**2019**	2018	2017
North America Fiber Cement[a]	**$ 3.0**	$ —	$ —
Other Businesses[b]	**12.9**	—	—
	$ 15.9	$ —	$ —

[a] For the year ended 31 March 2019, the Company recorded impairment charges of US$2.6 million and US$0.4 million to *Property, plant and equipment, net* and *Intangible assets, net,* respectively, related to the discontinuance of its MCT product line.

[b] For the year ended 31 March 2019, the Company recorded impairment charges of US$4.6 million, US$6.1 million and US$2.2 million to the *Goodwill, Property, Plant and equipment, net* and *Intangible assets, net*, respectively, due to the Company's decision to cease production of its fiberglass windows business in the second quarter of fiscal year 2019.

Concentrations of Risk

The distribution channels for the Company's fiber cement products are concentrated. If the Company were to lose one or more of its major customers, there can be no assurance that the Company will be able to find a replacement. Therefore, the loss of one or more customers could have a material adverse effect on the Company's consolidated financial position, results of operations and cash flows.

We have one customer who contributes greater than 10% of our net sales in each of the past three fiscal years.

This customer's accounts receivable represented 8.5% and 9.0% of the Company's accounts receivable at 31 March 2019 and 2018, respectively. The following is net sales generated by this customer, which is from the North America Fiber Cement segment:

	Years Ended 31 March					
(Millions of US dollars)	**2019**		2018		2017	
Customer A	**$ 260.5**	**10.4%**	$ 246.9	12.0%	$ 226.0	10.3%

Approximately 36%, 22% and 21% of the Company's net sales in fiscal year 2019, 2018 and 2017, respectively, were from outside the United States. Consequently, changes in the value of foreign currencies could significantly affect the consolidated financial position, results of operations and cash flows of the Company's non-US operations on translation into US dollars.

19. Accumulated Other Comprehensive Loss

During the year ended 31 March 2019 there were the following reclassifications out of *Accumulated other comprehensive loss:*

(Millions of US dollars)	Cash Flow Hedges	Foreign Currency Translation Adjustments	Total
Balance at 31 March 2018	$ 0.3	$ (1.6)	$ (1.3)
Other comprehensive loss	(0.1)	(28.9)	(29.0)
Balance at 31 March 2019	**$ 0.2**	**$ (30.5)**	**$ (30.3)**

20. Business Combinations

Fermacell Acquisition

On 3 April 2018, the Company completed its acquisition of the Fermacell business with Xella International S.A. for a purchase price of €516.4 million (US$635.6 million based on the exchange rate at 3 April 2018). The acquisition was pursuant to the Sales and Purchase Agreement dated 7 November 2017, and was structured as a stock purchase, resulting in 100% ownership of Fermacell. The Company financed the acquisition through a combination of cash on hand and borrowings of €400.0 million (US$492.4 million based on the exchange rate at 3 April 2018) from the Term Loan Facility. See Note 10 for more information.

Headquartered in Dusseldorf, Germany, Fermacell operates six manufacturing plants across Germany, the Netherlands and Spain, with a sales force in 13 countries and revenues generated primarily from countries in Western Europe. Fermacell is a provider of innovative building solutions, producing and distributing high quality fiber gypsum boards and cement-bonded boards, which are two complementary products in the high performance board space. Management believes this acquisition will generate significant value by providing the Company with a significant European presence and a differentiated platform to position the Company for meaningful long-term growth in Europe.

In connection with this acquisition, the Company incurred related transaction and integration costs of US$21.8 million during the year ended 31 March 2019, which have been recorded in the consolidated statements of operations and comprehensive income in *Selling, general and administrative expenses*.

The following is the purchase price allocation for Fermacell:

(Millions of US dollars)		
Cash and cash equivalents	$	76.9
Accounts and other receivable		43.7
Inventories		39.7
Other assets		4.1
Property, plant and equipment		230.3
Intangible assets		187.0
Accounts payable		(40.5)
Other liabilities		(41.2)
Deferred tax liabilities		(84.4)
Net assets acquired	$	415.6
Goodwill		220.0
Total consideration	$	635.6

The purchase price allocation set forth above reflects fair value of the net assets acquired based on analysis performed by management.

The following table summarizes the estimated fair value of acquired identifiable intangible assets:

(Millions of US dollars)	Estimated remaining useful life (years)		Fair Value
Trade name	Indefinite	$	126.8
Customer relationships	13		57.8
Other intangible assets	2 - 13		2.4
Total		$	187.0

Intangible assets will be evaluated for impairment annually or more frequently if an event occurs or circumstances change that indicate it may be impaired, by comparing its fair value to its carrying amount to determine if a write-down to fair value is required.

Goodwill is attributable primarily to the benefits from the increased scale of the Company as a result of the Fermacell acquisition. Goodwill arising from the Fermacell acquisition is not deductible for income tax purposes.

We recorded adjustments to the preliminary purchase price allocation during the year as the Company had up to one year from the acquisition date to finalize its purchase price allocation. The Company has finalized its purchase price allocation as of 31 March 2019 and does not expect further changes. During the year ended 31 March 2019, the Company recorded net adjustments of €0.5 million related to property, plant and equipment, other liabilities and deferred taxes valuations, with a corresponding increase in goodwill.

Supplemental Pro Forma Results of Operations

The following unaudited supplemental pro forma information presents the results of operations of the Company, after giving effect to the Fermacell acquisition, as if the Company had completed the Fermacell acquisition and related financing (as described in Note 10) on 1 April 2017, but using the fair values of the assets acquired and liabilities assumed as of the closing dates of the acquisition. These unaudited pro forma results are presented for informational purposes only and are not necessarily indicative of what the actual results of operations of the Company would have been if the Fermacell acquisition and related financing had occurred on the date assumed, nor are they indicative of future results of operations.

James Hardie Industries Consolidated Pro Forma

	Years Ended 31 March	
	2019	2018
(Millions of US dollars)	**(Unaudited)**	(Unaudited)
Net sales	**$ 2,506.6**	$ 2,367.0
Income before income taxes	**329.7**	203.6

Europe Building Products Pro Forma

	Years Ended 31 March	
	2019	2018
(Millions of US dollars)	**(Unaudited)**	(Unaudited)
Net sales	**$ 368.3**	$ 348.8
Income before income taxes	**39.1**	29.0

The unaudited pro forma results include the depreciation and amortization of the fair value of the acquired property, plant and equipment, customer relationships and other intangible assets and interest expense on the Term Loan Facility used to acquire Fermacell. The unaudited pro forma results exclude the impact of transaction and integration costs of US$21.8 million for the year ended 31 March 2019. The unaudited pro forma results also excludes the impact of the inventory fair value adjustment of US$7.3 million for the year ended 31 March 2019.

Exhibit 99.6

KPMG

Valuation of Asbestos-Related Disease Liabilities of former James Hardie entities ("the Liable Entites") to be met by the AICF Trust

Prepared for Asbestos Injuries Compensation Fund Limited ("AICFL")

As at 31 March 2019

21 May 2019

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21 May 2019

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Cc Matthew Marsh, Chief Financial Officer, James Hardie Industries plc
Chris Latham, Appointee of NSW Government to the Board of Asbestos Injures Compensation Fund Limited
The Board of Directors, Asbestos Injuries Compensation Fund Limited

Dear Narreda

Valuation of Asbestos-Related Disease Liabilities of former James Hardie entities ("The Liable Entities") to be met by the AICF Trust

We are pleased to provide you with our Annual Actuarial Report relating to the asbestos-related disease liabilities of the Liable Entities which are to be met by the AICF Trust.

The report is effective as at 31 March 2019 and has taken into account claims data and information provided to us by AICFL as at 31 March 2019.

If you have any questions with respect to the contents of this report, please do not hesitate to contact us.

Yours sincerely

N Donlevy

Neil Donlevy MA FIA FIAA
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Executive Summary

Important Note: Basis of Report

This valuation report ("the Report") has been prepared by KPMG Actuarial, a division of KPMG Financial Services Consulting Pty Ltd (ABN 91 144 686 046) (hereafter collectively referred to as "KPMG") in accordance with an "Amended and Restated Final Funding Agreement in respect of the provision of long-term funding for compensation arrangements for certain victims of Asbestos-related diseases in Australia" (hereafter referred to as the "the Amended Final Funding Agreement") between James Hardie Industries NV (now known as James Hardie Industries plc) (hereafter referred to as "James Hardie"), James Hardie 117 Pty Limited, the State of New South Wales and Asbestos Injuries Compensation Fund Limited ("AICFL") which was signed on 21 November 2006.

This Report is intended to meet the requirements of the Amended Final Funding Agreement and values the asbestos-related disease liabilities of the Liable Entities to be met by the AICF Trust.

This Report is not intended to be used for any other purpose and may not be suitable, and should not be used, for any other purpose. Opinions and estimates contained in the Report constitute our judgment as of the date of the Report.

The information contained in this Report is of a general nature and is not intended to address the objectives, financial situation or needs of any particular individual or entity. It is provided for information purposes only and does not constitute, nor should it be regarded in any manner whatsoever as, advice and is not intended to influence a person in making a decision in relation to any financial product or an interest in a financial product. No one should act on the information contained in this Report without obtaining appropriate professional advice after a thorough examination of the accuracy and appropriateness of the information contained in this Report having regard to their objectives, financial situation and needs.

In preparing the Report, KPMG has relied on information supplied to it from various sources and has assumed that the information is accurate and complete in all material respects. KPMG has not independently verified the accuracy or completeness of the data and information used for this Report.

Except insofar as liability under statute cannot be excluded, KPMG, its executives, directors, employees and agents will not be held liable for any loss or damage of any kind arising as a consequence of any use of the Report or purported reliance on the Report including any errors in, or omissions from, the valuation models.

The Report must be read in its entirety. Individual sections of the Report, including the Executive Summary, could be misleading if considered in isolation. In particular, the opinions expressed in the Report are based on a number of assumptions and qualifications which are set out in the full Report.

Introduction

The Amended Final Funding Agreement requires the completion of an Annual Actuarial Report evaluating the potential asbestos-related disease liabilities of the Liable Entities to be met by the AICF Trust. KPMG has been retained by AICFL to provide this Annual Actuarial Report as required under the Amended Final Funding Agreement and this is detailed in our Engagement Letter dated 16 November 2018.

The Liable Entities are defined as being the following entities:

- Amaca Pty Ltd (formerly James Hardie & Coy);
- Amaba Pty Ltd (formerly Jsekarb, James Hardie Brakes and Better Brakes); and
- ABN60 Pty Ltd (formerly James Hardie Industries Ltd).

In addition, the liability for Baryulgil claims is deemed to be a liability of Amaca by virtue of the James Hardie (Civil Liability) Act 2005 (NSW). Under Part 4 of that Act, Amaca is liable for the "Marlew Asbestos Claims" or "Marlew Contribution Claims" as defined in that Act.

Our valuation is on a central estimate basis and is intended to be effective as at 31 March 2019. It has been based on claims data and information as at 31 March 2019 provided to us by AICFL.

Overview of Recent Claims Experience and comparison with previous valuation projections

In this section we compare the actual experience in 2018/19 (referred to in the following tables as "FY19 Actual") with the projections for 2018/19 that were contained within our previous valuation report at 31 March 2018. We will refer to these projections for 2018/19 as "FY19 Expected" in the tables that follow.

Claim numbers

There have been 374 mesothelioma claims reported in 2018/19, a 5% decrease compared to the 393 mesothelioma claims reported in 2017/18 and 4% below expectations for 2018/19 (390 claims).

For non-mesothelioma claims (excluding workers compensation claims), there have been 173 claims reported in 2018/19, a 16% increase compared to 149 claims reported in 2017/18.

The following table shows the comparison of actual experience with that which had been forecast at the previous valuation.

Table E.1. Comparison of claim numbers

	FY19 Actual	FY19 Expected	Ratio of Actual to Expected (%)	FY18 Actual
Mesothelioma: all ages	374	390	96%	393
<60	21	33	63%	30
60-70	71	92	77%	88
70-80	176	160	110%	156
80+	100	105	95%	119
age not known	6	0	n/a	0
Asbestosis	105	96	109%	85
Lung Cancer	16	24	67%	26
ARPD & Other	39	30	130%	30
Wharf	13	12	108%	8
Workers	21	24	88%	20
Total	568	576	99%	562

Average Claim Awards

Average claims awards in 2018/19 have been lower than expectations across most disease types with the exception of ARPD & Other.

For mesothelioma, average claim sizes have been favourable across three of the four age cohorts, with the 70-80 age cohort being adverse by 4%.

There have been two large mesothelioma claims settlements (being claims in excess of $1m in 2006/07 money terms) in 2018/19. Total claims expenditure on large claims has been 52% below expectations, reflecting the low number of large claims settled in 2018/19.

The following table shows the comparison of actual experience with that which had been forecast at the previous valuation.

Table E.2. Comparison of average claim size of non-nil claims

	FY19 Actual ($)	FY19 Expected ($)	Ratio of Actual to Expected (%)	FY18 Actual ($)
Mesothelioma: all ages				
<60	540,182	634,500	85%	631,255
60-70	369,748	396,563	93%	353,787
70-80	312,807	301,388	104%	294,808
80+	243,126	248,513	98%	221,066
Asbestosis	90,985	111,038	82%	108,978
Lung Cancer	75,154	126,900	59%	121,695
ARPD & Other	108,979	100,463	108%	68,632
Wharf	55,329	105,750	52%	81,815
Workers	0	144,878	0%	251,333
Mesothelioma Large Claims (settled)				
Number	2	4	50%	1
Average claim size	2,275,000	2,358,225	96%	2,080,000
Large claim expenditure	4,550,000	9,432,900	48%	2,080,000

Note: FY18 Actuals have been inflated (by 4%) to mid 2018/19 values

Cashflow expenditure: gross and net

Gross cashflow expenditure, at $154.4m, was 2% above expectations.

Net cashflow expenditure, at $142.8m, was in line with expectations.

Table E.3. Comparison of cashflow

	FY19 Actual ($M)	FY19 Expected ($M)	Ratio of Actual to Expected (%)	FY18 Actual ($M)
Gross Cashflow	154.4	151.8	102%	139.7
Insurance and Other Recoveries	(11.6)	(9.2)	126%	(11.4)
Insurance recoveries from HIH and from commutations	0.0	0.0	n/a	(4.6)
Net Cashflow	142.8	142.6	100%	123.7

Liability Assessment

At 31 March 2019, our projected central estimate of the liabilities of the Liable Entities (the Discounted Central Estimate) to be met by the AICF Trust is $1,868.4m. We have not allowed for the future Operating Expenses of the AICF Trust or the Liable Entities in the liability assessment.

Table E.4. Comparison of central estimate of liabilities

	31 March 2019 $m			31 March 2018 $m
	Gross of insurance recoveries	Insurance recoveries	Net of insurance recoveries	Net of insurance recoveries
Total uninflated and undiscounted cash-flows	1,466.5	66.7	1,399.8	1,442.9
Inflation allowance	848.3	29.6	818.7	938.0
Total inflated and undiscounted cash-flows	2,314.8	96.3	2,218.5	2,380.9
Discounting allowance	(365.6)	(15.5)	(350.1)	(528.0)
Net present value liabilities	1,949.2	80.8	1,868.4	1,852.9

Comparison with previous valuation

In the absence of any change to the claim projection assumptions from our 31 March 2018 valuation, other than allowing for the changes in the discount rate, we would have projected a Discounted Central Estimate liability of $1,881.1m as at 31 March 2019.

The increase of $28.2m relative to the valuation result at 31 March 2018 is due to:

- A reduction of $112.3m, being the net impact of expected claims payments (which reduce the liability) and the "unwind of discount" (to reflect the fact that cashflows are now one year nearer).
- An increase of $140.5m resulting from changes to the yield curve between 31 March 2018 and 31 March 2019, particularly relating to lower yields at durations below 15 years.

Our liability assessment at 31 March 2019 of $1,868.4m therefore represents a decrease of $12.7m arising from changes to the actuarial assumptions. The change is principally a consequence of:

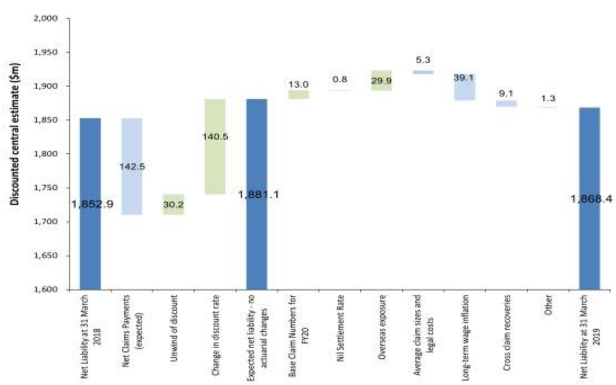
- An additional allowance for the potential costs relating to overseas exposures following the decision in *Talifero vs Amaca*; and
- An increase to the base level of asbestosis and ARPD & Other claims and the consequential impact this has on the number of claims in all future years;

offset by

- Lower wage inflation assumptions, which we have reduced from 4.00% pa to 3.75% pa; and
- Increased allowance for cross-claim recoveries.

The following chart shows an analysis of the change in our liability assessments from 31 March 2018 to 31 March 2019 on a discounted basis.

Figure E.1. Analysis of change in central estimate liability (discounted basis)



Note: Green bars signal that this factor has given rise to an increase in the liability whilst light blue bars signal that this factor has given rise to a reduction in the liability.

Amended Final Funding Agreement calculations

The Amended Final Funding Agreement sets out the basis on which payments will be made to the AICF Trust.

Additionally, there are a number of other figures specified within the Amended Final Funding Agreement that we are required to calculate. These are:

- Discounted Central Estimate;
- Term Central Estimate; and
- Period Actuarial Estimate.

Table E.5. Amended Final Funding Agreement calculations

	$m	
Discounted Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,868.4	
Period Actuarial Estimate (net of cross-claim recoveries, gross of Insurance and Other Recoveries) comprising:	472.3	
Discounted value of cashflow in 2019/20		153.5
Discounted value of cashflow in 2020/21		161.9
Discounted value of cashflow in 2021/22		156.9
Term Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,846.2	

The actual funding amount due at a particular date will depend upon a number of factors, including:

- the net asset position of the AICF Trust at that time;
- the free cash flow amount of the James Hardie Group in the preceding financial year; and
- the Period Actuarial Estimate in the latest Annual Actuarial Report.

Uncertainty

Estimates of asbestos-related disease liabilities are subject to considerable uncertainty, significantly more than personal injury liabilities in relation to other causes, such as CTP or Workers Compensation claims.

It should therefore be expected that the actual emergence of the liabilities will vary from any estimate. As indicated in Figure E.2, depending on the actual out-turn of experience relative to that currently forecast, the variation could potentially be substantial.

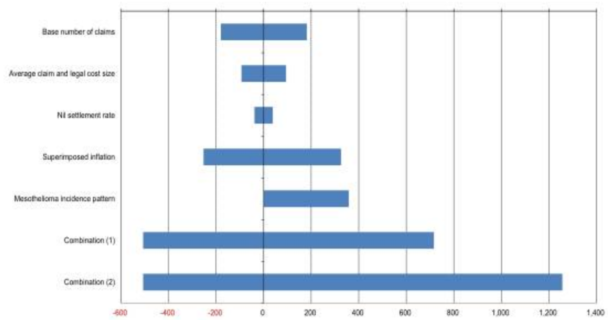
Thus, no assurance can be given that the actual liabilities of the Liable Entities to be met by the AICF Trust will not ultimately exceed the estimates contained in this Report. Any such variation may be significant.

We have performed sensitivity testing to identify the impact of different assumptions upon the size of the liabilities. The different scenarios selected are documented at Section 11.2 of this report.

We have not included a sensitivity test for the impact of changes in discount rates although, as noted in this Report, changes in discount rates can introduce significant volatility to the Discounted Central Estimate result reported at each year-end.

We note that these sensitivity test ranges are not intended to correspond to a specified probability of sufficiency, nor are they intended to indicate an upper bound or a lower bound of all possible outcomes.

Figure E.2. Sensitivity testing results – Impact around the Discounted Central Estimate (in $m)



The single most sensitive assumption shown in the chart is the peak period of claims reporting against the Liable Entities. Shifting the pattern of incidence by 2 years could add approximately $358m (19%) on a discounted basis to our valuation (as shown in the above chart by the scenario labelled "mesothelioma incidence pattern").

Table E.6. Summary results of sensitivity analysis ($m)

	Undiscounted	Discounted
Central estimate	2,218.5	1,868.4
Low Scenario	1,583.3	1,361.8
High Scenario	3,897.7	3,124.7

Whilst the table above indicates a range around the discounted central estimate of liabilities of -$507m to +$1,256m, the actual cost of liabilities could fall outside that range depending on the actual experience.

Executive Summary Not Report

Please note that this executive summary is intended as a brief overview of our Report. To properly understand our analysis and the basis of our liability assessment requires examination of our Report in full.

Contents

Appendices

1. Scope and Purpose

1.1 Introduction

The Amended Final Funding Agreement requires the completion of an Annual Actuarial Report evaluating the potential asbestos-related disease liabilities of the Liable Entities to be met by the AICF Trust.

1.1.1 Liable Entities

The Liable Entities are defined as being the following entities:

- Amaca Pty Ltd (formerly James Hardie & Coy);
- Amaba Pty Ltd (formerly Jsekarb, James Hardie Brakes and Better Brakes); and
- ABN60 Pty Ltd (formerly James Hardie Industries Ltd).

In addition, the liability for Baryulgil claims is deemed to be a liability of Amaca by virtue of the James Hardie (Civil Liability) Act 2005 (NSW). Under Part 4 of that Act, Amaca is liable for "Marlew Asbestos Claims" or "Marlew Contribution Claims" as defined in that Act.

Baryulgil claims are discussed further in Section 5.8.

1.1.2 Personal asbestos claims

Under the Amended Final Funding Agreement, the liabilities to be met by the AICF Trust relate to personal asbestos-related disease liabilities of the Liable Entities.

The precise scope of the liabilities is documented in Section 1.2 and in Appendix C of this Report.

1.1.3 Purpose of report

KPMG has been retained by AICFL to provide an Annual Actuarial Report as required under the Amended Final Funding Agreement and this is detailed in our Engagement Letter dated 16 November 2018.

The prior written consent of KPMG is required for any other use of this Report or the information contained in it.

Our valuation is effective as at 31 March 2019 and has been based on claims data and information as at 31 March 2019 provided to us by AICFL.

1.2 Scope of report

We have been requested to provide an actuarial assessment as at 31 March 2019 of the asbestos-related disease liabilities of the Liable Entities to be met by the AICF Trust, consistent with the terms of the Amended Final Funding Agreement.

The assessment is on a central estimate basis and is based on the claims experience as at 31 March 2019.

A "central estimate" liability assessment is an estimate of the expected value of the range of potential future liability outcomes. In other words, if all the possible values of the liabilities are expressed as a statistical distribution, the central estimate is an estimate of the mean of that distribution.

It is of note that our liability assessment:

- Relates to the Liable Entities and Marlew (in relation to Marlew Claims arising from asbestos mining activities at Baryulgil).
- Is intended to cover:
  - The amount of settlements, judgments or awards for all Personal Asbestos Claims.
  - Claims Legal Costs incurred by the AICF Trust in connection with the settlement of Personal Asbestos Claims.
- Is not intended to cover:
  - Personal injury or death claims arising from exposure to asbestos which took place outside Australia.
  - Personal injury or death claims, arising from exposure to Asbestos, which are brought in Courts outside Australia.
  - Claims for economic loss, other than any economic loss forming part of an award for damages for personal injury and/or death.
  - Claims for loss of property, including those relating to land remediation.
  - The costs of asbestos or asbestos product removal relating to asbestos or asbestos products manufactured or used by or on behalf of the Liable Entities.
- Includes an allowance for:
  - Compensation to the NSW Dust Diseases Authority ("DDA") or a Workers Compensation Scheme by way of a claim by such parties for contribution or reimbursement from the Liable Entities, but only to the extent that the cost of such claims is within the limits of funding for such claims as outlined within the Amended Final Funding Agreement.
  - Workers Compensation claims, being claims from former employees of the Liable Entities, but only to the extent that such liabilities are not met by a Workers Compensation Scheme or Policy (see section 1.2.1).
- Assumes that the product and public liability insurance policies of the Liable Entities will continue to respond to claims as and when they fall due. We have not made any allowance for the impact of any disputation concerning Insurance Recoveries, nor for any legal costs that may be incurred in resolving such disputes.

- Makes no allowance for:
  - Insurance Recoveries from insurance policies placed from 1986 onwards which were placed on a "claims made" basis.
  - the future Operating Expenses of the Liable Entities or the AICF Trust. Separate allowance for future Operating Expenses should be considered by the management of AICFL.
  - the inherent uncertainty of the liability assessment. That is, no additional provision (or risk margin) has been included in excess of a central estimate.

Readers of this Report may refer to our previous reports which are available at www.ir.jameshardie.com.au and www.aicf.org.au.

1.2.1 Workers Compensation

Workers Compensation claims are claims made by former employees of the Liable Entities. Such past, current and future reported claims were insured with, amongst others, Allianz Australia Limited, QBE and the various State-based Workers Compensation Schemes.

Under the Amended Final Funding Agreement, the part of a future Workers Compensation claim that is met by a Workers Compensation Scheme or Policy of the Liable Entities is outside of the AICF Trust. The AICF Trust is, however, to provide for any part of a claim not covered by a Workers Compensation Scheme or Policy (e.g. as a result of the existence of limits of indemnity and policy deductibles on those policies of insurance).

On this basis our liability assessment in relation to Workers Compensation claims and which relates to the AICF Trust, includes only the amount borne by the Liable Entities in excess of the anticipated recoveries due from a Workers Compensation Scheme or Policy.

In making our assessment we have assumed that the Workers Compensation insurance programme will continue to respond to claims by former employees of the Liable Entities as and when they fall due. To the extent that they were not to respond owing to (say) insurer insolvency, Insurer Guarantee Funds may be available to meet such obligations.

1.2.2 Dust Disease Authority and Other Reimbursements

The Amended Final Funding Agreement indicates that the AICF Trust is intended to meet Personal Asbestos Claims and that claims by the DDA or a Workers Compensation Scheme for reimbursement will only be met up to a certain specified limit (aggregated across the DDA and Workers Compensation Schemes), being:

- In the first financial year (2006/07) a limit of $750,000 applied;
- In respect of each financial year thereafter, that limit is indexed annually in line with the Consumer Price Index. At 31 March 2019, the annual limit is $1,022,548;
- There is an overall unindexed aggregate cap of $30m;
- At 31 March 2019, AICFL has paid out $10.47m to the DDA.

The cashflow and liability figures contained within this Report have already removed that component of any reimbursements that will not be met by the AICF Trust owing to the application of these limits and caps.

1.2.3 Risk Margins

Australian-licensed insurance companies are required to hold, and many non-insurance companies elect to hold, insurance and self-insurance claims provisions at a level above the central estimate basis to reflect the uncertainty attaching to the liability assessment and to include an allowance in respect of that uncertainty.

A risk margin is an additional amount held, above the central estimate, so as to increase the likelihood of adequacy of the provisions to meet the ultimate cost of settlement of those liabilities.

We note that the Amended Final Funding Agreement envisages the ongoing financing of the AICF Trust is to be based on a "central estimate" approach and that the Annual Actuarial Report should provide a Discounted Central Estimate valuation.

Accordingly, we have made no allowance for any risk margins within this Report.

1.3 Areas of potential exposure

As identified in Section 1.2, there are other potential sources of claims exposure beyond those directly considered within this Report. However, in a number of cases they are unquantifiable even if they have the potential to generate claims. This is especially the case for those sources of future claim where there has been no evidence of claims to date.

1.3.1 General areas of potential exposure

Areas of potential changes in claims exposure we have not explicitly allowed for in our valuation include, but are not limited to:

- Future significant individual landmark and precedent-setting judicial decisions;
- Significant medical advancements;
- Unimpaired claims, i.e. claims for fear, stress, pure nervous shock or psychological illness;
- A change in the basis of compensation for asymptomatic pleural plaques for which no associated physical impairment is exhibited;
- A proliferation (compared to past and current levels of activity) of "third-wave" claims, i.e. claims arising as a result of indirect exposure such as home renovation, washing clothes of family members that worked with asbestos, or from workers involved in the removal of asbestos or the demolition of buildings containing asbestos;
- Changes in legislation, especially those relating to tort reform for asbestos sufferers. Examples include the current consultation by the Law Reform Commission in Western Australia in relation to damages for gratuitous services and provisional damages;
- Introduction of new, or elimination of existing, heads of damage;

- Exemplary and aggravated or punitive damages (being damages awarded for personal injuries caused as a result of negligence or reckless conduct);
- Changes in the basis of apportionment of awards for asbestos-related diseases for claimants who have smoked (we note the decisions in *Amaca v Ellis* [2010] HCA 5 and *Evans v Queanbeyan City Council* [2010] NSWDDT 7 which we understand are consistent with the previous decision in *Judd v Amaca* [2002] NSWDDT 25);
- Changes to taxation; and
- Future bankruptcies of other asbestos claim defendants (i.e. other liable manufacturers or distributors).

Nonetheless, implicit allowance is made in respect of some of these items in the allowance for superimposed inflation included in our liability assessment. Furthermore, to the extent that some of these have emerged in past claims experience, they are reflected in our projections.

1.3.2 Overseas exposures: Talifero decision

In relation to claimants where exposures have involved more than one country (e.g. UK and Australia), we have previously assumed that the AICF Trust will only meet that part of the cost which is attributable to the Australian-related exposure.

In 2017, the Estate of Mr Francis John Talifero brought a claim against Amaca in the Dust Diseases Tribunal. Judge Russell presided over the matter. The Trustee determined that a 48% deduction should be made to the claim to reflect the exposure of Mr Talifero that related to the United Kingdom. Mr Talifero's estate rejected the Trustee's interpretation of the Amended and Restated Final Funding Agreement.

On 4 May 2018, in the NSW Supreme Court (Equity Division), Sackar J concluded that the 2005 Act, the Amended Final Funding Agreement and the Trust Deed when read together harmoniously, meant that the Trustee was only obliged to pay those personal asbestos claims to the extent that exposure occurred in Australia (i.e. that the Trustee should apply a deduction to reflect the exposure in relation to the United Kingdom).

The estate of Mr Talifero appealed the decision (*[2018] NSWCA 227*), and on 11 October 2018 the NSW Supreme Court, Court of Appeal allowed the Estate's appeal, setting aside the original decision of the NSW Supreme Court of 4 May 2018.

AICFL submitted an application for special leave to appeal to the High Court of Australia in November 2018. On 13 March 2019, the High Court refused AICFL's application.

As a consequence of the decision of the Court of Appeal and the subsequent refusal of special leave to appeal to the High Court of Australia, we consider it appropriate to make allowance at this valuation for the potential additional costs (upon future claims) relating to that part of the exposures that took place outside of Australia (where there was also exposure inside Australia).

The basis for this assessment is documented further in Section 7 of this Report.

The additional allowance included in our valuation in relation to overseas exposures is:

- $21.7m on an uninflated and undiscounted basis.
- $36.6m on an inflated and undiscounted basis.
- $29.9m on an inflated and discounted basis.

1.3.3 Third-wave claims

We have made allowance for so-called "third-wave" claims. These are defined as claims for personal injury and / or death arising from asbestos exposure during home renovations by individuals or to builders involved in such renovations. Such claims are allowed for within the projections to the extent to which they have arisen to date and to the extent our exposure model factors in these exposures in its projection.

We have not allowed for a significant additional surge in third-wave claims (over and above current levels of activity) in the future arising from renovations, but conversely we have not allowed for a tempering of those third-wave claims already included within our projection as a result of improved education of individuals as to the risks of such home renovations, or of any local Councils or State Governments passing laws in this regard.

It should be noted that claims for the cost of asbestos or asbestos product removal from homes and properties or any claims for economic loss arising from asbestos or asbestos products being within such homes and properties is not required to be met by the AICF Trust.

1.4 Data reliances and limitations

KPMG has relied upon the accuracy and completeness of the data with which it has been provided. KPMG has not verified the accuracy or completeness of the data, although we have undertaken steps to test its consistency with data previously received. However, KPMG has placed reliance on the data previously received, and currently provided, as being accurate and complete in all material respects.

1.5 Uncertainty

It must be understood that estimates of asbestos-related disease liabilities are subject to considerable uncertainty.

This is due to the fact that the ultimate disposition of future claims will be subject to the outcome of events that have not yet occurred. Examples of these events, as noted in Section 1.3, include jury decisions, court interpretations, legislative changes, epidemiological developments, medical advancements, public attitudes, potential additional third-wave exposures and social and economic conditions such as inflation.

Therefore, it should be expected that the actual emergence of the liabilities will vary, perhaps materially, from any estimate. Thus, no assurance can be given that the actual liabilities of the Liable Entities to be met by the AICF Trust will not ultimately exceed the estimates contained herein. Any such variation may be significant.

1.6 Distribution and use

The purpose of this Report is as stated in Section 1.1.

This Report should not be used for any purpose other than those specified.

This Report will be provided to the Board and management of AICFL. This Report will also be provided to the Board and management of James Hardie, the NSW Government and to EY in their capacity as auditors to both James Hardie and AICFL.

We understand that this Report will be filed with the ASX and placed on James Hardie's website in its entirety.

We understand that this Report will also be placed on AICFL's website in its entirety.

KPMG consents to this Report being made available to the above-mentioned parties and for the Report to be distributed in the manner described above.

To the extent permitted by law, neither KPMG nor its Executives, directors or employees will be responsible to any third parties for the consequences of any actions they take based upon the opinions expressed with this Report, including any use of or purported reliance upon this Report not contemplated in Section 1.2. Any reliance placed is that party's sole responsibility.

Where distribution of this Report is permitted by KPMG, the Report may only be distributed in its entirety and judgements about the conclusions and comments drawn from this Report should only be made after considering the Report in its entirety and with necessary consultation with KPMG.

Readers are also advised to refer to the "Important Note: Basis of Report" section at the front of the Executive Summary of this Report.

1.7 Date labelling convention used in this Report

In our analyses throughout this Report (unless otherwise stated), the "year" we refer to aligns with the financial year of AICFL and James Hardie and runs from 1 April to 31 March.

A "2008" notified claim would be a claim notified in the period 1 April 2008 to 31 March 2009. This might also be referred to as "2008/09" or "FY09".

Similarly, a "2018" claim settlement would be a claim settled in the period 1 April 2018 to 31 March 2019. This might also be referred to as "2018/19" or "FY19".

1.8 Author of the report

This Report is authored by Neil Donlevy, an Executive of KPMG Financial Services Consulting Pty Ltd, a Fellow of the Institute of Actuaries (London) and a Fellow of the Institute of Actuaries of Australia.

This Report is co-authored by Jefferson Gibbs, an Executive of KPMG Financial Services Consulting Pty Ltd, a Fellow of the Institute of Actuaries (London) and a Fellow of the Institute of Actuaries of Australia.

In relation to this Report, the primary regulator for both Neil Donlevy and Jefferson Gibbs is the Institute of Actuaries of Australia.

1.9 Professional standards and compliance

This Report details a valuation of the outstanding claims liabilities of entities which hold liabilities with features similar to general insurance liabilities.

In preparing this Report, we have complied with the Professional Standard 300 of the Institute of Actuaries of Australia ("PS300"), "Valuation of General Insurance Claims".

However, as we note in Section 1.2, this Report does not include an allowance for the future Operating Expenses of the AICF Trust (which are estimated by AICFL) and nor does it include any allowance for a risk margin to reflect the inherent uncertainty in the liability assessment.

1.10 Control processes and review

This valuation report and the underlying analyses have been subject to technical review and internal peer review.

The technical review focuses on ensuring that the valuation models and supporting claims experience analyses that are carried out are performed correctly and that the calculations are being correctly applied. The technical review also focuses on ensuring that the data that is being used has been reconciled insofar as possible.

Internal peer review involves a review of the approach, the methods, the assumptions selected and the professional judgments applied.

Both the technical review and internal peer review processes are applied to the Report as well as the valuation models.

1.11 Basis of preparation of Report

We have been advised by the management of AICFL to prepare the Report on a "going concern" basis (i.e. we should assume that AICFL will be able to meet any shortfall in the cost of the liabilities of the Liable Entities as they fall due).

The cashflow estimates contained in this Report assume that claims against the Liable Entities will continue to be paid in full as and when they fall due.

2. Data

2.1 Data provided to KPMG

We have been provided with the following data by AICFL:

- Claims dataset at 31 March 2019 with individual claims listings;
- Accounting transactions dataset at 31 March 2019 (which includes individual claims payment details); and
- Detailed insurance bordereaux information (being a listing of claims filed with the insurers of the Liable Entities) as at 31 March 2019.

We have allowed for the benefits of the product and public liability insurance policies of the Liable Entities based on information provided to us by AICFL relating to the insurance programme's structure, coverage and layers.

We have also considered the claims data listings which formed the basis of our previous valuation assessments. The data structures provided for the claims and accounting datasets are consistent with those provided at previous valuations.

2.2 Data limitations

We have tested the consistency of the various data sets provided to us at different valuation dates. Section 2.3 outlines the nature of the testing undertaken.

However, we have not otherwise verified the data and have instead relied on the data provided as being complete and accurate in all material respects.

We have relied upon the robustness of AICFL's internal administration and systems as to the completeness of the data provided.

Consequently, should there be material errors or incompleteness in the data, our assessment could also be affected materially.

2.3 Data reconciliation and testing

We have performed a reconciliation of the data provided at 31 March 2019 with the data provided at 31 March 2018.

We have undertaken a number of tests and reconciliations to test the accuracy of the data to the extent possible, noting the limitations outlined above.

2.3.1 Reconciliation with previous valuation's data

We have performed a reconciliation of the claims database as at 31 March 2019 with that provided at 31 March 2018.

Our findings are:

- Claims notifications: There were no new claims reported that had a report date prior to 31 March 2018. No claims (that already had a notification date) changed notification date between the two databases.
- Portfolio category: Five claims changed category. Three of these changed to mesothelioma. Only one claim related to the 2017/18 year.
- Settlement date: There have been two claims that previously had a settlement date prior to 31 March 2018 that have changed settlement dates at the current valuation.

Changing and developing data is not unexpected or to be considered as adverse. Indeed, changing data is common to all claims administration systems. We do not consider the number or extent of the changes noted above to be unreasonable, nor do we consider the changes to be material to the valuation.

2.3.2 Reconciliation of claims settlement amounts between claims and accounting databases

We have mapped the financial data between the claims and accounting databases into standardised groupings as follows:

Table 2.1: Grouping of financial data from claims and accounting databases

	CLAIMS DATABASE	ACCOUNTING DATABASE
Award	Damages (gross of cross-claims) plus DDB reimbursement plus Medicare (from Accounting Database)	Damages plus DDB reimbursements plus Medicare
Costs / Other	Costs plus Other less Medicare (from accounting database)	Costs plus Consulting
Defence legal costs	Defence legal costs	Defence legal costs

Note: Recovery amounts are available from the accounting database

We have compared the payment records between the claims database and the accounting database from the earliest date to the current file position.

The table below shows the results of this reconciliation for all claim transactions to date.

Table 2.2: Comparison of amounts from claims and accounting databases ($m)

CLAIMS DATABASE		ACCOUNTING DATABASE	
Damages (gross of recoveries, excluding medicare)	1,739.6	Damages (gross of recoveries)	1,742.1
Costs	51.9	Costs	52.5
DDB	15.7	DDB	15.8
Other (inc Medicare)	5.5	Consulting	2.2
		Medicare	3.2
		Interest	0.2
Defence legal costs	196.3	Defence legal costs	197.1
Total Value	2,009.0	Total Value	2,013.1
Standardisation			
Award plus Medicare plus DDB	1,758.6	Award plus Medicare plus DDB	1,761.1
Costs / Other	54.1	Costs / Other	54.9
Defence legal costs	196.3	Defence legal costs	197.1
Total Value	2,009.0	Total Value	2,013.1

The standardisation is the most relevant comparison because the two database extracts allocate the information (particularly in relation to Medicare) in slightly different ways.

Once the standardisation has been undertaken, the two datasets reconcile closely – with reconciliation differences for claim awards totalling approximately $2.5m (31 March 2018: $2.6m).

Our approach for each claim record has been to take the maximum value of the two databases for each claim record. This results in the following overall totals being used in our analysis:

- $1,762.4m for the claims award component;
- $55.3m for the costs / other component; and
- $197.1m for the defence legal costs component.

This approach, of taking the maximum value for each claims record, may result in some minor prudence in our overall analysis although the amount of prudence is not considered to be significant in the context of the size of the potential liabilities and the underlying uncertainty in any valuation estimating future claims costs over the next 40 years or more.

2.4 Data conclusion

We have not verified the underlying data nor have we undertaken "auditing at source". No material data issues have been identified and notified to us by the Approved Auditor of AICFL (EY) during their testing.

We have tested the data for internal consistency with the data provided at the previous valuation (31 March 2018).

Based on that testing and reconciliation, and subject to the limitations described in Section 1.4, we have formed the view that:

- Generally, the data is consistent between valuations, with any differences in the data being readily explainable;
- The financial data appears to reconcile reasonably between the two data sources (the claims dataset and the accounting transactions datasets);
- Any data issues that have emerged are not significant in relation to the size of the liabilities; and
- The data is appropriate for use for the purpose of this Report.

3. Valuation Methodology and Approach

3.1 Valuation methodology changes

We have maintained the core valuation methodology adopted at our previous valuation.

3.2 Overview of current methodology

The methodology involves assessing the liabilities in two separate components, being:

- Allowance for the cost of settling claims which have already been reported but have not yet been settled ("pending claims"); and
- Allowance for the cost of settling claims which have not yet been reported ("Incurred But Not Reported" or "IBNR" claims).

For pending claims, we have used the case estimates (where available) with some adjustments to reflect the extent to which the case estimates (on average) tend to overstate the ultimate cost. For IBNR claims we have used an "average cost per claim method".

In brief, the overall methodology may be summarised as follows:

- Project the future number of claims expected to be reported in each future year by disease type (for product and public liability) and for Workers Compensation and wharf claims taking into account the expected future incidence of mesothelioma and other diseases and also the past rate of co-joining of the Liable Entities;
- Analyse past average attritional claim costs of non-nil claims in mid 2018/19 money terms. We have defined attritional claims to be claims which are less than $1m in 2006/07 money terms. We estimate a baseline attritional non-nil average claim cost in mid 2018/19 money terms. This represents the Liable Entities' share of a claim rather than the total claim settlement;
- Analyse past historical average plaintiff/other and defendant legal costs for non-nil claim settlements;
- Analyse past historical average defendant legal costs for nil claim settlements;
- Estimate a "large claims loading" for mesothelioma claims by estimating the frequency, or incidence rate, and average claim size and legal cost sizes of such claims (being claims which are in excess of $1m in 2006/07 money terms);

- Project the pattern and incidence of future claims settlements from the claims reporting profile projected. This is done by using a settlement pattern derived from consideration of past experience of the pattern of delay between claim reporting and claim settlement for each disease type;
- Estimate the proportion of claims which will be settled with no liability against the Liable Entities by reference to past proportions of claims settled for nil claim cost (we refer to this as the "nil settlement rate");
- Inflate average claim, plaintiff/other and defence legal costs and large claim costs to the date of settlement of claims allowing for base inflation and (where applicable) superimposed inflation;
- Multiply the claims numbers which are expected to be settled for non-nil amounts in a period by the inflated average non-nil claim costs (including the "large claims loading") and plaintiff/other and defence legal costs for that period;
- Make allowance in defence legal costs for that proportion of settled claims which are expected to be settled for no liability but for which defence costs will be incurred;
- Inflate average defence legal costs of nil claims to the date of settlement of claims allowing for base inflation;
- Multiply the claims numbers which are expected to be settled for nil amounts in a period by the inflated average defence legal costs for nil claims for that period;
- Add the expected claims costs and legal payments relating to pending claims (after allowance for the potential savings on case estimates) after making allowance for the assumed settlement pattern of pending claims;
- This gives the projected future gross cashflow for each future financial year;
- Adjust the projected gross cashflow for the impact of the annual and aggregate caps on DDA reimbursements;
- Estimate the recoveries resulting from cross-claims made by the Liable Entities against other parties ("cross-claim recoveries");
- Project Insurance Recoveries to establish the net cashflows;
- Discount the cashflows using a yield curve derived from yields on Commonwealth Government Fixed Interest Bonds at the valuation date to arrive at our present value liability assessment.

It should be noted that this description is an outline and is not intended to be exhaustive in consideration of all the stages we consider or all investigations we undertake. Those other stages are outlined in more detail elsewhere in this Report and readers are advised to refer to those sections for a more detailed understanding of the process undertaken.

As discussed elsewhere, the liabilities are established on a central estimate basis.

3.3 Disease type and class subdivision

3.3.1 Claims records excluded from our analysis

We have excluded records that relate to cross-claims brought by the Liable Entities against other defendants. Where the cross-claim is brought as part of the main proceedings the claim is automatically counted in our analysis of the number of claims. However, where the cross-claim by the Liable Entities is severed from the main proceedings, the existence of a separate record in the claims dataset does not indicate an additional claim (or liability) against the Liable Entities. In these circumstances such claims records are not counted in our analysis.

We have also excluded "insurance recovery" claims records. This is because the insurance recovery record is a separate record that exists for claims records where an insurance recovery is due. In other words, the claim against the Liable Entity has already been included in our analysis and the insurance recovery record exists for operational purposes only.

3.3.2 Categories of claim

We have sub-divided the remaining claims into the following groups:

- Product and Public Liability;
- Workers Compensation, being claims by former employees of the Liable Entities; and
- Wharf claims, being claims by individuals whose occupations involved working on the docks or wharves, or where part of their exposure related to wharves.

3.3.3 Categories of disease

For product and public liability claims, we have separately analysed the individual disease types.

We have split the data by disease type for these claims, because there is sufficient volume of claims to do so, because different disease types display substantially different average claim sizes, and because the incidence pattern of future notifications is expected to vary between the different disease types.

We have not divided the Workers Compensation or wharf claims data by disease type, given their low financial significance and the reduced credibility of the data if sub-divided by disease type (given the low number of claims).

For the purposes of our analysis, we have allocated each claim once and therefore to one disease only. We have selected the following order of priority, based on the relative severity of the disease:

- Mesothelioma;
- Lung cancer / Other cancer;
- Asbestosis; and then
- Asbestos-Related Pleural Disease and Other ("ARPD & Other").

This means that if a product or public liability claim has mesothelioma as one of its listed diseases, it is counted as a mesothelioma claim. If a product or public liability claim has lung cancer or other cancer as one of its listed diseases (but not mesothelioma), it is counted as a lung cancer claim. If a product or public liability claim has asbestosis as one of its listed diseases, it is only counted as asbestosis if it has no reference to mesothelioma, lung cancer or other cancer as one of its diseases.

For mesothelioma, we have also separated claims based on the age of the claimant at the date of notification of the claim. We have used four age cohorts, namely:

- <60 years of age;
- 60-70 years of age;
- 70-80 years of age; and
- >80 years of age.

3.4 Numbers of future claims notifications: mesothelioma

To project the pattern of incidence of claims against the Liable Entities, we have constructed a model which utilises the following inputs:

- The current Australian population by year of birth / current age and gender;
- Standard mortality rates by age and gender. This is used to project the population by year of birth / age at each future year;
- The relative risk-exposure (or incidence rates) between males and females;
- The relative risk-exposure by age of person at time of exposure;
- The exposure to asbestos in Australia;
- The statistical distribution of the latency period from average exposure for each disease type and by age of claimant, together with the underlying parameters (the mean and the standard deviation) of the latency model.

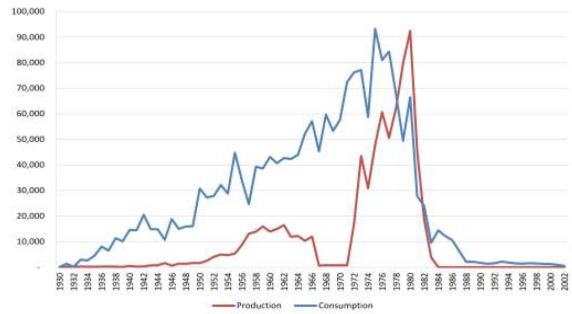
Detailed discussion of the approach taken is documented in our 31 March 2018 Annual Actuarial Report. We have continued to adopt that model and the initial parameters, noting that experience has been in line with, or favourable to expectations, and that this was the first year of adoption of the new model. As such, we have not repeated the detailed analysis and assumptions underpinning the projections at this valuation.

3.4.1 Exposure model

We have constructed a proxy for exposure by reference to statistics showing the levels of Australian usage of asbestos. We do not have detailed individual exposure information for the Liable Entities, its products or where the products were used and how many people were exposed to those products.

However, given the market share of James Hardie over the years (through to 1987) and its relative stability, we have used a national pattern of usage as a reasonable proxy for the Liable Entities' exposure.

Figure 3.1: Consumption and production indices – Australia 1930-2002



Source: World Mineral Statistics Dataset, British Geological Survey, www.mineralsuk.com
R Virta, USGS Website Annual Yearbook

There is an implicit assumption within the use of the consumption to derive the level of future claim notifications that:

- the consumption of asbestos is directly correlated with, and is a suitable proxy for, the number (and extent of exposure) of people exposed to asbestos in any year; and
- the rate of incidence of individuals developing an asbestos-related disease arising from exposure to asbestos is the same for each exposure year and is independent of the type of asbestos used.

3.4.2 Latency model

Our assumption is that the latency pattern (from the average date of exposure) is statistically distributed with a normal distribution.

The parameters for the mean (40 years) and for the standard deviation (9 years) of the latency period have been set taking into account the claims experience of the Liable Entities to date and epidemiological studies.

The analysis supporting the selection of these parameters is summarised in Section 6.1.

3.4.3 Calibrating the curve index to current reporting experience

We take the claim curve index and then calibrate the number of notifications in each future year by reference to the recent levels of claims reporting and the number of claims we have assumed for the 2019/20 financial year. This approach implicitly assumes that:

- The future rate of incidence of asbestos-related diseases manifesting as a result of a past exposure to asbestos will remain stable;
- The pattern of diagnosis and the delay between diagnosis and reporting remain stable;
- The "propensity to claim" by individuals will remain stable; and
- The rate of co-joining the Liable Entities in common law claims will remain stable.

Changes to any of these factors over time will result in changes to the actual pattern of incidence of claims reporting.

The claim curve index also provides us with the proportions of the total number of claims reported in each future year that relate to each of the four age groups for mesothelioma.

Our assumptions for the base number of claims projected to be reported in 2019/20 are summarised in Section 4.4 and Section 5.7.

3.5 Incidence of claim settlements from future claim notifications

We derive a settlement pattern by analysing triangulations of the numbers of settlements and claims payments by delay from the year of notification.

From these settlement pattern analyses, we have estimated the pace at which claims notified in the future will settle, and used this to project the future number, and monetary amount, of settlements in each financial year for each disease type.

Our analysis and assumptions selected are summarised in Section 9.5.

3.6 Average claim costs of IBNR claims

3.6.1 Attritional claims

We define a large claim as one for which the award is greater than or equal to $1m in 2006/07 money terms (which equates to approximately $1.60m in mid 2018/19 money terms).

We define an attritional claim as a non-nil, non-large claim. We define a nil claim as one for which the award payable by the relevant Liable Entity is zero.

We have estimated the following five components to the average cost assessment:

- Average award (sometimes including plaintiff legal costs) of a non-nil "attritional" claim.
- Average plaintiff legal / other costs of a non-nil "attritional" claim.
- Average defence legal costs of a non-nil "attritional" claim.
- Average defence legal costs of a nil claim.
- Large claim awards and legal cost allowances.

All of our analyses have been constructed using past average awards, which have been inflated to mid 2018/19 money terms using a historical base inflation index (of 4% per annum). This allows for basic inflation effects when identifying trends in historical average settlements. We then determine a prospective average cost in mid 2018/19 money terms, including an explicit allowance for overseas exposures resulting from the decision in *Talifero vs Amaca*.

Our analysis and assumptions are summarised in Section 7.

3.6.2 Large claims loading

We analyse the historical incidence rate of large claims (being measured as the ratio of the number of large claims to the total number of non-nil claims), and the average claim size and legal costs of these claims.

We use these to arrive at a "per claim" loading (being the average large claim cost multiplied by the large claim incidence rate per claim), being the additional amount we need to add to our attritional average claim size to allow for large claims.

We have derived separate incidence rate and average claim size assumptions for each of the four age groups for mesothelioma.

Our analysis and assumptions are summarised in Section 7.8.

3.6.3 Future inflation of average claim sizes

Allowance for future claim cost inflation is made. This is modelled as a combination of base inflation plus superimposed inflation. This enables us to project future average settlement costs in each future year, which can then be applied to the IBNR claims numbers as they settle in each future year.

Our analysis and assumptions in relation to claims inflation are summarised in Section 9.2.

3.7 Proportion of claims settled for nil amounts

We apply a "nil settlement rate" to the overall number of settlements to estimate the number of claims which will be settled for nil claim cost (i.e. other than in relation to defence legal costs) and those which will be settled for a non-nil claim cost.

The prospective nil settlement rate is estimated by reference to the analysis of past trends in the rate of nil settlements.

Our analysis and assumptions selected are summarised in Section 8.

3.8 Pending claims

3.8.1 Definition of pending claims

At 31 March 2019, there were 379 claims for which claim awards have not yet been fully settled by the Liable Entities.

Additionally, there are a number of other claims for which defence legal costs have not yet been settled, even though the awards have been settled.

3.8.2 Evaluating the liability for pending claims

The excess amount of the liability for pending claims, over the case estimates held, is what the insurance industry terms Incurred But Not Enough Reported ("IBNER").

Depending on the case estimation procedure of a company and the nature of the liabilities, IBNER can be either positive or negative, with a negative IBNER implying that the ultimate cost of settling claims will be less than case estimates, i.e. that there is some degree of redundancy in case estimates.

3.8.3 Findings

The table below shows that there has been no deterioration compared to the estimates we previously adopted and are currently adopting (both of which have already made allowance for a 25% saving on case estimates).

Table 3.1: Change in cost of claims during 2018/19 financial year ($m) – claim award component only

Figures in $ millions	Current year reported claims	Prior year reported claims	Total
Estimates for pending claims at 31 March 2018 (undiscounted)	0.0	71.7	71.7
Paid in the year to 31 March 2019	75.6	62.4	138.0
Estimates for pending claims at 31 March 2019 (undiscounted)	59.8	10.0	69.8
Incurred Cost in the financial year	**135.4**	**0.7**	**136.1**

The table above shows that there has been an increase of $0.7m (1%) in the cost of claims that were reported prior to 31 March 2018 (after taking into account the 25% savings on case estimates).

We have maintained our assumption for the level of redundancy in case estimates on currently reported claims at 25% at this valuation (March 2018: 25%). This assumption is only applied to the case estimates for the claim award, i.e. it is not applied to plaintiff/other costs or defence costs.

3.9 Insurance Recoveries

Insurance Recoveries are defined as proceeds which are estimated to be recoverable under the product and public liability insurance policies of the Liable Entities, and therefore exclude any such proceeds from a Workers Compensation Scheme or Policy in which the Liable Entities participate or which the Liable Entities hold.

In applying the insurance programme we therefore consider only the projected gross cashflows relating to product and public liability claims.

Historical analysis of the claims data suggests that approximately 97.5% of all liability claims by cost have been product liability claims.

3.9.1 Programme overview

Until 31 May 1986, the Liable Entities had in place product and public liability insurance policies that were placed on a claims occurring basis.

Product liability claims were insured under these insurance policies on an "in the aggregate" basis whilst public liability claims were insured on an "each and every loss" basis.

From 31 May 1986, the insurance policies were placed on a claims made basis in relation to asbestos-related product and public liability cover.

In summary, the insurance policies were placed as follows:

- For the period up to June 1976, the insurance policies were written on a claims occurring basis. The insurance was provided by QBE but the cover provided by these policies was commuted in June 2000. Therefore we have assumed no future Insurance Recoveries from these policies.
- For the period from June 1976 to 31 May 1986, the insurance policies were written on a claims occurring basis; insured by Lloyds' of London, London Market insurers, Australian insurers and HIH entities.
- For the period 31 May 1986 to 31 March 1997, the insurance policies were written on a claims-made basis. For the purpose of this Report, we have made no allowance for any future Insurance Recoveries arising from these policies.

3.9.2 Modelling insurance recoveries on the claims occurring programme

Our methodology for projecting the future insurance recoveries to be collected by AICFL involves the following steps:

- Identify the current contract positions for each insurance policy year. This assumes that all monies due have been collected, and does not allow for the impact of commutations that have taken place.
- Allocate the projected future gross cashflows to individual insurance policy years using an allocation basis that has been determined by reference to the exposure methodology used to project future claim numbers and also using a "period of exposure" allocation.
- This gives a projection of how the insurance programme is utilised over time.

This method allows us to:

- evaluate the total insurance recoveries due by payment year;
- determine how the insurance recoveries due will be assigned to each layer and to each insurer; and
- identify and allow for when the individual layers are projected to be fully exhausted.

We then make an additional adjustment to the projected recoveries to exclude those projected future insurance recoveries that are assigned to the participations of insurers who have already commuted their coverage with AICFL and the Liable Entities or insurers who have settled their coverage by way of a Scheme of Arrangement.

3.9.3 Commutations, HIH and Schemes of Arrangement

Other commutations have been entered into by AICFL in previous years and these commutations have typically (other than QBE) involved the payment of a lump sum amount.

In these circumstances, we have assumed that the insurance liabilities of that company to the Liable Entities have been fully discharged and no further recoveries will fall due.

Additionally, we have assumed that all monies have been paid in relation to insurance recoveries for the claims occurring period from HIH.

For the claims occurring period, where a claim filed against a company under a Scheme of Arrangement has been accepted and payment made, we have assumed that the insurance liabilities of that company to the Liable Entities have been fully discharged and no further recoveries will fall due.

At 31 March 2019, AICF was in the process of commuting its insurance coverages with two insurers, for a total amount of more than $3m. For the purpose of this report, we have assumed these policies have been commuted.

We have made no allowance or adjustment in our valuation for any other future commutations with the remaining insurers.

3.9.4 Unpaid insurance recoveries

We have not included within our liability estimate any allowance for insurance recoveries under the claims occurring period that are due but have not yet been collected.

We are advised that such monies amount to approximately $2m at 31 March 2019.

These amounts are more appropriately dealt with as being debtors of AICFL.

3.9.5 Bad and doubtful debt allowance on Insurance Recoveries

We have made allowance for bad and doubtful debts on future Insurance Recoveries within our valuation by use of the default rates as shown in the table below.

Table 3.2: Credit rating default rates by duration

Rating	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9	Yr. 10	Yr. 11	Yr. 12	Yr. 13	Yr. 14	Yr. 15
AAA	0.00%	0.03%	0.13%	0.24%	0.35%	0.46%	0.51%	0.60%	0.65%	0.71%	0.74%	0.77%	0.80%	0.86%	0.93%
AA+	0.00%	0.05%	0.05%	0.10%	0.16%	0.21%	0.27%	0.33%	0.39%	0.45%	0.51%	0.57%	0.64%	0.70%	0.77%
AA	0.02%	0.03%	0.08%	0.22%	0.36%	0.48%	0.61%	0.72%	0.81%	0.91%	0.99%	1.05%	1.16%	1.23%	1.30%
AA-	0.03%	0.09%	0.18%	0.25%	0.33%	0.45%	0.52%	0.57%	0.63%	0.69%	0.75%	0.82%	0.84%	0.89%	0.94%
A+	0.05%	0.09%	0.20%	0.34%	0.45%	0.55%	0.66%	0.79%	0.93%	1.08%	1.22%	1.36%	1.54%	1.74%	1.92%
A	0.06%	0.15%	0.24%	0.36%	0.49%	0.68%	0.86%	1.03%	1.23%	1.47%	1.65%	1.81%	1.94%	2.03%	2.21%
A-	0.07%	0.17%	0.28%	0.40%	0.57%	0.74%	0.98%	1.16%	1.30%	1.42%	1.54%	1.68%	1.82%	1.95%	2.05%
BBB+	0.11%	0.31%	0.53%	0.77%	1.03%	1.32%	1.54%	1.78%	2.04%	2.30%	2.56%	2.74%	2.98%	3.28%	3.61%
NR	3.75%	7.31%	10.39%	12.90%	14.95%	16.64%	18.05%	19.23%	20.27%	21.21%	22.00%	22.65%	23.25%	23.80%	24.34%
R	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Standard & Poors' 2017 Annual Global Corporate Default Study and Rating Transitions.
NR relates to companies which are Not Rated
R relates to companies which have been subject to Regulatory Action regarding solvency.

We have considered the credit rating of the insurers (and/or their parent companies) of the Liable Entities as at March 2019 and applied the relevant credit rating default rates to the expected future cashflows by year, treaty and insurer.

3.10 Cross-claim recoveries

A cross-claim can be brought by, or against, one or more Liable Entities. Cross-claims brought against a Liable Entity ("Contribution Claims") are included in our analysis of the claims experience.

Cross-claims brought by a Liable Entity relate to circumstances where the Liable Entity seeks to join (as a cross-defendant) another party to the claim in which the Liable Entity is already joined.

Our approach in the valuation has been to separately value the rate of recovery ("cross-claims recovery rate") as a percentage of the gross award based on historical experience of such recoveries.

Our analysis and assumptions selected are summarised in Section 9.4.

3.11 Discounting cashflows

Cashflows are discounted on the basis of yields available at the valuation date on Commonwealth of Australia fixed interest Government Bonds ("Commonwealth Government Bonds") of varying coupon rates and durations to maturity.

Our approach to the determination of the discount rates is broadly unchanged from the approach adopted at 31 March 2018, and is:

- For years 1 to 16, zero coupon spot rates were determined by reference to the prices, coupons and durations of Commonwealth Government Bonds;
- For years 19 and onwards, we have selected a uniform long-term discount rate of 4.50% per annum (FY2018: 5.50% per annum); and
- For years 17 and 18, we have selected spot rates that "linearly interpolate" between the year-16 rate and the year-19 rate (of 4.50%).

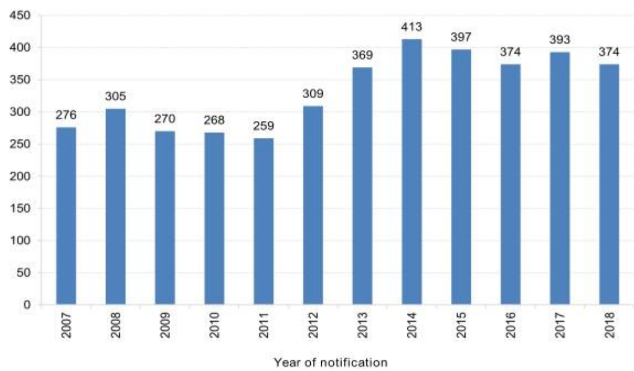
Our selected assumptions are summarised in Section 9.3.

4. Claims Experience: Mesothelioma Claim Numbers

4.1 Overview

The following chart shows the number of mesothelioma claims reported by year of notification.

Figure 4.1: Number of mesothelioma claims reported annually



Note: Throughout Sections 4 to 9, the date convention used in tables and charts is that (for example) 2008/09 indicates the financial year running from 1 April 2008 to 31 March 2009. Furthermore, unless clearly identifying a calendar year, the label "2008" in charts or tables would indicate the financial year running from 1 April 2008 to 31 March 2009.

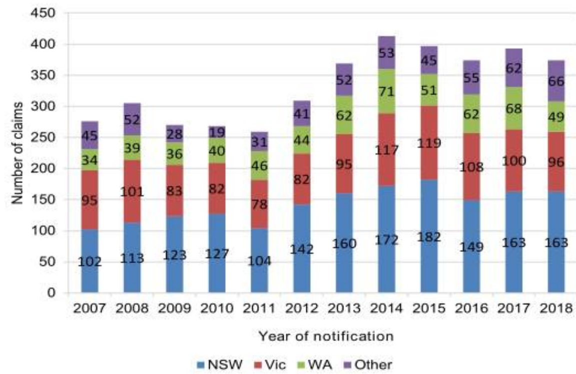
For 2018/19, there were 374 mesothelioma claims reported. This represented a 5% decrease relative to the prior year.

4.2 Profile of mesothelioma claims

4.2.1 Claims by State

We have analysed the number of mesothelioma claim notifications by the State in which the claim is filed.

Figure 4.2: Number of mesothelioma claims by State

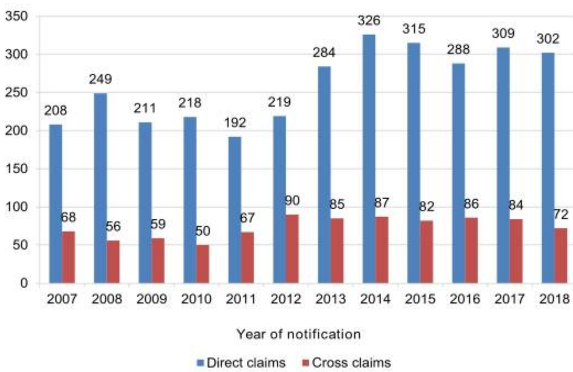


NSW remains the largest State in terms of claims reporting activity for mesothelioma claims.

4.2.2 Direct claims and cross-claims

The following chart shows the number of claims separately as between claims brought by claimants ('direct claims') and claims brought by other defendants ('cross claims').

Figure 4.3: Number of mesothelioma claims by type of claim



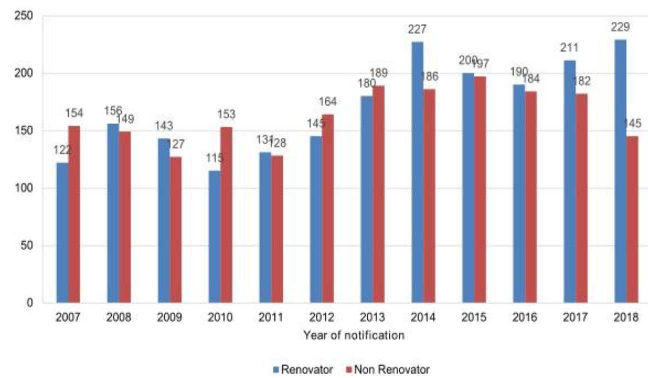
NSW is the primary source of cross claims (making up approximately 50% of all cross claims).

4.2.3 Source of claims

Renovator claims can involve both short periods and long periods of exposure and the definition used in the chart below also includes other family and home exposures (e.g. family members involved in washing clothes of people who were using asbestos products).

The number of renovator claims in 2018/19 has shown a material increase since 2016/17, to the highest level historically observed. This experience has been more than offset by a material reduction in non-renovator claims, which are at their lowest level since 2011/12.

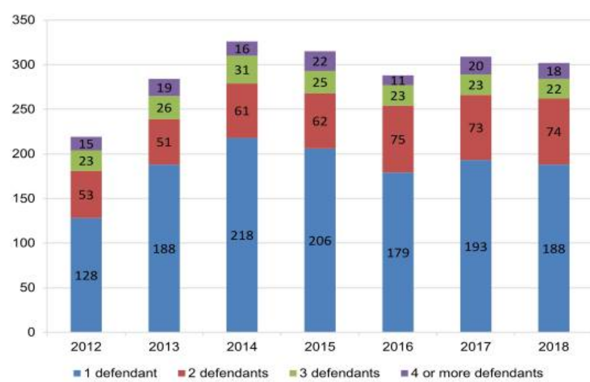
Figure 4.4: Number of mesothelioma claims by source of claim



4.2.4 Number of defendants

The following chart shows the number of claims notified by year of notification and by number of defendants.

Figure 4.5: Number of mesothelioma claims by number of defendants (direct claims only)



The number of claims reported involving only the Liable Entities (i.e. single-defendant claims) showed considerable increases between 2012/13 and 2014/15.

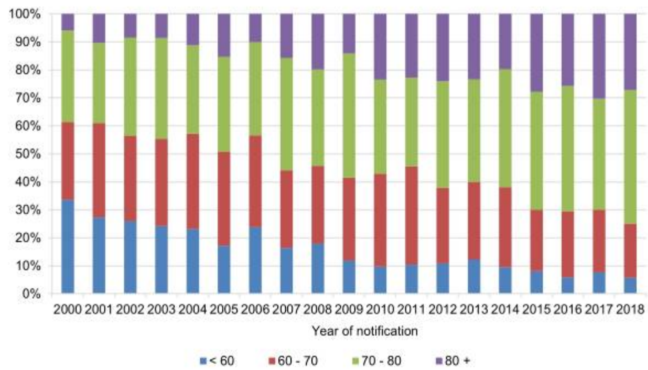
Claims in which the Liable Entities are the only defendants to the claim are typically associated with higher average claim sizes whilst claims involving multiple defendants typically involve the Liable Entities paying 60% or less of the total settlement (see Section 7.2).

This feature is a contributor to the trends in average claim sizes experienced in the last five years.

4.2.5 Age profile of claimants

The following charts show the numbers and proportions of claims reported for each of the four age groups of claimants.

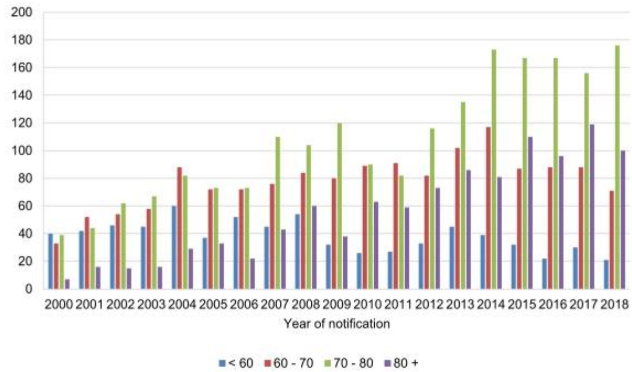
Figure 4.6: Proportion of mesothelioma claims by age of claimant



The proportion of claims reported involving claimants over the age of 70 has gradually increased, evident by the downwards trends in the chart from left to right.

Claimants over the age of 70 years made up approximately 74% of all claims in 2018/19 (276 claims out of 374 claims in total).

Figure 4.7: Number of mesothelioma claims by age of claimant



In absolute terms, the number of claims arising from claimants aged 70 years or older rose by 46% from 189 in 2012/13 to 276 in 2018/19.

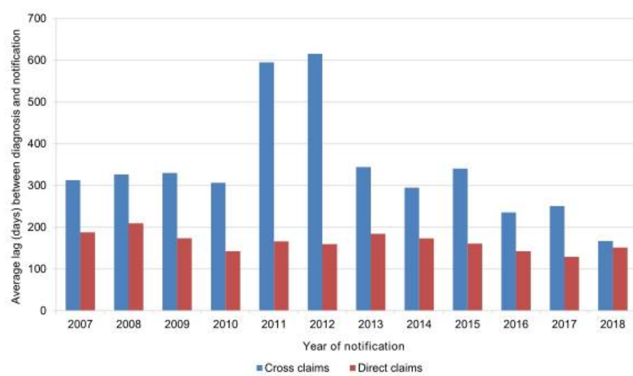
By contrast, the number of claims arising from claimants aged less than 70 years has decreased by 20% from 115 in 2012/13 to 92 in 2018/19.

There are currently 6 claims notified in 2018/19 where the age of claimant is not yet known to the Liable Entities.

4.2.6 Delay from diagnosis to notification

The chart below measures the time-lag (in days) from diagnosis of mesothelioma to notification of a claim against the Liable Entities. Direct claims have typically taken between 5 months and 7 months to be reported after diagnosis of mesothelioma.

Figure 4.8: Delay from diagnosis of mesothelioma to notification of claim against the Liable Entities



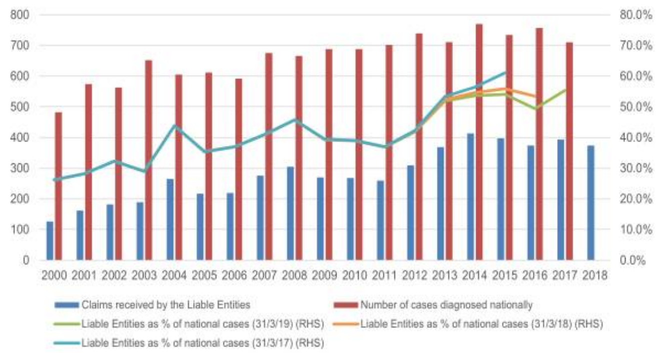
4.3 External statistics on mesothelioma claims incidence

The following chart compares the total number of mesothelioma cases reported (diagnosed) nationally to the number of mesothelioma claims received by the Liable Entities.

It should be noted that the two sets of data correspond to different definitions of year and so are not directly comparable and some caution should be exercised.

The "year" is calendar year for the national cases (i.e. 2012 is the year running from 1 January 2012 to 31 December 2012); whilst for the Liable Entities it is the financial year (i.e. 2012 is the year running from 1 April 2012 to 31 March 2013).

Figure 4.9: Number of mesothelioma cases reported nationally compared to the number of claims received by the Liable Entities



Sources: Australian Cancer Incidence and Mortality book for Mesothelioma, Australian Institute of Health and Welfare, updated February 2018 for 2000-2013

Annual Report of the Australian Mesothelioma Registry for 2014 and onwards

The annual number of mesothelioma cases diagnosed nationally was relatively stable for the period 2007 to 2011 varying between 666 and 702 cases.

In calendar year 2017, the number of cases diagnosed nationally (as currently reported) fell to 710. It should be noted there may be a considerable degree of under-reporting in the 2017 year and, to a lesser extent, the 2016 year, noting that:

- The 2014 year was first reported as 641 and this increased to 732 (as reported in the 2015 Australian Mesothelioma Registry Report), then to 756 (as reported in the 2016 Australian Mesothelioma Registry Report), and now to 770 (as reported in the 2017 Australian Mesothelioma Registry Report).

- The 2015 year was first reported as 650, and this increased to 710 (as reported in the 2016 Australian Mesothelioma Registry Report), and is now 734 (as reported in the 2017 Australian Mesothelioma Registry Report).

These increases in national statistics lead to a lower ratio for the number of Liable Entity claims as a percentage of the number of national cases of mesothelioma. As a consequence the currently estimated 55% for 2017/18 may be over-stated and (if previous experience of initial under-reporting of the number of national cases were to recur) may be more in the order of 50%.

It should be noted that not all cases of mesothelioma result in a claim being brought in Common Law. Furthermore, even if a claim is brought, not all claims will involve the Liable Entities.

In relation to NSW, we have additional information from the Dust Diseases Tribunal (NSW) that indicates what proportion of common law claims the Liable Entities are joined in for NSW.

For the DDB/DDA data, the "year" is financial year (i.e. 2012 is the year running from 1 July 2012 to 30 June 2013). In contrast, in the DDT data, "year" is defined as a calendar year (i.e. 2012 is the year running from 1 January 2012 to 31 December 2012). It should be noted that the four sets of data correspond to different definitions of year and so are not directly comparable and some caution should be exercised.

Figure 4.10: Number of mesothelioma cases reported in NSW

Sources: NSW Central Cancer Registry Reporting Module, 2012 for 2007-2012.
Australian Mesothelioma Registry for 2013-2017.
Insurance and Care NSW Annual Report 2017-18.
DDT statistics provided by the State of New South Wales

The chart shows that whilst the number of NSW cases of mesothelioma has been relatively stable, other than the 12% increase in 2016 and the consequential reduction in 2017, the number of common law DDT cases has risen by 45% between 2007 and 2017. The Liable Entities have experienced a broadly similar rate of growth.

The data would appear to indicate that the Liable Entities are not being increasingly joined in common law claims in NSW, nor that there is necessarily an increasing prevalence of mesothelioma in NSW, but rather that the proportion of people being diagnosed who then bring a common law claim is the primary factor leading to the increases in claim numbers that have been observed in the last ten years (i.e. there has been an increase in the propensity to claim).

The chart below shows the mix of national cases by age. The data shows a broadly similar pattern to AICF's own experience (see Figure 4.6), with the proportion of cases relating to people under 70 years of age trending down and currently comprising around 30% of all cases.

Figure 4.11: Age profile of mesothelioma cases nationally

Sources: Australian Institute of Health and Welfare; Australian Mesothelioma Registry Report

Note: Data by age cohort for 2017 was not published in the 2017 Australian Mesothelioma Registry Report

4.4 Base valuation assumption for number of mesothelioma claims

The actual claims reporting experience in 2018/19 has been 4% favourable compared to expectations for 2018/19 in relation to overall mesothelioma claim numbers.

In relation to the mix of claims by age cohort, this has also been slightly favourable compared to expectations, as illustrated in the table below.

Table 4.1: Mix of claims by age cohort

	FY19 Actual	FY19 Expected	FY18 Actual
Mesothelioma: all ages			
<60	5.6%	8.5%	7.6%
60-70	19.0%	23.5%	22.4%
70-80	47.1%	41.0%	39.7%
80+	26.7%	27.0%	30.3%
age not known	1.6%	0.0%	0.0%

In this context, and noting that 2018/19 was the first year in which our new valuation model had been used, we consider that at this year-end it is appropriate to make no changes either to the overall claim numbers projection or to the mix by age cohort, relative to the model we adopted at 31 March 2018.

The assumption for 2019/20 has therefore been set at 378 claims.

The assumptions for the mix of claims by age cohort is as shown in the table below.

Table 4.2: Assumed mix of claims by age cohort for 2019/20

	FY20 Assumption	FY19 Actual
Mesothelioma: all ages		
<60	7.4%	5.6%
60-70	22.7%	19.0%
70-80	42.0%	47.1%
80+	27.9%	26.7%
age not known	0.0%	1.6%

4.5 Inherent uncertainties in the future number of mesothelioma claims

There remain material uncertainties in relation to the base level of claims reporting and the total future number of mesothelioma claims to be reported against the Liable Entities.

It is possible that claims reporting activity could increase next year, or fall next year.

There remain uncertainties in relation to the peak period of claims reporting for mesothelioma. Our valuation modelling approach, together with the assumption of 378 claims for 2019/20 continues to assume (or imply) that the peak period of claims reporting for mesothelioma was from 1 April 2014 to 31 March 2017.

There also remain material uncertainties as to the pace at which future claims reporting will reduce ("the decay rate") as well as the rate of co-joining of the Liable Entities in common law claims.

Depending on the outcome of future experience, further changes to the valuation assumptions and therefore to the valuation results may be necessary in future periods. Such changes could be material.

As a consequence of the above noted uncertainties, further volatility in relation to the valuation result should be anticipated.

Section 11 of our Report provides an indication of the sensitivity of the valuation result to the peak period and the decay rate of mesothelioma claims reporting after 2019/20.

5. Claims Experience: Claim numbers (non-mesothelioma)

5.1 Overview

The table below shows the number of claims reported by year of notification and by disease category.

Table 5.1: Number of claims by disease type

Year of notification	Asbestosis	Lung Cancer	ARPD & Other	Wharf	Workers
2007	171	28	43	8	46
2008	163	40	44	11	59
2009	120	40	43	3	61
2010	140	13	36	9	30
2011	110	15	36	6	30
2012	128	33	38	7	27
2013	117	26	49	15	32
2014	143	25	39	11	34
2015	91	19	30	11	29
2016	97	18	33	11	24
2017	85	26	30	8	20
2018	105	16	39	13	21
2007-2018	1,470	299	460	113	413
All Years	2,483	648	829	243	1,426

5.2 Asbestosis claims

For asbestosis, the most recent four years of claims reporting have averaged 95 claims.

This is in contrast to the previous four years which averaged 125 claims.

In selecting our assumption for 2019/20, we have (in broad terms) taken the average of the last three years as a base level.

We have assumed 96 asbestosis claims will be reported in 2019/20.

5.3 Lung cancer claims

The number of lung cancer claims reported has typically been between 15 and 35 claims per annum.

In 2015/16 and 2016/17, the number of claims reported fell to 19 and 18 respectively, followed by an increase to 26 claims in 2017/18.

In 2018/19, there were 16 claims reported.

We have assumed 21 lung cancer claims will be reported in 2019/20.

5.4 ARPD & Other claims

The number of ARPD & Other claims has averaged 34 claims from 2014/15 to 2018/19. This is in contrast to the previous three years (2011/12 to 2013/14) which averaged 41 claims.

In selecting our assumption for 2019/20, we have (in broad terms) taken the average of the last three years as a base level.

We have assumed 33 ARPD & Other claims will be reported in 2019/20.

5.5 Workers Compensation claims

The number of Workers Compensation claims, including those met in full by the Liable Entities' Workers Compensation insurers, has historically exhibited some degree of volatility. However claims reporting activity has been relatively stable for the last nine years, albeit showing a reduction to 20 claims in 2017/18. In 2018/19, there were 21 claims reported.

We have assumed 24 Workers Compensation claims will be reported in 2019/20.

It should be noted that the financial impact of this source of claim is not substantial to the Liable Entities given the proportion of claims which are settled for nil liability against the Liable Entities (typically above 90%), which results from the insurance arrangements in place.

5.6 Wharf claims

For Wharf claims, there were 13 claims reported in 2018/19, 8 claims reported in 2017/18 and 11 claims were reported in each of the previous three years.

We have assumed 12 claims will be notified in 2019/20.

Again, the financial impact of this source of claim is not currently significant.

5.7 Summary of base claims numbers assumptions (including mesothelioma)

As outlined in Sections 4 and 5, our assumptions as to the number of claims to be reported in 2019/20 are as follows:

Table 5.2: Claim numbers experience and assumptions for 2019/20

	FY18 actual	FY19 actual	FY19 expected	FY20 assumption
Mesothelioma	393	374	390	378
Asbestosis	85	105	96	96
Lung Cancer	26	16	24	21
ARPD & Other	30	39	30	33
Wharf	8	13	12	12
Worker	20	21	24	24
Total	562	568	576	564

FY19 Expected is the assumption selected for 2018/19 in our previous valuation report.

5.8 Baryulgil

Almost half of the claims settled which relate to asbestos mining activities at Baryulgil (as discussed previously in Section 1.2.3) have been settled with no liability against the Liable Entities; and for the remaining settled claims, the Liable Entities have typically borne one-third to one-half of the settlement amount, reflecting the contribution by other defendants to the overall settlement (including those which have since been placed in liquidation).

For the purposes of our valuation, we have estimated there to be 9 future claims reported, comprising 6 mesothelioma claims and 3 non-mesothelioma claims.

We have assumed average claims and legal costs broadly in line with those described in Section 7.

Our projected liability assessment at 31 March 2019 of the additional provision (for claims not yet reported) that could potentially be required is an undiscounted liability of $2.5m and a discounted liability of $2.3m, all of which is deemed to be a liability of Amaca.

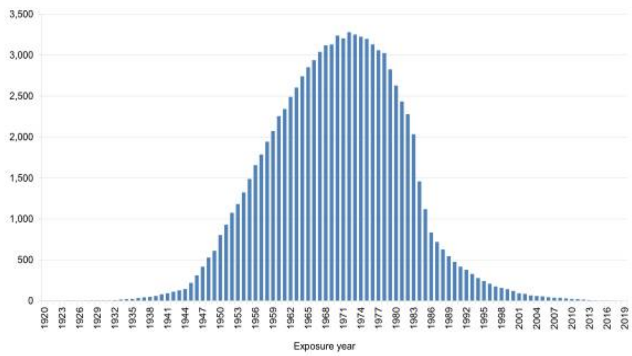
6. Exposure and Latency Experience and Incidence Pattern Assumptions

6.1 Mesothelioma claims experience

6.1.1 Exposure information from claims notified to date

We have reviewed the actual exposure information available for claims notified to date. This has been conducted by using the exposure dates stored in the claims database at an individual claim level and identifying the number of person-years of exposure in each exposure year.

Figure 6.1: Exposure (person-years) of all Liable Entities' mesothelioma claimants to date



The chart shows that, currently, the peak year of exposure for claims reported to date is in 1972.

It should be recognised that there is a degree of bias in this analysis in that the claims notified to date will tend to have arisen from the earlier periods of exposure.

Over time, we expect the right-hand side of this curve to develop and the peak year of exposure to trend towards the early-1970s to mid-1970s, and an increase in the absolute level at all periods of exposure as more claims are notified and the associated exposures from these are included in the analysis.

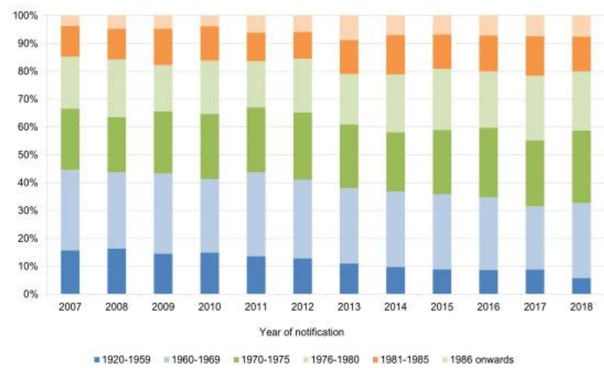
The relatively low level of exposure from 1987 onwards (about 5% of the total) is not unexpected given that all asbestos products ceased being manufactured by the Liable Entities by 1987. The exposure after that date likely results from usage of products already produced and sold before that date.

The chart above is a cumulative chart of the position to date and does not show temporal trends in the allocation of claims to exposure years.

For example, one would expect that more recently reported claims should be associated with, on average, later exposures; and that claims reported in future years would continue that trend towards later exposure periods.

To understand better these temporal trends, we have modelled claimants' exposures for each past claim report year.

Figure 6.2: Exposure (person years) of all mesothelioma claimants to date by report year and exposure period



As can be seen in the chart above, there has been a general increasing shift towards the exposure period after 1970, evident by the downwards trends in the chart from left to right indicating that an increasing proportion of the claimants' exposure relates to more recent exposure periods.

For example, pre-1970 exposures made up approximately 45% of mesothelioma claims exposures in 2007/08 but less than 33% of claims exposures in 2018/19.

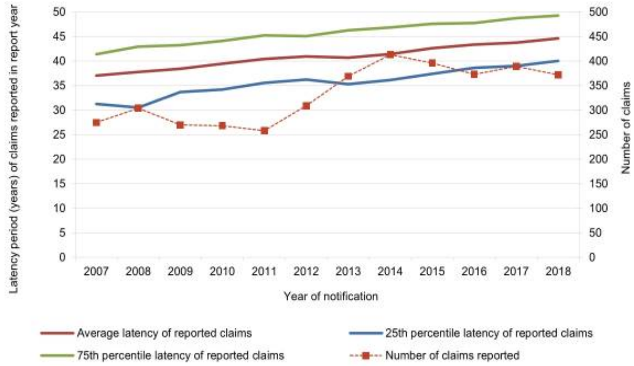
We would expect that such a trend (towards claims emerging from later exposure periods) should continue for some time to come.

6.1.2 Latency period of reported claims

We have analysed the actual latency period of the reported claims of the Liable Entities. In the charts that follow, we have measured the average actual latency period from the average date of exposure to the date of notification of a claim.

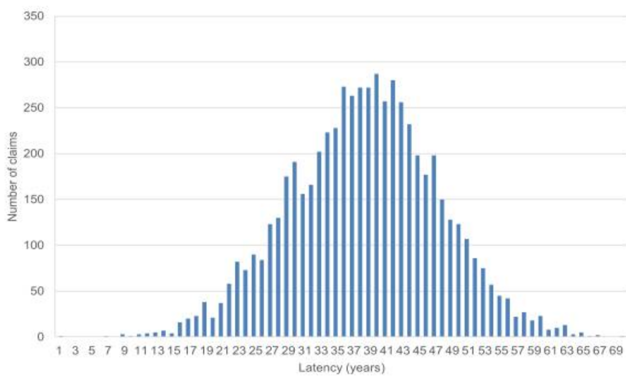
The chart below shows the average latency observed for mesothelioma claims and the 25th percentile and 75th percentile observations.

Figure 6.3: Latency of mesothelioma claims



The above chart indicates that the observed average latency period from the average exposure is currently approximately 45 years for mesothelioma, and has shown an increase over time.

Figure 6.4: Latency distribution of mesothelioma claims (all years)



Our latency model assumes a "normal distribution" and the chart above seems to (in broad terms) support that assumption at this time, with both the mean latency to date and the median latency to date being 39 years and the mode of the latency being 40 years.

Over the past ten years, the observed average latency of mesothelioma claims reported in a report year has increased from 38 years to 45 years, increasing at a rate of about 0.7 years with every year that passes.

The observed average latency of claims reported in future report years should also be expected to show a further upward trend in the coming years.

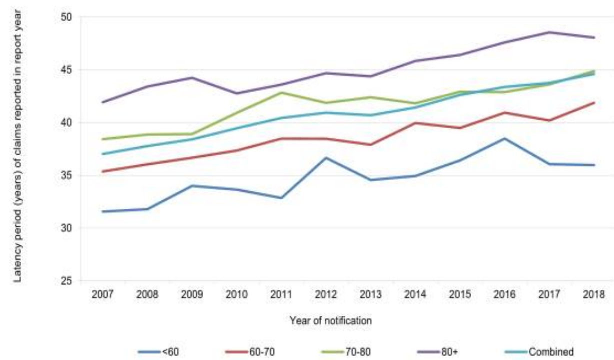
The currently observed standard deviation of the latency period is 9 years.

Some of the increase in average reported latencies over time has been a consequence of the changing mix of claims by age of claimant. Older claimants are typically associated with longer latencies.

As discussed elsewhere in this report, the proportion of claims arising from older age groups has been increasing.

The following chart shows how the average reported latencies vary between each of the age groups.

Figure 6.5: Latency of mesothelioma claims by age of claimant



The claims experience to date and the assumptions selected seem to broadly accord with epidemiological research in relation to mesothelioma, once the relevant adjustments to standardise onto a consistent terminology are made.

Our latency model for mesothelioma from first exposure assumes a mean latency of 40 years and a standard deviation of 9 years.

An indication of how different assumptions would affect the incidence curve and therefore the number of IBNR claims is as follows:

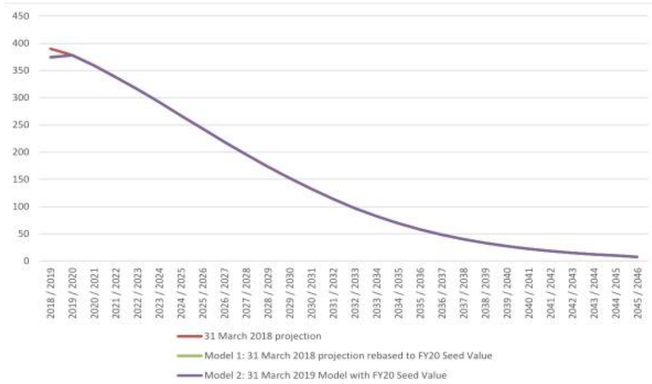
- A higher mean latency period would increase the peak period of claims reporting and would give rise to a higher number of IBNR claims.
- A lower standard deviation would lead to a faster decay in the number of claims being reported after the peak period of claims reporting and would give rise to a lower number of IBNR claims.

6.2 Mesothelioma incidence patterns

6.2.1 Overall future incidence pattern and IBNR claim numbers

The following chart shows the pattern of future notifications which have resulted from the application of our methodology.

Figure 6.6: Projected future claim notifications for mesothelioma



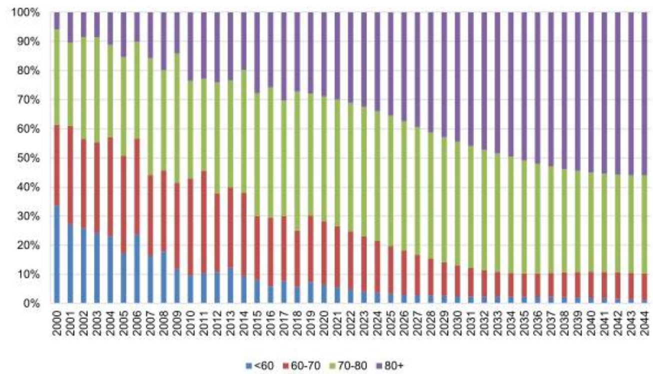
6.2.2 Assumed change in future mix of claims by claimant age

Based on the actual mix of claims by claimant age, we have assumed a mix of claims by claimant age for 2019/20 as follows:

- 7.4% for ages less than 60,
- 22.7% for ages 60-70,
- 42.0% for ages 70-80, and
- 27.9% for ages over 80.

The following chart shows the change in mix of claims by claimant age over time both historically and projected into the future periods.

Figure 6.7: Mix of claims by claimant age for mesothelioma



6.2.3 Inherent uncertainty in future mesothelioma claims reporting

Should mesothelioma claims reporting escalate in future periods, further valuation responses in future years may be necessary.

Additionally, should the mix of claims by claimant age change relative to that assumed, the overall average claim sizes emerging would differ from expected and this might lead to further valuation responses.

6.3 Non-mesothelioma experience

6.3.1 Latency period of reported claims

The trend in latency periods for other disease types is shown in the following charts.

Figure 6.8: Latency of asbestosis claims

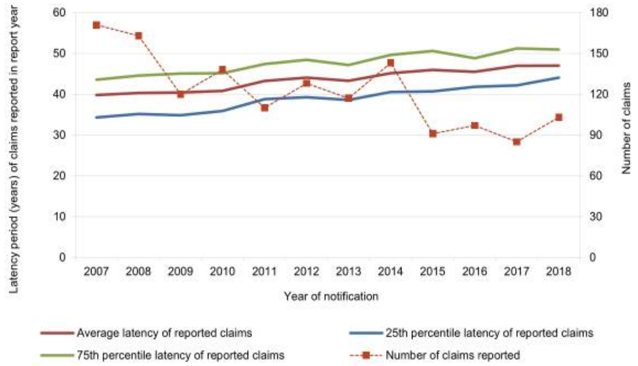


Figure 6.9: Latency of lung cancer claims

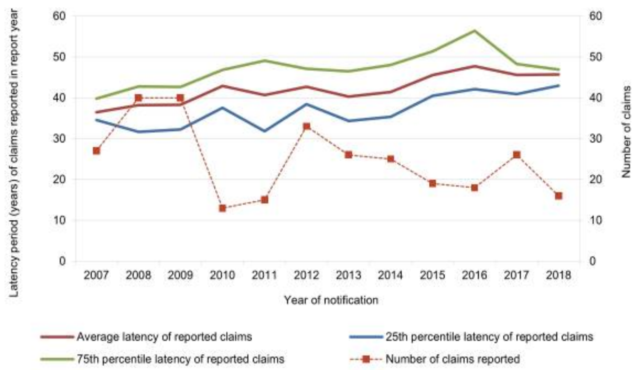
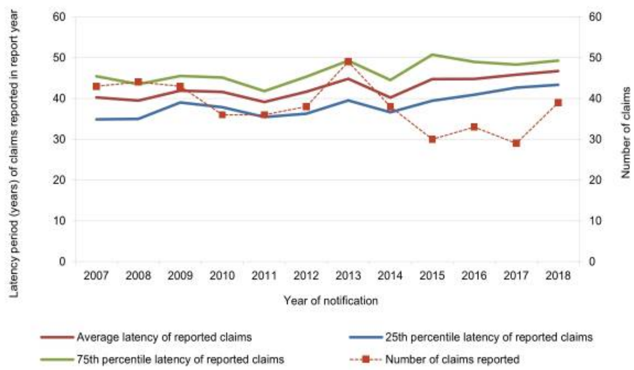


Figure 6.10: Latency of ARPD & Other claims



The average observed latency periods for the other disease types show a more surprising trend, appearing to be longer than epidemiological literature has tended to suggest.

A summary of our underlying latency assumptions by disease type are shown below. The mean and standard deviation values quoted are applied to a normal distribution model for the latency period.

Table 6.1: Assumed underlying latency distribution parameters from average date of exposure to date of notification

	Mean latency (years)	Standard deviation of latency (years)
Asbestosis	35	8
Lung Cancer	35	10
ARPD & Other	32	10
Wharf	n/a	n/a
Workers compensation	n/a	n/a

These assumptions are unchanged from the previous valuation.

6.3.2 Modelled assumptions for peak year of claim incidence

Based on the application of our exposure model and our latency model, and the assumptions contained explicitly or implicitly within those models, the peak year of notification of claims reporting against the Liable Entities for each disease type (excluding mesothelioma) is modelled to be as follows:

Table 6.2: Modelled peak year of claim notifications

	Current valuation	Previous valuation
Asbestosis	2008/09	2008/09
Lung Cancer	2010/11	2010/11
ARPD & Other	2007/08	2007/08
Wharf	2008/09	2008/09
Workers Compensation	2007/08	2007/08

These modelled assumptions are unchanged and reflect no changes to the exposure data and no changes to the latency model assumptions at this time.

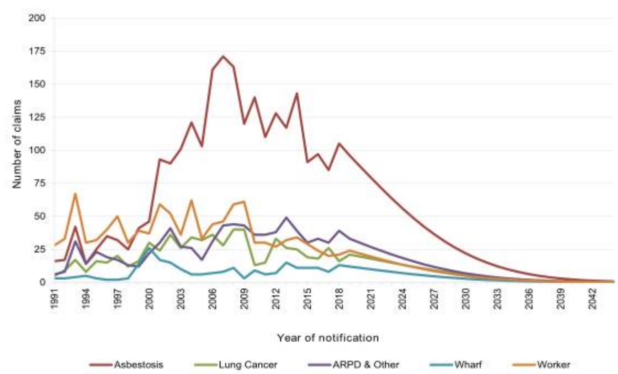
We note that whilst the "modelled peak" derived from our model is as shown above, this does not automatically translate to, nor does it imply that, the "highest claims reporting year" will be those years. This is because variation from year to year is expected due to normal 'statistical variation' in claim numbers.

6.3.3 Projected incidence patterns

We have projected the future number of claim notifications from the curve we have derived using our exposure model and our latency model. We have applied this curve to the base number of claims we have estimated for each disease type for 2019/20 as summarised in Section 5.7.

The following chart shows the pattern of future notifications which have resulted from the application of our exposure and latency model and the recalibration of the curve to our revised expectations of claims reporting activity for 2019/20.

Figure 6.11: Projected future claim notifications for other disease types



7. Claims Experience: Average Claims and Legal Costs

7.1 Overview

We have analysed the average claim awards, average plaintiff/other costs and average defendant legal costs by disease type in arriving at our valuation assumptions.

The table below shows how the average settlement cost for non-nil attritional (i.e. non-large) claims has varied by settlement year. All data have been converted into mid 2018/19 money terms using a historical base inflation index of 4% per annum.

We refer to these amounts as "inflated average attritional awards" in the charts and tables that follow.

The average amounts shown hereafter relate to the average amount of the contribution made by the Liable Entities, and does not reflect the total award payable to the plaintiff unless this is clearly stated to be the case.

In particular, for Workers Compensation the average award reflects the average contribution by the Liable Entities for claims in which they are joined but relates only to that amount of the award determined against the Liable Entities which is not met by a Workers Compensation Scheme or Policy.

Table 7.1: Average attritional non-nil claim award (inflated to mid 2018/19 money terms)

Settlement Year	Mesothelioma	Asbestosis	Lung Cancer	ARPD & Other	Wharf	Workers Compensation
2007	347,492	120,471	168,993	72,638	72,825	402,457
2008	394,400	126,916	124,937	132,508	214,128	81,413
2009	352,027	142,566	144,486	125,619	83,788	142,995
2010	357,896	116,800	187,825	98,791	54,005	0
2011	376,431	143,689	164,547	128,457	100,129	1,184,339
2012	370,753	155,040	147,995	109,889	44,520	107,552
2013	379,523	120,199	126,191	118,390	126,308	24,333
2014	352,670	116,193	157,068	83,742	93,617	81,890
2015	333,104	113,161	130,864	116,000	151,603	0
2016	298,417	84,919	44,137	79,011	39,908	0
2017	314,499	108,978	121,695	68,632	81,815	251,333
2018	318,479	90,985	75,154	108,979	55,329	0

7.2 Mesothelioma claims

7.2.1 Overall average claim sizes

The chart below shows the average claim size for non-nil, non-large claims inflated to mid 2018/19 money terms.

Figure 7.1: Average attritional awards (inflated to mid 2018/19 money terms) and number of non-nil claims settlements for mesothelioma claims (excluding large claims)

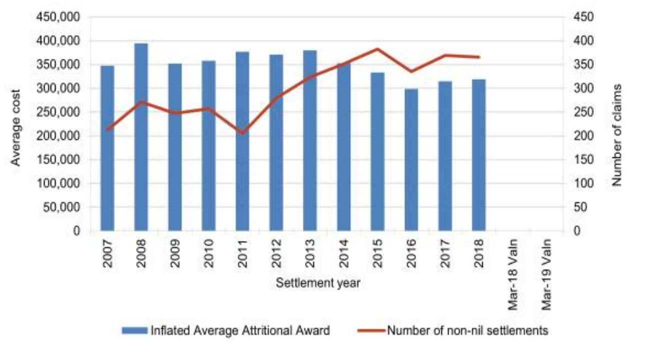
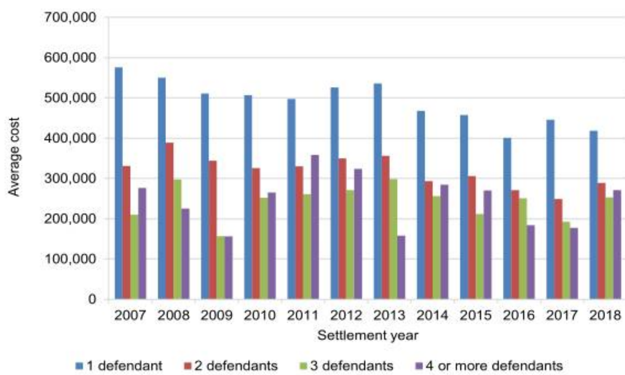


Figure 7.2: Average attritional awards (inflated to mid 2018/19 money terms) by number of defendants for direct claims

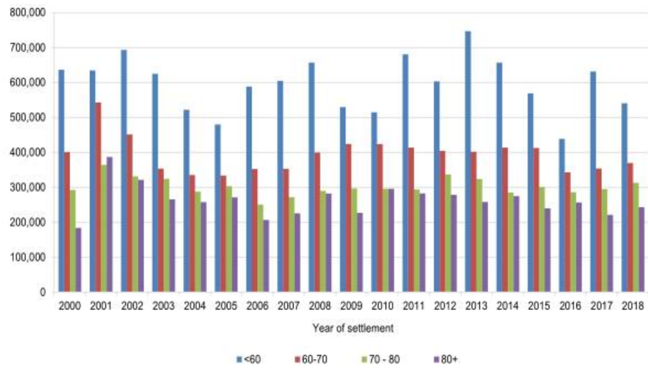


Single-defendant are the most prevalent claims for the Liable Entities (making up more than 50% of all claims). The claims experience for single-defendant claims (where the Liable Entities pay 100% of the award) has been relatively stable for last five years. The variability in average claim size for claims involving 3 or more defendants is reflective of the small numbers of such claims.

7.2.2 Claim sizes by age of claimant

The following chart shows that there is a significant difference between the average costs of claims for different age groups.

Figure 7.3: Average attritional awards (inflated to mid 2018/19 money terms) by age of claimant



The key factor that has led to claim sizes reducing over time (as shown in Figure 7.1) has been the increasing proportion of claims that have emerged from claimants over the age of 80 and the reduction in the proportion of claims emerging from claimants under the age of 60.

7.2.3 Claim size assumptions by age of claimant

For claimants under the age of 60:

- The last three years have averaged $552,000; the last four years have averaged $558,000; the last five years have averaged $582,000. The last six years have averaged $620,000.
- The average size for 2017/18 was $631,000.
- The average size for 2018/19 was $540,000.
- The three-year and four-year averages are particularly impacted by the extremely favourable experience in 2016/17.
- We have taken a longer-term view noting the smaller numbers of claims in this age group and because it appears that the experience in 2016/17 was aberationally low.
- We have therefore selected an assumption of $620,000.

For claimants aged 60-70:

- The last three years have averaged $355,000; the last four years have averaged $372,000; the last five years have averaged $382,000.
- The most recent three years have been particularly favourable relative to the preceding seven years.

- The average size for 2018/19 was $370,000.
- We have taken a longer-term view noting the smaller numbers of claims in this age group.
- We have therefore selected an assumption of $380,000.

For claimants aged 70-80:

- The last three years have averaged $298,000; the last four years have averaged $299,000; the last five years have averaged $296,000.
- The average size for 2018/19 was $313,000 and was 4% above expectations.
- This segment is the largest segment by both number of claims and total expenditure.
- We have therefore selected an assumption of $310,000.

For claimants aged 80+:

- The last three years have averaged $240,000; the last four years have averaged $240,000; the last five years have averaged $245,000.
- These averages are all affected by the unusually favourable experience in 2017/18 which has not recurred in 2018/19.
- The average size for 2018/19 was $243,000.
- We have therefore selected an assumption of $250,000.

7.2.4 Additional allowance for potential costs from overseas exposures (*Talifero vs Amaca)*

We have made an additional allowance for 2019/20 of $6,000 per mesothelioma claim (this amount has been applied across all mesothelioma claims) to allow for the potential costs arising from overseas exposures consequent to the decision in *Talifero vs Amaca*. We have then applied that assumption (with wage and superimposed inflation) for future years.

In determining our assumption, we have received data from AICF indicating the volume of claims that have involved overseas exposures and the amounts of monies that have not been paid that related to overseas exposures.

Historically, there have recently been approximately 20 mesothelioma claims per annum that have involved overseas exposures.

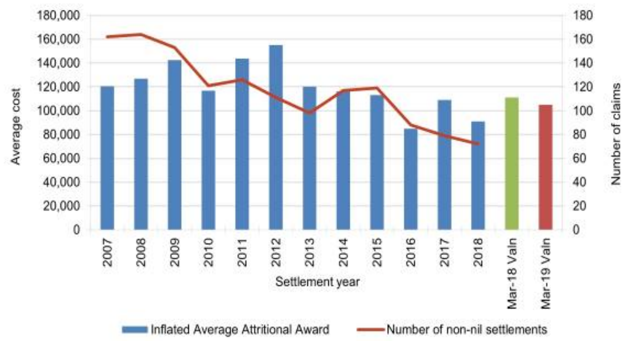
The amounts of awards that have not been paid but that relate to overseas exposures have been more variable and can vary from $10,000 to $400,000 depending on the specific circumstances of asbestos exposure for the individual.

Our per-claim adjustment is only applied to mesothelioma claims.

7.3 Asbestosis claims

For asbestosis, it can be seen from Table 7.1 that the period since 2007/08 has had volatile average claim size experience, with average claim sizes ranging from $85,000 to $155,000 (in mid 2018/19 money terms).

Figure 7.4: Average awards (inflated to mid 2018/19 money terms) and number of non-nil claims settlements for asbestosis claims



The average of the past three years is $95,000; the average of the past four years is $101,000 and the average of the past five years is $105,000.

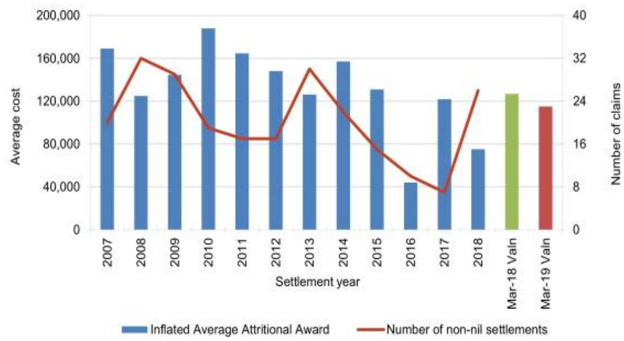
In setting an assumption, we also note there has been one asbestosis claim settled as a "large claim" and is not shown in the above analysis.

Taking all of the above factors into consideration, we have adopted a valuation assumption of $105,000 for asbestosis claims in mid 2018/19 money terms. This assumption represents a 5% decrease in inflation-adjusted terms.

7.4 Lung cancer claims

The average award for lung cancer claims has exhibited some volatility in the past five years, although this is not unexpected given the small volume of claim settlements (approximately 10 to 30 claims per annum).

Figure 7.5: Average awards (inflated to mid 2018/19 money terms) and number of non-nil claims settlements for lung cancer claims



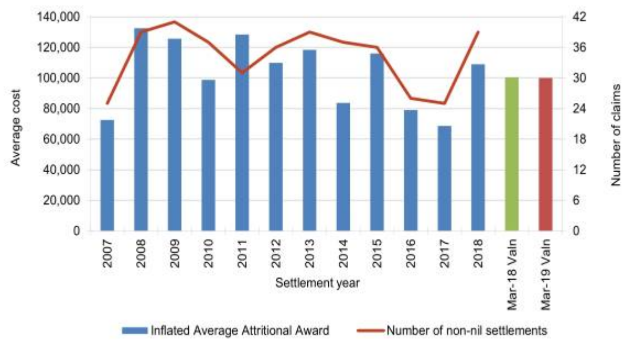
The average of the past three years is $76,000; the average of the past four years is $90,000 and the average of the past five years is $108,000. Each of these have been impacted by the extremely favourable average claims size experience in 2016/17.

Taking all of the above factors into consideration, we have adopted a valuation assumption of $115,000. This assumption represents a decrease of 9% in inflation-adjusted terms from our previous assumption.

7.5 ARPD & Other claims

The average award size has shown considerable volatility and three of the last five years have seen some of the lowest average claim sizes historically observed.

Figure 7.6: Average awards (inflated to mid 2018/19 money terms) and number of non-nil claims settlements for ARPD & Other claims



The average of the past three years is $89,000; the average of the past four years is $97,000 and the average of the past five years is $94,000. Each of these is affected by the unusually favourable experience in 2017/18.

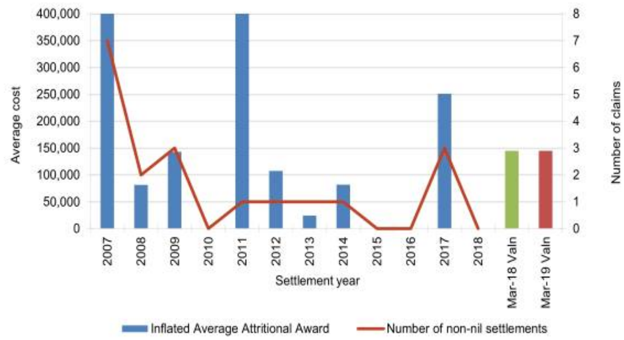
The 2018/19 year had an average claim size of $109,000.

Taking all of the above factors into consideration, we have adopted a valuation assumption of $100,000 for ARPD & Other claims in mid 2018/19 money terms. This assumption represents no change in inflation-adjusted terms from our previous assumption.

7.6 Workers Compensation claims

The average award for non-nil Workers Compensation claims has shown a large degree of volatility, reflecting the small number of non-nil claims.

Figure 7.7: Average awards (inflated to mid 2018/19 money terms) and number of non-nil claims settlements for Workers Compensation claims



It should be noted that the high average claim size in 2011/12 is due to one claim of $900,000 (in 2011/12 values). Furthermore, we understand that this claim payment was able to be recovered from the workers compensation insurer at a later date.

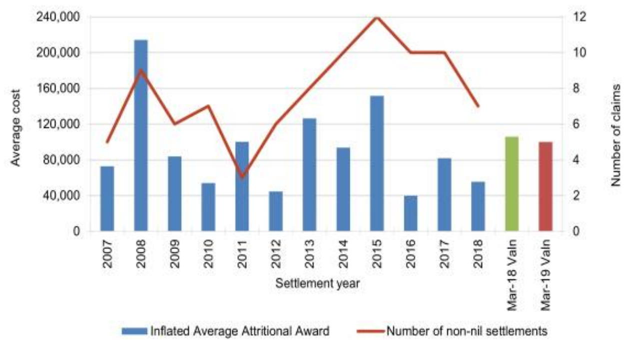
In the absence of any new information, given there were no non-nil claims settled in 2018/19, we have maintained our inflation-adjusted previous valuation assumption of $145,000.

This assumption is not material to the overall liability given the high proportion of claims (in excess of 90%) which are settled with no retained liability against the Liable Entities.

7.7 Wharf claims

For wharf claims, the average of the past three years has been $59,000; the average of the past four years has been $88,000 and the average of the past five years has been $89,000.

Figure 7.8: Average awards (inflated to mid 2018/19 money terms) and number of non-nil claims settlements for wharf claims



The experience in 2008/09 was impacted by one large claim of almost $600,000 (in 2008/09 values).

At this valuation, we have adopted a valuation assumption of $100,000 in mid 2018/19 money terms. This assumption represents a 5% decrease compared to our previous valuation in inflation-adjusted terms.

Given the small volume of wharf claims, this assumption is not financially significant to the overall results.

7.8 Mesothelioma large claim size and incidence rates

There have been 68 mesothelioma claims settled with awards in excess of $1m in 2006/07 money terms.

In aggregate these claims have been settled at an average cost of approximately $2.39m. There have been two claims of more than $6.0m each in mid 2018/19 money terms.

In selecting a large claim incidence rate, or expected annual number of large claims, we have analysed the number of large claims by year of notification, separately for each of the four age groups.

We have also shown the incidence rate of large claims for each of the age groups.

Figure 7.9: Number of large claims by year of notification

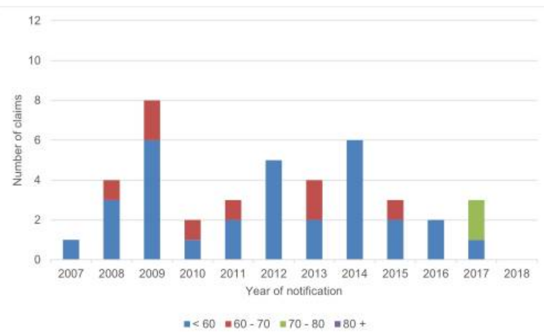
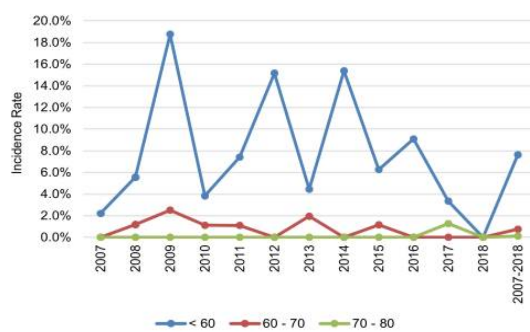


Figure 7.10: Large claims incidence rate by age of claimant



There have been no large claims for claimants over the age of 80.

We have assumed a future large claim incidence rate of 9.00% for claimants under 60 years of age, 1.00% for claimants between 60 and 70 years of age, and 0.10% for claimants between 70 and 80 years of age.

For the average large claim size, we have adopted a valuation assumption of $2.35m in mid 2018/19 money terms and we have adopted the same average claim size for all age groups. This is based on analysis that shows minimal variation in average claim size for large claims between claimants in each of the age cohorts

In relation to legal costs, we have made an additional allowance for plaintiff legal costs to allow for those instances where such costs are made additional to, rather than included with, the claims award and also for defence costs.

The actual incidence of, and settlement of, large claims is not readily predictable and therefore deviations will occur from year to year due to random fluctuations because of the small numbers of large claims (between 1 and 8 large claims per annum).

For other disease types, we observe that there has been (in 2014/15) one asbestosis claim which exceeds the "large claims threshold". We have made implicit allowance for this claim in setting our attritional claim size assumption for that disease type.

7.9 Summary average claim cost assumptions

The following table provides a summary of our average claim cost assumptions at this valuation, and those assumed at the previous valuation.

Table 7.2: Summary average claim cost assumptions

	Current Valuation	Previous Valuation	% change
Mesothelioma: <60	620,000	634,500	-2%
Mesothelioma: 60-70	380,000	396,563	-4%
Mesothelioma: 70-80	310,000	301,388	3%
Mesothelioma: 80+	250,000	248,513	1%
Asbestosis	105,000	111,038	-5%
Lung Cancer	115,000	126,900	-9%
ARPD & Other	100,000	100,463	0%
Wharf	100,000	105,750	-5%
Workers Compensation	145,000	144,878	0%
Mesothelioma Large Claims (award only)	Average Size: $2.35m. Frequency: 9.00% (<60), 1.00% (60-70), 0.1% (70-80)	Average Size: $2.36m. Frequency: 9.00% (<60), 1.00% (60-70), 0.1% (70-80)	

Note: Both the current valuation assumption and the previous valuation assumption are expressed in mid 2018/19 money terms.

Note: Current valuation assumptions for Mesothelioma in the above table do not include the additional $6,000 per claim allowance for overseas exposures per the decision in Talifero vs Amaca.

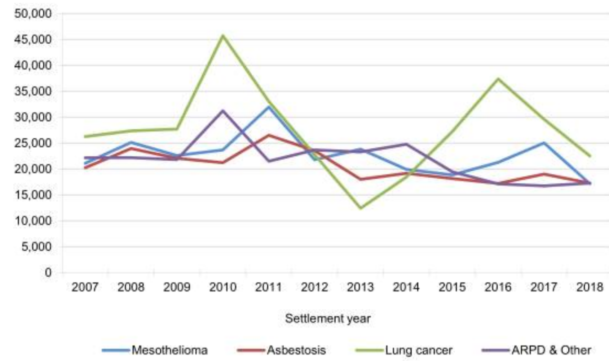
7.10 Defence legal costs

7.10.1 Non-nil claims

The average defence legal costs for non-nil claims by settlement year have been relatively stable over the last ten years for mesothelioma, asbestosis and ARPD & Other.

The average defence costs for lung cancer have shown a greater degree of variability, although this is not unexpected given the small volume of claim settlements (approximately 10 to 30 claims per annum).

Figure 7.11: Average defence legal costs (inflated to mid 2018/19 money terms) for non-nil claims settlements by settlement year



Note: The chart does not include average defence costs for Wharf and Worker claims due to the smaller number of claims involved and the variability that exists as a consequence.

7.10.2 Large claims

The average defence legal costs across all large claims to date has been $162,000 although this has generally been trending downwards over time.

We have allowed for defence legal costs of $105,000 per large claim having regard to more recent experience.

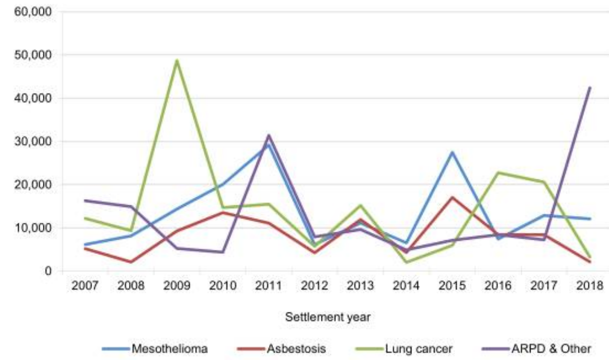
7.10.3 Nil claims

The average defence legal costs for nil claims by settlement year has been volatile for all disease types.

For mesothelioma, the volatility is a consequence of low nil settlement rate, meaning that there may be 20 to 30 nil claims in any year.

For the other disease types, the number of nil claims might typically be of the order of 10 claims per annum for each disease type.

Figure 7.12: Average defence legal costs (inflated to mid 2018/19 money terms) for nil claims settlements by settlement year



Note: The chart does not include average defence costs for Wharf and Worker claims due to the smaller number of claims involved and the variability that exists as a consequence.

7.11 Summary average defendant legal costs assumptions

The following table provides a summary of our defendant legal costs assumptions at this valuation, and those assumed at the previous valuation.

We have adopted different legal cost assumptions for mesothelioma for the four age groups, based on analysis which indicates there is variation (which in part will be related to the average size of claims in each age group).

Table 7.3: Summary average defendant legal costs assumptions

	Current Valuation		Previous Valuation	
	Non Nil Claims	Nil Claims	Non Nil Claims	Nil Claims
Mesothelioma: <60	34,000	30,000	33,200	31,125
Mesothelioma: 60-70	23,000	11,000	22,825	11,413
Mesothelioma: 70-80	20,000	11,000	19,713	11,413
Mesothelioma: 80+	18,000	11,000	17,638	11,413
Asbestosis	18,000	8,000	18,156	9,338
Lung Cancer	25,000	15,000	25,938	15,563
ARPD & Other	18,000	10,000	18,675	8,300
Wharf	15,000	5,000	15,563	5,188
Workers Compensation	15,000	1,000	15,563	1,038
Mesothelioma Large	105,000	0	103,750	0

Note: Both the current valuation assumption and the previous valuation assumption are expressed in mid 2018/19 money terms.

8. Claims Experience: Nil Settlement Rates

8.1 Overview

We have analysed the nil settlement rates, being the number of nil settlements expressed as a percentage of the total number of settlements (nil and non-nil).

The table below shows the observed nil settlement rates by disease type and by settlement year.

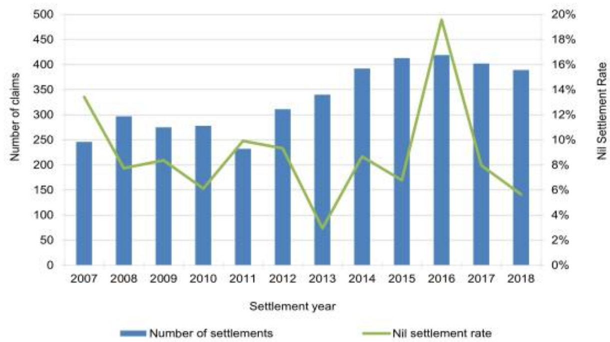
Table 8.1: Nil settlement rates

Settlement Year	Mesothelioma	Asbestosis	Lung Cancer	ARPD & Other	Wharf	Workers Compensation
2007	13%	9%	31%	19%	72%	85%
2008	8%	9%	24%	13%	0%	95%
2009	8%	8%	29%	2%	14%	83%
2010	6%	6%	41%	14%	0%	100%
2011	10%	7%	32%	11%	0%	67%
2012	9%	16%	23%	20%	40%	99%
2013	3%	8%	3%	13%	20%	99%
2014	9%	11%	12%	8%	9%	97%
2015	7%	6%	25%	8%	8%	100%
2016	20%	13%	57%	16%	9%	100%
2017	8%	18%	59%	7%	9%	88%
2018	6%	15%	16%	5%	22%	100%

8.2 Mesothelioma claims

The following chart shows the number of claims settled for nil cost, the total number of claims settled and the implied nil settlement rate for each settlement year.

Figure 8.1: Mesothelioma nil claims experience



In considering the future nil settlement rate assumption, we note the following:

- The nil settlement rate for the 2016/17 year of 20% was due to 54 Queensland statutory recovery claims being closed at nil cost in December 2016.
- Adjusting for this one-off impact, the nil settlement rate for the past three years has averaged 7.1%, for the past four years has averaged 7.0% and for the past five years has averaged 7.3%.
- The nil settlement rate for 2018/19 was 5.7% compared to our previous valuation assumption of 7.0%.

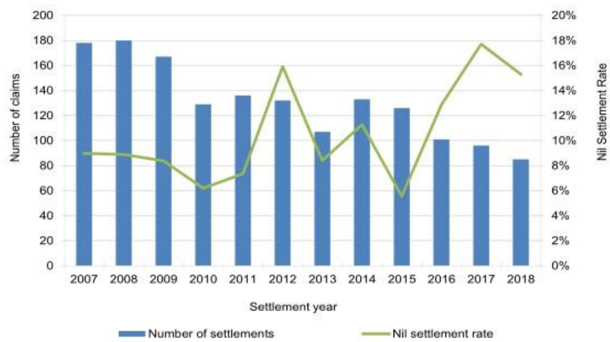
Taking all of these factors into consideration, we have assumed a future nil settlement rate of 7.0%, unchanged from our previous valuation.

We have applied this assumption to all age groups. We have done this because analysis by age group did not seem to indicate materially different nil settlement rates for the four age groups over time, and because the number of nil claims annually (typically around 25 to 30 claims in total across all ages) is quite small, meaning that sub-division of experience into four age groups results in reduced credibility and greater volatility.

8.3 Asbestosis claims

As with mesothelioma, the historical asbestosis nil settlement rate has been volatile.

Figure 8.2: Asbestosis nil claims experience



In considering the future nil settlement rate assumption, we note the following:

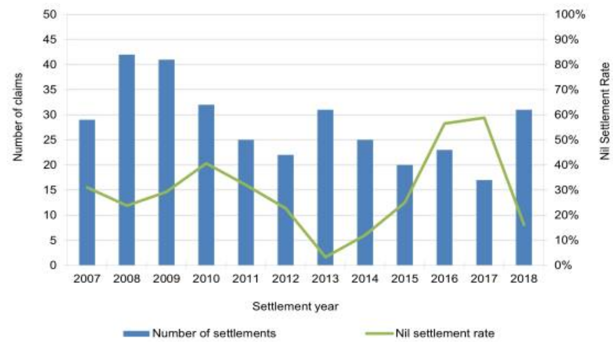
- The nil settlement rate for the past three years has averaged 15%, for the past four years has averaged 12% and for the past five years has averaged 12%.
- The nil settlement rate for 2017/18 and 2018/19 was 18% and 15% respectively.

Taking all of these factors into consideration, we have assumed a future nil settlement rate of 12.0%, an increase from our previous valuation assumption of 11.0%.

8.4 Lung cancer claims

Given the small volumes of claims, volatility in the nil settlement rate for lung cancer claims is to be expected.

Figure 8.3: Lung cancer nil claims experience



In considering the future nil settlement rate assumption, we note the following:

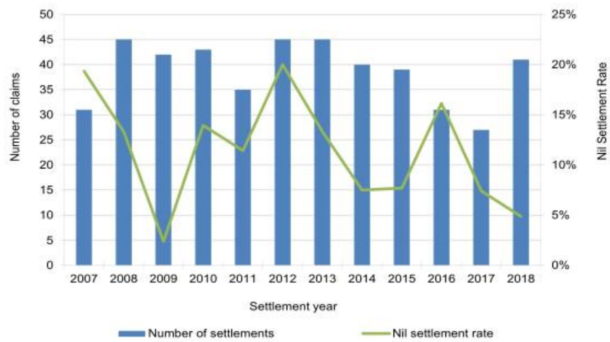
- The nil settlement rate for the past three years has averaged 39%, for the past four years has averaged 36% and for the past five years has averaged 31%.
- The nil settlement rate for 2018/19 was 16%, following the two highest nil settlement rates in 2016/17 and 2017/18 of 57% and 59% respectively.

Taking all of these factors into consideration, we have assumed a future nil settlement rate of 25%, unchanged from our previous valuation.

8.5 ARPD & Other claims

As with other disease types, there has been significant volatility in the historical nil settlement rate, given the low numbers of claims for this disease.

Figure 8.4: ARPD & Other nil claims experience



The nil settlement rate for the past three years has averaged 9%, for the past four years has averaged 9% and for the past five years has averaged 8%. Four out of the last five years have seen a nil settlement rate below 10%.

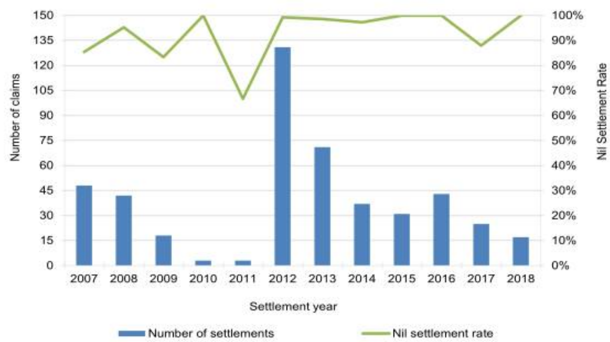
We have selected 9% as our nil settlement rate assumption, a decrease from our previous assumption of 10%.

8.6 Workers Compensation claims

The nil settlement rates for Workers Compensation claims have been high and reflect the portion of claims whose costs are fully met by a Workers Compensation Scheme or Policy. The proportion of such claims which are fully met by insurance has been relatively stable since 1997/98, typically varying between 80% and 100%.

The nil settlement rate has been in excess of 90% for seven out of the past ten years, and it has been above 80% for nine out of the past ten years.

Figure 8.5: Workers Compensation nil claims experience



We have selected 97% as our nil settlement rate assumption, unchanged from our previous valuation.

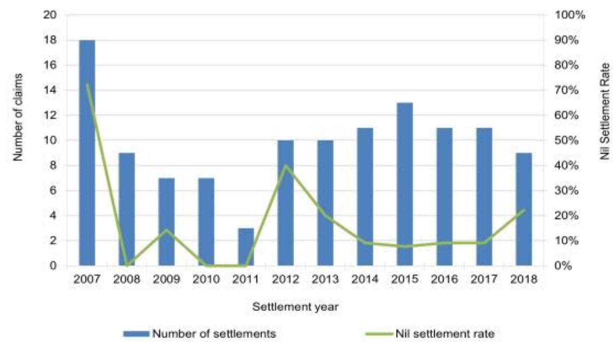
The overall financial impact of this assumption is not material.

8.7 Wharf claims

During the past ten years, the nil settlement rate has exhibited considerably volatility for wharf claims, varying between 0% and 40%.

The nil settlement rate for the past three years has averaged 13%, for the past four years it has averaged 11% and for the past five years it has averaged 11%.

Figure 8.6: Wharf nil claims experience



We have selected a nil settlement rate assumption of 10%, unchanged from our previous valuation assumption.

Given the low volume of claims activity for wharf claims, this assumption is highly subjective but is also not material to the overall liability assessment.

8.8 Summary assumptions

The following table provides a summary of our nil settlement rate assumptions at this valuation, and those assumed at the previous valuation.

Table 8.2: Summary nil settlement rate assumptions

	Current Valuation	Previous Valuation
Mesothelioma	7.0%	7.0%
Asbestosis	12.0%	11.0%
Lung Cancer	25.0%	25.0%
ARPD & Other	9.0%	10.0%
Wharf	10.0%	10.0%
Workers Compensation	97.0%	97.0%

9. Economic and Other Assumptions

9.1 Overview

The two main economic assumptions required for our valuation are:

- The underlying claims inflation assumptions adopted to project the future claims settlement amounts and related costs.
- The discount rate adopted for the present value determinations.

We also discuss the basis of derivation of other valuation assumptions, being:

- The cross-claim recovery rate; and
- The pattern of settlement of future reported claims and pending claims.

9.2 Claims inflation

We are required to make assumptions about the future rate of inflation of claims costs.

We have adopted a standard Australian actuarial claims inflation model for liabilities of the type considered in this report that is based on:

- An underlying, or base, rate of general economic inflation relevant to the liabilities, in this case based on wage/salary (earnings) inflation; and
- A rate of superimposed inflation, i.e. the rate at which claims costs inflation exceeds base inflation.

9.2.1 Base inflation

We have adopted a base (wage) inflation assumption for FY2020 onwards of 3.75% per annum. This is a slight reduction from our previous valuation assumption of 4.00% per annum.

We have made this reduction in light of continued low wage inflation and economic forecasts for future wage inflation in Australia, whilst also having regard to the lower ten-year government bond yields which are approximately 80 basis points lower than 12 months ago.

This assumption applies both to claims awards and legal costs.

9.2.2 Superimposed inflation

Superimposed inflation is a term commonly used by Australian actuaries to measure the rate at which average claims costs escalate in excess of a base (usually wage) inflation measure.

As a result, superimposed inflation is a "catch-all" for a range of potential factors affecting claims costs, including (but not limited to):

- Courts making compensation payments in relation to new heads of damage;
- Courts changing the levels of compensation paid for existing heads of damage;
- Advancements in medical treatments – for example, this could lead to higher medical treatment costs (e.g. the cost of the use of new drug treatments);
- Allowance for medical costs to rise faster than wages because of the use of enhanced medical technologies;
- Changes in life expectancy;
- Changes in retirement age – this would have the potential to increase future economic loss awards;
- Changes in the relative share of the liability to be borne by the Liable Entities' (which we refer to as "the contribution rate") and which might result from changes in the number of defendants joined in claims;
- Changes in the mix of claims costs by different heads of damage; and
- Changes in the mix of claimants by age of claimant.

Additionally, superimposed inflation also captures those characteristics of claims experience which might have different relative claim sizes but which are currently modelled in aggregate (rather than explicitly and separately modelled). This includes factors such as:

- Changes in the mix of claims between direct and cross claims;
- Changes in the mix of claims between renovator and non-renovator claims; and
- Changes in the mix of claims by the numbers of defendants to each claim.

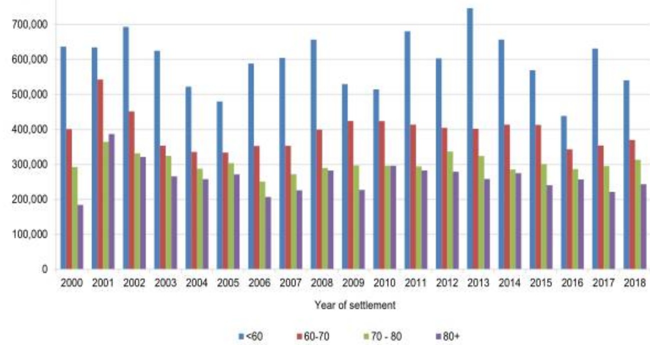
Whilst the future rate of superimposed inflation is uncertain, and not predictable from one year to the next, it is of note that the average claim costs appear to have been relatively stable in recent years (after adjusting for wage inflation) and that, if anything, average claim sizes have trended downwards in recent years. As discussed elsewhere in this report, this reflects the changing mix of claimants by claimant age (shifting towards older claimants).

Furthermore, the emergence of new or expanding heads of damage does not tend to proceed smoothly but progresses in "steps", depending on the outcome of legislative and other developments.

We have reviewed the rate of inflation of claims costs by settlement year for the past 18 years for mesothelioma claims. We have assessed this by analysing inflated claim costs and therefore the following chart measures the trend in the rate of superimposed inflation.

We have separately considered each of the four age groups to detect whether superimposed inflation is emerging in some or all of the age groups.

Figure 9.1: Average mesothelioma awards of the Liable Entities (inflated to mid 2018/19 money terms) by age of claimant



For claimants under 60 years of age, the rate of superimposed inflation:

- Averaged (0.9)% per annum for 2000/01 to 2018/19;
- Averaged (1.5)% per annum for 2002/03 to 2018/19;
- Averaged 0.2% per annum for 2004/05 to 2018/19;
- Averaged (1.0)% per annum for 2007/08 to 2018/19.

For claimants 60-70 years of age, the rate of superimposed inflation:

- Averaged (0.4)% per annum for 2000/01 to 2018/19;
- Averaged (1.2)% per annum for 2002/03 to 2018/19;
- Averaged 0.7% per annum for 2004/05 to 2018/19;
- Averaged 0.4% per annum for 2007/08 to 2018/19.

For claimants 70-80 years of age, the rate of superimposed inflation:

- Averaged 0.4% per annum for 2000/01 to 2018/19;
- Averaged (0.4)% per annum for 2002/03 to 2018/19;
- Averaged 0.6% per annum for 2004/05 to 2018/19;
- Averaged 1.3% per annum for 2007/08 to 2018/19.

For claimants 80+ years of age, the rate of superimposed inflation:

- Averaged 1.6% per annum for 2000/01 to 2018/19;

- Averaged (1.7)% per annum for 2002/03 to 2018/19;
- Averaged (0.4)% per annum for 2004/05 to 2018/19;
- Averaged 0.7% per annum for 2007/08 to 2018/19.

The actuarial approach for this report is to take an average view for superimposed inflation to be applied over the long-term, noting that there will necessarily be deviations from this average on an annual basis and that cashflows are projected for the next 50 or more years.

Weighing all of the evidence together, and in particular recognising that the period since 2000/01 has generally been benign, we have adopted an assumed long-term rate of future superimposed inflation of claims awards of 2.00% per annum.

This assumption is applied to the claim awards for each of the four age groups for mesothelioma and is also applied to the claim awards for other disease types.

There is no superimposed inflation applied to legal costs.

The assumption for superimposed inflation is unchanged from the previous valuation.

The outcome of this assumption is a "superimposed inflation allowance" of approximately $250m on a discounted central estimate basis and approximately $340m on an inflated and undiscounted central estimate basis.

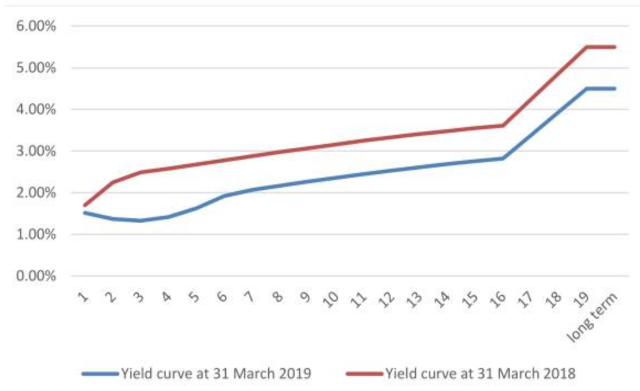
9.3 Discount rates: Commonwealth bond zero coupon yields

We have calculated the zero coupon yield curve at 31 March 2019 underlying the prices, coupons and durations of Commonwealth Government Bonds for the purpose of discounting the liabilities for this report.

The use of such discount rates is consistent with standard Australian actuarial practice for such liabilities, is in accordance with the Institute of Actuaries of Australia's Professional Standard PS300 and is also consistent with our understanding of the Australian accounting standards.

The chart below shows the assumptions for the current valuation and the previous valuation.

Figure 9.2: Zero coupon yield curve by duration



At this valuation, in light of the continued lower yields at long durations and particularly noting the approximate 80 basis point reduction in the year-16 yield between 31 March 2018 and 31 March 2019, we consider it appropriate to lower the long-term assumption from 5.50% per annum to 4.50% per annum.

The reduction in the long-term discount rate has increased the Discounted Central Estimate by approximately $7m. This adjustment is relatively small because the vast majority of the future cashflows (more than 85%) are projected to be paid over the next 18 years.

By contrast, the reduction in the discount rates for durations 1 to 16 years has increased the Discounted Central Estimate by approximately $130m.

9.4 Cross-claim recovery rates

The following chart shows how the experience of cross-claim recoveries has varied over the last eight years, both in monetary terms and expressed as a percentage of gross payments.

Figure 9.3: Cross-claim recovery experience

Cross claim recoveries reduced year on year from 2012/13 to 2015/16, both in absolute terms and as a percentage of gross payments. The subsequent three years have seen successive increases in the level of cross-claim recoveries.

Over the eight-year period, cross claim recoveries have been approximately 3.2% of gross payments.

In light of the additional year of experience and given the continued improvement in the level of recovery activity in each of the last three years, we have now increased our assumption for cross-claim recoveries to be 3.0% of claims awards (31 March 2018: 2.5%).

9.5 Settlement Patterns

Triangulation methods are used to derive the past pattern of settlement of claims and are used in forming a view on future settlement patterns.

The following triangles provide an illustrative example of how we perform this:

Figure 9.4: Settlement pattern derivation for mesothelioma claims: paid as % of ultimate cost

Yr of Notification	0	1	2	3	4	5	6	7	8	9	10	11	12
2004	52.7%	93.9%	97.5%	98.6%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2005	57.9%	92.3%	97.5%	97.5%	97.9%	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2006	61.7%	93.7%	97.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2007	53.3%	97.1%	99.5%	99.8%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2008	67.3%	96.5%	97.7%	99.3%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
2009	57.7%	88.4%	92.7%	99.2%	99.4%	99.8%	100.0%	100.0%	100.0%	100.0%			
2010	71.7%	96.4%	99.7%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%				
2011	57.1%	96.9%	98.1%	99.7%	100.0%	100.0%	100.0%	100.0%					
2012	55.7%	97.7%	99.7%	100.0%	100.0%	100.0%	100.0%						
2013	65.3%	94.9%	99.6%	99.8%	100.0%	100.0%							
2014	65.9%	96.7%	98.7%	99.6%	100.0%								
2015	65.4%	96.1%	99.2%	99.6%									
2016	56.8%	97.6%	98.6%										
2017	55.3%	96.5%											
2018	59.1%												

Figure 9.5: Settlement pattern derivation for non-mesothelioma claims: paid as % of ultimate cost

Yr of Notification	0	1	2	3	4	5	6	7	8	9	10	11	12
2004	17.5%	58.9%	83.4%	92.6%	95.3%	96.6%	98.0%	98.0%	98.0%	100.0%	100.0%	100.0%	100.0%
2005	19.6%	81.3%	94.6%	98.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2006	22.7%	72.0%	91.5%	94.7%	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2007	28.9%	83.1%	93.0%	99.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2008	26.1%	84.5%	95.6%	97.3%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
2009	39.7%	76.3%	92.5%	94.2%	94.4%	95.8%	98.2%	98.2%	98.2%	98.2%			
2010	26.1%	84.7%	95.7%	97.4%	100.0%	100.0%	100.0%	100.0%	100.0%				
2011	36.8%	90.1%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%					
2012	38.7%	89.1%	98.4%	99.9%	99.9%	100.0%	100.0%						
2013	28.3%	84.2%	95.7%	97.7%	98.9%	99.9%							
2014	32.7%	90.6%	97.2%	99.8%	100.0%								
2015	46.2%	88.5%	94.6%	98.0%									
2016	22.3%	73.2%	89.6%										
2017	35.4%	85.6%											
2018	21.5%												

We have estimated the settlement pattern for future claim reporting as follows:

Table 9.1: Settlement pattern of claims awards by delay from claim reporting

Delay (years)	Mesothelioma	Non-mesothelioma
0	60.0%	31.0%
1	35.0%	54.0%
2	3.0%	7.0%
3	1.0%	5.0%
4	0.5%	1.0%
5	0.3%	0.5%
6	0.2%	0.5%
7	0.0%	0.5%
8	0.0%	0.5%
9	0.0%	0.0%

These assumed settlements patterns have been modified slightly since our previous valuation, resulting in an assumption of a slight speeding-up for mesothelioma claim and non-mesothelioma claim settlements.

For mesothelioma, we have adopted one pattern (for all four age groups) because analysis of the average time to settlement for each of the four age groups was not materially different to the overall average time to settlement aggregated across all age groups (there was less than one month's variation).

10. Valuation Results

10.1 Central estimate liability

At 31 March 2019, our projected central estimate of the liabilities of the Liable Entities (the Discounted Central Estimate) to be met by the AICF Trust is $1,868.4m (2018: $1,852.9m).

We have not allowed for the future Operating Expenses of the AICF Trust or the Liable Entities in the liability assessment.

The following table shows a summary of our central estimate liability assessment and compares the current assessment with our previous valuation.

Table 10.1: Comparison of central estimate of liabilities

	31 March 2019 $m			31 March 2018 $m
	Gross of insurance recoveries	Insurance recoveries	Net of insurance recoveries	Net of insurance recoveries
Total uninflated and undiscounted cash-flows	1,466.5	66.7	1,399.8	1,442.9
Inflation allowance	848.3	29.6	818.7	938.0
Total inflated and undiscounted cash-flows	2,314.8	96.3	2,218.5	2,380.9
Discounting allowance	(365.6)	(15.5)	(350.1)	(528.0)
Net present value liabilities	1,949.2	80.8	1,868.4	1,852.9

10.2 Comparison with previous valuation

In the absence of any change to the claim projection assumptions from our 31 March 2018 valuation, other than allowing for the changes in the discount rate, we would have projected a Discounted Central Estimate liability of $1,881.1m as at 31 March 2019.

The increase of $28.2m relative to the valuation result at 31 March 2018 is due to:

- A reduction of $112.3m, being the net impact of expected claims payments (which reduce the liability) and the "unwind of discount".
- An increase of $140.5m resulting from changes to the yield curve between 31 March 2018 and 31 March 2019, particularly relating to lower yields at durations below 15 years.

Our liability assessment at 31 March 2019 of $1,868.4m therefore represents a decrease of $12.7m arising from changes to the actuarial assumptions. The change is principally a consequence of:

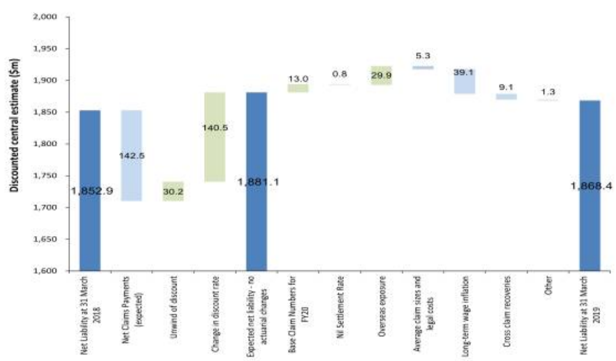
- An additional allowance for the potential costs relating to overseas exposures following the decision in *Talifero vs Amaca*; and
- An increase to the base level of asbestosis and ARPD & Other claims and the consequential impact this has on the number of claims in all future years;

offset by

- Lower wage inflation assumptions which we have reduced from 4.00% pa to 3.75% pa; and
- Increased allowance for cross-claim recoveries.

The following chart shows an analysis of the change in our liability assessments from 31 March 2018 to 31 March 2019 on a discounted basis.

Figure 10.1: Analysis of change in central estimate liability (discounted basis)



Note: Green bars signal that this factor has given rise to an increase in the liability whilst light blue bars signal that this factor has given rise to a reduction in the liability.

10.3 Comparison of valuation results since 30 September 2006

We have analysed how our valuation results have changed since the Initial Report (as defined in the Amended Final Funding Agreement) at 30 September 2006.

The table below shows the results over time.

We have used the inflated and undiscounted results as the comparison. We consider this to be the most appropriate assessment as it removes the impacts of changes in discount rates and the "unwind of the discount".

Table 10.2: Comparison of net undiscounted valuation results since 30 September 2006

	FY2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY2017	FY2018	FY2019
Valuation result at end of previous financial year	3,169	2,811	3,027	3,124	2,906	2,661	2,525	2,513	2,805	2,743	2,427	2,200	2,381
Net payments made (actual)	-32	-55	-93	-86	-76	-76	-86	-113	-121	-129	2	-124	-143
Expected valuation result (no actuarial changes)	3,137	2,756	2,934	3,038	2,830	2,585	2,439	2,400	2,684	2,614	2,429	2,076	2,238
Actual valuation at end of financial year	2,811	3,027	3,124	2,906	2,661	2,525	2,513	2,805	2,743	2,427	2,200	2,381	2,219
Impact of actuarial valuation changes	-326	271	190	-132	-169	-60	74	405	59	-187	-229	305	-19
Cumulative changes since 30 September 2006	-326	-55	135	3	-166	-226	-152	253	312	125	-104	201	182

Note: For FY2007, the starting valuation ($3,169m) is the valuation at 30 September 2006, not the valuation at 31 March 2006.

The table shows that whilst there have been some years where there have been increases and some years where there have been decreases arising from changes to actuarial valuation assumptions, over the period from 30 September 2006 to 31 March 2019 the valuation has increased by approximately $182m (5.7% of the valuation contained in the Initial Report).

In terms of net cashflows, actual net payments of $1,132m have been made since 30 September 2006. This compares with an estimate of $1,335m projected for the same period (1 October 2006 to 31 March 2019) in the valuation at 30 September 2006.

After allowing for removal of the beneficial impact of HIH, Equitas and other commutations ($183m), actual net cashflows have been approximately $20m (1.5%) below those projected in the valuation at 30 September 2006.

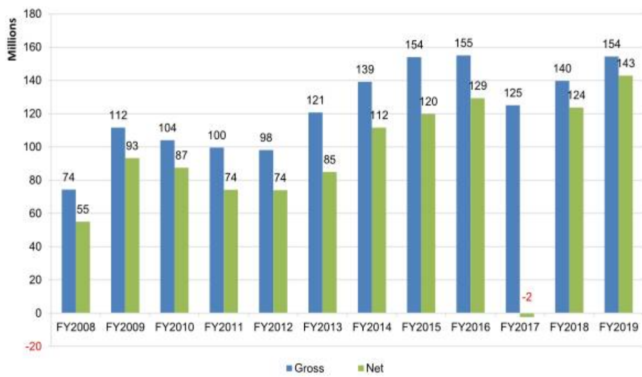
Gross cashflows over the same period have been $31m (2.0%) below those projected in the valuation at 30 September 2006 ($1,518m vs $1,549m).

10.4 Cashflow projections

10.4.1 Historical cashflow expenditure

The following chart shows the historical expenditure by the Liable Entities relating to asbestos-related claim settlements since the formation of AICFL.

Figure 10.2: Historical claim-related expenditure of the Liable Entities



Gross cashflow payments in the 12 months to 31 March 2019 were $154.4m. This was $2.6m (2%) higher than the gross cashflow projected for 2018/19 in our 31 March 2018 valuation ($151.8m).

Actual net cashflow payments in 2018/19 were $142.8m. This was $0.2m higher than the net cashflow projected for 2018/19 in our 31 March 2018 valuation report ($142.6m).

10.4.2 Key changes in cashflow projections by period of cashflow

The following table summarises how the projected cashflows compare between the current and previous valuation.

Table 10.3: Comparison of projected cashflows by period

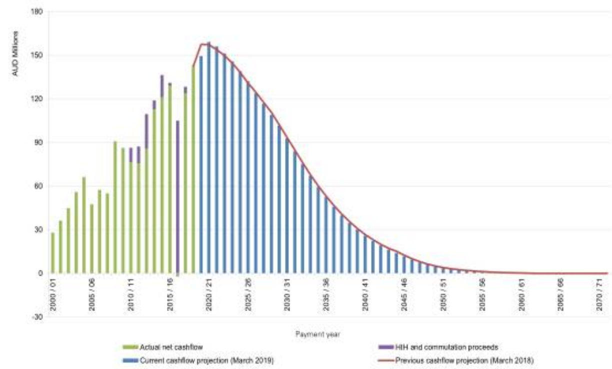
Cashflow Projections ($m)	Previous Valuation	Current Valuation	Valuation change	Valuation change (%)
FY2019	143	143	0	0.2%
FY2020	158	149	-8	-5.1%
FY21 - FY25	743	751	8	1.0%
FY26 - FY30	586	583	-3	-0.5%
FY31 - FY40	590	581	-8	-1.4%
FY41 - FY45	102	98	-5	-4.6%
1 April 2045 onwards	59	56	-4	-6.4%
Total	**2,381**	**2,361**	**-20**	**-0.8%**
FY2019 to FY2025	**1,043**	**1,043**	**-0**	**0.0%**
FY2026 onwards	**1,337**	**1,318**	**-20**	**-1.5%**

Note: Figures may not add "on sight" due to rounding.

10.4.3 Future cashflow projections

The following chart shows the projected net cashflows underlying our current valuation and the projected net cashflow projection underlying our previous valuation at 31 March 2018.

Figure 10.3: Annual cashflow projections – inflated and undiscounted ($m)



Given the extremely long-tailed nature of asbestos-related liabilities, a small change in an individual assumption can have a significant impact upon the cashflow profile of the liabilities.

10.5 Amended Final Funding Agreement calculations

The Amended Final Funding Agreement sets out the basis on which payments will be made to the AICF Trust.

Additionally, there are a number of other figures specified within the Amended Final Funding Agreement that we are required to calculate. These are:

- Discounted Central Estimate;
- Term Central Estimate; and
- Period Actuarial Estimate.

Table 10.4: Amended Final Funding Agreement calculations

	$m
Discounted Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,868.4
Period Actuarial Estimate (net of cross-claim recoveries, gross of Insurance and Other Recoveries) comprising:	472.3
Discounted value of cashflow in 2019/20	153.5
Discounted value of cashflow in 2020/21	161.9
Discounted value of cashflow in 2021/22	156.9
Term Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,846.2

The actual funding amount due at a particular date will depend upon a number of factors, including:

- the net asset position of the AICF Trust at that time;
- the free cash flow amount of the James Hardie Group in the preceding financial year; and
- the Period Actuarial Estimate in the latest Annual Actuarial Report.

10.6 Insurance Recoveries

Our liability valuation has made allowance for a discounted central estimate of Insurance Recoveries of $80.8m.

This estimate is comprised as follows:

Table 10.5: Insurance recoveries at 31 March 2019

$m	Undiscounted central estimate	Discounted central estimate
Gross liability	2,314.8	1,949.2
Product liability recoveries	87.8	73.8
Bad and doubtful debt allowance (product)	(1.3)	(1.0)
Public liability recoveries	9.9	8.1
Bad and doubtful debt allowance (public)	(0.1)	(0.1)
Insurance recovery asset	96.3	80.8
Net liability	2,218.5	1,868.4
Insurance recovery rate	4.2%	4.2%
Bad and doubtful debt rate	1.4%	1.3%
Value of Insurance Policies per Facility Agreement		72.8

The combined bad and doubtful debt rate is 1.3% on a discounted basis (2018: 1.3%).

The AICF Facility Agreement requires the Approved Actuary to calculate the discounted central estimate value of certain Insurance Policies, being those specified in Schedule 5 of the AICF Facility Agreement.

At 31 March 2019 the discounted central estimate of the Insurance Policies, as specified in Schedule 5 of the AICF Facility Agreement, is $72.8m (2018: $77.5m).

11. Uncertainty

11.1 Overview

There is uncertainty involved in any valuation of the liabilities of an insurance company or a self-insurer. The sources of such uncertainty include, but are not limited to:

- Parameter error – this is the risk that the parameters and assumptions chosen ultimately prove not to be reflective of future experience.
- Model error – this is the risk that the model selected for the valuation of the liabilities ultimately proves not to be adequate for the projection of the liabilities.
- Legal and social developments – this is the risk that the legal environment in which claims are settled changes relative to its current and historical position thereby causing significantly different awards.
- Future actual rates of inflation being different from that assumed.
- The general economic environment being different from that assumed.
- Potential sources of exposure – this is the risk that there exist sources of exposure which are as yet unknown or unquantifiable, or for which no liabilities have yet been observed, but which may trigger future claims.

In the case of asbestos liabilities, these uncertainties are exacerbated by the extremely long latency period from exposure to onset of disease and notification of a claim. Asbestos-related claims often take in excess of 40 years from original exposure to become notified and then settled, compared with an average delay from exposure to settlement of 4-5 years for many other compensation-type liabilities such as Comprehensive Third-Party injury liabilities or other Workers Compensation liabilities.

Specific forms of uncertainty relating to asbestos-related disease liabilities include:

- The difficulty in quantifying the extent and pattern of past asbestos exposures and the number and incidence of the ultimate number of lives that may be affected by asbestos related diseases arising from such past asbestos exposures;
- The timing of the peak level and future pattern of incidence of claims reporting for mesothelioma;
- The propensity of individuals affected by diseases arising from such exposure to file common law claims against defendants;
- The extent to which the Liable Entities will be joined in such future common law claims;
- The mix of claimants by age, in particular noting the shift towards older claimants and which has had a downwards effect on average claim sizes in recent years;

- The fact that the ultimate severity of the impact of the disease and the quantum of the claims that will be awarded will be subject to the outcome of events that have not yet occurred, including:
  - medical and epidemiological developments, including those relating to life expectancy in general;
  - court interpretations;
  - legislative changes;
  - changes to the form and range of benefits for which compensation may be awarded ("heads of damage");
  - public attitudes to claiming;
  - the potential for future procedural reforms in NSW and other States affecting the legal costs incurred in managing and settling claims;
  - potential third-wave exposures; and
  - social and economic conditions such as inflation.

11.2 Sensitivity testing

As we have noted above, there are many sources of uncertainty. Actuaries often perform "sensitivity testing" to identify the impact of different assumptions on future experience, thereby providing an indication of the degree of parameter error risk to which the valuation assessment is exposed.

Sensitivity testing may be considered as being a mechanism for testing "what will the liabilities be if instead of choosing [x] for assumption [a] we choose [y]?" It is also a mechanism for identifying how the result will change if experience turns out different in a particular way relative to that which underlies the central estimate expectations. As such, it provides an indication of the level of variability inherent in the valuation.

We have performed some sensitivity tests of the results of our central estimate valuation. We have sensitivity tested the following factors:

- **number of claims notified**: 10% above and below our central estimate assumption.
- **average claim cost of a non-nil claim**: 5% above and below our central estimate assumption.
- **nil settlement rate**: 2 percentage points above and below our central estimate assumption.
- **superimposed inflation**: being 0% per annum or 4% per annum over all future years.
- **mesothelioma incidence pattern**: we have tested the impact of shifting out the pattern of incidence by two further years.

There are other factors which influence the liability assessment and which could be sensitivity tested, including:

- The cross-claim recovery rate;
- The variation in timing of claim notifications (but with no change in the overall number of notifications); and
- The pattern and delay of claim settlements from claim notification.

We have not sensitivity tested these factors, viewing them as being of less financial significance individually.

We have not sensitivity tested the value of Insurance Recoveries as uncertainties typically relate to legal risk and disputation risk, and it is not possible to parameterise a sensitivity test in an informed manner.

We have not included a sensitivity test for the impact of changes in discount rates although, as noted in this Report, changes in discount rates can introduce significant volatility to the Discounted Central Estimate result reported at each year-end.

11.3 Results of sensitivity testing

The chart below shows the impact of various individual sensitivity tests on the Discounted Central Estimate of the liabilities, and of a combined sensitivity test of a number of factors.

Although we have tested multiple scenarios of each assumption, one cannot gauge an overall potential range by simply adding these tests together. Accordingly, we have prepared a range based on a combination of factors.

Figure 11.1: Sensitivity testing results – Impact around the Discounted Central Estimate (in $m)

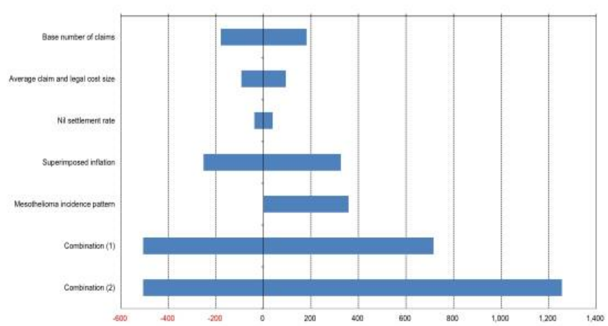
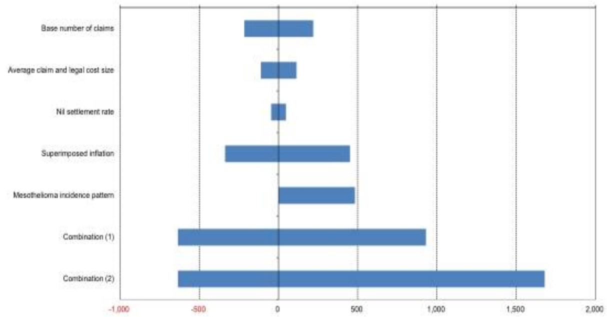


Figure 11.2: Sensitivity testing results – Impact around the undiscounted central estimate (in $m)



The single most sensitive assumption shown in the chart is the incidence pattern of mesothelioma claims reporting against the Liable Entities. Shifting the pattern of incidence by 2 years could add approximately $358m (19%) on a discounted basis to our valuation (as shown in Figure 11.1 by the scenario labelled "mesothelioma incidence pattern").

Table 11.1: Summary results of sensitivity analysis ($m)

	Undiscounted	Discounted
Central estimate	2,218.5	1,868.4
Low Scenario	1,583.3	1,361.8
High Scenario	3,897.7	3,124.7

Whilst the table above indicates a range around the discounted central estimate of liabilities of -$507m to +$1,256m, the actual cost of liabilities could fall outside that range depending on the actual experience.

We further note that these sensitivity test ranges are not intended to correspond to a specified probability of sufficiency nor are they intended to indicate an upper bound or a lower bound of all possible outcomes.

A Projected inflated and undiscounted cashflows ($m)

Payment Year	Mesothelioma Claims	Asbestosis Claims	Lung Cancer Claims	ARPD & Other Claims	Legal and Other Costs	Workers Compensation Claims	Workers Compensation Legal and Other Costs	Wharf Claims	Wharf Legal and Other Costs	Baryulgil	Cross Claim Recoveries	Gross	Insurance	Net
2019 / 2020	128.1	10.1	1.6	3.1	14.7	0.1	0.1	0.6	0.2	0.3	4.3	154.7	5.2	149.4
2020 / 2021	136.9	10.1	1.9	3.3	16.2	0.1	0.1	1.1	0.2	0.3	4.6	165.5	6.4	159.2
2021 / 2022	135.1	9.7	2.0	3.2	15.3	0.1	0.0	1.1	0.2	0.3	4.5	162.5	6.5	156.0
2022 / 2023	131.6	9.1	1.9	3.0	14.8	0.1	0.0	1.1	0.2	0.2	4.4	157.8	6.6	151.2
2023 / 2024	127.8	8.7	1.9	2.9	13.9	0.1	0.0	1.0	0.2	0.2	4.3	152.4	6.6	145.8
2024 / 2025	122.6	8.3	1.8	2.7	13.1	0.1	0.0	1.0	0.2	0.2	4.1	145.9	6.9	139.0
2025 / 2026	117.3	7.7	1.7	2.5	12.3	0.1	0.0	0.9	0.1	0.2	3.9	139.0	6.8	132.2
2026 / 2027	110.4	7.1	1.6	2.3	11.6	0.1	0.0	0.9	0.1	0.1	3.7	130.6	6.7	123.9
2027 / 2028	103.8	6.6	1.5	2.1	10.8	0.1	0.0	0.8	0.1	0.1	3.4	122.5	5.9	116.6
2028 / 2029	96.8	6.0	1.4	1.9	9.7	0.1	0.0	0.7	0.1	0.1	3.2	113.6	4.6	109.0
2029 / 2030	89.7	5.4	1.3	1.7	8.8	0.1	0.0	0.7	0.1	0.1	3.0	104.8	3.3	101.5
2030 / 2031	82.4	4.8	1.2	1.5	7.9	0.1	0.0	0.6	0.1	0.1	2.7	95.9	3.1	92.8
2031 / 2032	74.9	4.3	1.1	1.3	7.1	0.0	0.0	0.5	0.1	0.1	2.5	86.9	3.0	84.0
2032 / 2033	67.4	3.8	0.9	1.2	6.3	0.0	0.0	0.5	0.1	0.1	2.2	78.0	2.8	75.2
2033 / 2034	60.4	3.3	0.8	1.0	5.5	0.0	0.0	0.4	0.1	0.0	2.0	69.6	2.6	67.1
2034 / 2035	53.8	2.9	0.7	0.9	4.8	0.0	0.0	0.3	0.0	0.0	1.8	61.8	2.4	59.4
2035 / 2036	47.7	2.4	0.6	0.7	4.2	0.0	0.0	0.3	0.0	0.0	1.6	54.6	2.2	52.4
2036 / 2037	42.0	2.1	0.6	0.6	3.6	0.0	0.0	0.3	0.0	0.0	1.4	47.9	2.1	45.8
2037 / 2038	36.9	1.7	0.5	0.5	3.1	0.0	0.0	0.2	0.0	0.0	1.2	41.8	1.9	39.9
2038 / 2039	32.3	1.5	0.4	0.4	2.7	0.0	0.0	0.2	0.0	0.0	1.0	36.5	1.8	34.7
2039 / 2040	28.2	1.2	0.3	0.3	2.3	0.0	0.0	0.1	0.0	0.0	0.9	31.6	1.6	30.1
2040 / 2041	24.4	1.0	0.3	0.3	1.9	0.0	0.0	0.1	0.0	0.0	0.8	27.3	1.4	25.9
2041 / 2042	21.1	0.8	0.2	0.2	1.6	0.0	0.0	0.1	0.0	0.0	0.7	23.5	1.2	22.2
2042 / 2043	18.3	0.6	0.2	0.2	1.4	0.0	0.0	0.1	0.0	0.0	0.6	20.2	1.1	19.1
2043 / 2044	15.8	0.5	0.2	0.1	1.2	0.0	0.0	0.1	0.0	0.0	0.5	17.4	1.0	16.4
2044 / 2045	13.7	0.4	0.1	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.4	14.9	0.8	14.1
2045 / 2046	11.3	0.3	0.1	0.1	0.8	0.0	0.0	0.0	0.0	0.0	0.4	12.3	0.5	11.8
2046 / 2047	9.0	0.2	0.1	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0.3	9.8	0.3	9.5
2047 / 2048	7.2	0.2	0.1	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.2	7.8	0.3	7.5
2048 / 2049	5.7	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.2	6.2	0.2	6.0
2049 / 2050	4.6	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	4.9	0.2	4.7
2050 / 2051	3.6	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	3.9	0.1	3.7
2051 / 2052	2.9	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	3.1	0.1	3.0
2052 / 2053	2.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.4	0.1	2.3
2053 / 2054	1.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	1.9	0.1	1.8
2054 / 2055	1.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.1	1.5
2055 / 2056	1.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.1
2056 / 2057	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.8
2057 / 2058	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.6
2058 / 2059	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
2059 / 2060	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.3
2060 / 2061	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
2061 / 2062	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
2062 / 2063	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2063 / 2064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2064 / 2065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2065 / 2066	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2066 / 2067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2067 / 2068	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2068 / 2069	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2069 / 2070	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2070 / 2071	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2071 / 2072	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	1,973.0	121.4	27.2	38.4	199.7	1.4	0.4	13.8	2.2	2.5	65.3	2,314.8	96.3	2,218.5

B Projected inflated and discounted cashflows ($m)

Payment Year	Mesothelioma Claims	Asbestosis Claims	Lung Cancer Claims	ARPD & Other Claims	Legal and Other Costs	Workers Compensation Claims	Workers Compensation Legal and Other Costs	Wharf Claims	Wharf Legal and Other Costs	Baryulgil	Cross Claim Recoveries	Gross	Insurance	Net
2019 / 2020	127.2	10.0	1.6	3.1	14.6	0.1	0.1	0.6	0.2	0.3	4.3	153.5	5.2	148.3
2020 / 2021	133.9	9.8	1.9	3.2	15.9	0.1	0.0	1.0	0.2	0.3	4.5	161.9	6.2	155.7
2021 / 2022	130.5	9.4	1.9	3.1	14.8	0.1	0.0	1.0	0.2	0.3	4.4	156.9	6.3	150.6
2022 / 2023	125.3	8.7	1.8	2.9	14.1	0.1	0.0	1.0	0.2	0.2	4.2	150.2	6.2	144.0
2023 / 2024	119.9	8.2	1.7	2.7	13.0	0.1	0.0	1.0	0.2	0.2	4.0	142.9	6.2	136.7
2024 / 2025	113.0	7.6	1.6	2.5	12.1	0.1	0.0	0.9	0.1	0.2	3.8	134.4	6.3	128.1
2025 / 2026	106.0	6.9	1.5	2.2	11.1	0.1	0.0	0.8	0.1	0.1	3.5	125.6	6.1	119.4
2026 / 2027	97.7	6.3	1.4	2.0	10.3	0.1	0.0	0.8	0.1	0.1	3.2	115.5	5.9	109.6
2027 / 2028	89.8	5.7	1.3	1.8	9.4	0.1	0.0	0.7	0.1	0.1	3.0	106.0	5.1	101.0
2028 / 2029	81.9	5.1	1.2	1.6	8.2	0.1	0.0	0.6	0.1	0.1	2.7	96.1	3.9	92.2
2029 / 2030	74.1	4.5	1.1	1.4	7.3	0.0	0.0	0.5	0.1	0.1	2.4	86.6	2.7	83.9
2030 / 2031	66.4	3.9	0.9	1.2	6.4	0.0	0.0	0.5	0.1	0.1	2.2	77.3	2.5	74.8
2031 / 2032	58.8	3.4	0.8	1.0	5.6	0.0	0.0	0.4	0.1	0.0	1.9	68.3	2.3	66.0
2032 / 2033	51.6	2.9	0.7	0.9	4.8	0.0	0.0	0.4	0.0	0.0	1.7	59.7	2.1	57.6
2033 / 2034	45.0	2.5	0.6	0.7	4.1	0.0	0.0	0.3	0.0	0.0	1.5	51.9	1.9	50.0
2034 / 2035	39.0	2.1	0.5	0.6	3.5	0.0	0.0	0.3	0.0	0.0	1.3	44.8	1.7	43.1
2035 / 2036	33.6	1.7	0.5	0.5	3.0	0.0	0.0	0.2	0.0	0.0	1.1	38.4	1.5	36.9
2036 / 2037	28.5	1.4	0.4	0.4	2.5	0.0	0.0	0.2	0.0	0.0	0.9	32.5	1.4	31.1
2037 / 2038	24.0	1.1	0.3	0.3	2.0	0.0	0.0	0.1	0.0	0.0	0.8	27.2	1.3	26.0
2038 / 2039	20.1	0.9	0.3	0.3	1.7	0.0	0.0	0.1	0.0	0.0	0.7	22.7	1.1	21.6
2039 / 2040	16.8	0.7	0.2	0.2	1.4	0.0	0.0	0.1	0.0	0.0	0.5	18.8	0.9	17.9
2040 / 2041	13.9	0.6	0.2	0.2	1.1	0.0	0.0	0.1	0.0	0.0	0.4	15.5	0.8	14.8
2041 / 2042	11.5	0.4	0.1	0.1	0.9	0.0	0.0	0.1	0.0	0.0	0.4	12.8	0.7	12.1
2042 / 2043	9.5	0.3	0.1	0.1	0.7	0.0	0.0	0.0	0.0	0.0	0.3	10.5	0.6	10.0
2043 / 2044	7.9	0.3	0.1	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0.3	8.7	0.5	8.2
2044 / 2045	6.5	0.2	0.1	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.2	7.1	0.4	6.7
2045 / 2046	5.2	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.2	5.6	0.2	5.4
2046 / 2047	4.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	4.3	0.1	4.2
2047 / 2048	3.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	3.3	0.1	3.2
2048 / 2049	2.3	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	2.5	0.1	2.4
2049 / 2050	1.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	1.9	0.1	1.8
2050 / 2051	1.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.1	1.4
2051 / 2052	1.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.0
2052 / 2053	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.8
2053 / 2054	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.6
2054 / 2055	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.4
2055 / 2056	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
2056 / 2057	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2
2057 / 2058	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2
2058 / 2059	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
2059 / 2060	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
2060 / 2061	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
2061 / 2062	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2062 / 2063	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2063 / 2064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2064 / 2065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2065 / 2066	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2066 / 2067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2067 / 2068	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2068 / 2069	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2069 / 2070	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2070 / 2071	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2071 / 2072	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	1,653.9	105.1	23.1	33.4	170.9	1.2	0.4	11.8	2.0	2.3	54.9	1,949.2	80.8	1,868.4

C Glossary of terms used in the Amended Final Funding Agreement

The following provides a glossary of terms which are referenced in the Amended Final Funding Agreement and upon which we have relied in preparing our report.

The operation of these definitions cannot be considered in isolation but instead need to be considered in the context of the totality of the Amended Final Funding Agreement.

AICF means the trustee of the Asbestos Injuries Compensation Fund from time to time, in its capacity as trustee, initially being Asbestos Injuries Compensation Fund Limited.

These terms also need to be read in conjunction with the Deed of Amendment dated 19 December 2017 which added a new clause (13.4A) and which is effective from 1 January 2018.

AICF Funded Liability means:

(a) any Proven Claim;

(b) Operating Expenses;

(c) Claims Legal Costs;

(d) any claim that was made or brought in legal proceedings against a Former James Hardie Company commenced before 1 December 2005;

(e) Statutory Recoveries within the meaning and subject to the limits set out in the Amended Final Funding Agreement;

(f) a claim or category of claim which James Hardie and the NSW Government agree in writing is a "AICF Funded Liability" or a category of "AICF Funded Liability".

but in the cases of paragraphs (a), (c) and (d) excludes any such liabilities or claims to the extent that they have been recovered or are recoverable under a Worker's Compensation Scheme or Policy.

Claims Legal Costs means all costs, charges, expenses and outgoings incurred or expected to be borne by AICF or the Former James Hardie Companies, in respect of legal advisors, other advisors, experts, court proceedings and other dispute resolution methods in connection with Personal Asbestos Claims and Marlew Claims but in all cases excluding any costs included as a component of calculating a Proven Claim.

Concurrent Wrongdoer in relation to a personal injury or death claim for damages under common law or other law (excluding any law introduced or imposed in breach of the restrictions on adverse regulatory or legislative action against the James Hardie Group under the Amended Final Funding Agreement, and which breach has been notified to the NSW Government in accordance with Amended Final Funding Agreement), means a person whose acts or omissions, together with the acts or omissions of one or more Former James Hardie Companies or Marlew or any member of the James Hardie Group (whether or not together with any other persons) caused, independently of each other or jointly, the damage or loss to another person that is the subject of that claim.

Contribution Claim means a cross-claim or other claim under common law or other law (excluding any law introduced or imposed in breach of the restrictions on adverse regulatory or legislative action against the James Hardie Group under the Amended Final Funding Agreement, and which breach has been notified to the NSW Government in accordance with Amended Final Funding Agreement):

(a) for contribution by a Concurrent Wrongdoer against a Former James Hardie Company or a member of the James Hardie Group in relation to facts or circumstances which give rise to a right of a person to make a Personal Asbestos Claim or a Marlew Claim; or

(b) by another person who is entitled under common law (including by way of contract) to be subrogated to such a first mentioned cross-claim or other claim;

Discounted Central Estimate means the central estimate of the present value (determined using the discount rate used within the relevant actuarial report) of the liabilities of the Former James Hardie Companies and Marlew in respect of expected Proven Claims and Claims Legal Costs, calculated in accordance with the Amended Final Funding Agreement.

Excluded Claims are any of the following liabilities of the Former James Hardie Companies:

(i) personal injury or death claims arising from exposure to Asbestos outside Australia;

(ii) personal injury or death claims arising from exposure to Asbestos made outside Australia;

(iii) claims for economic loss (other than any economic loss forming part of the calculation of an award of damages for personal injury or death) or loss of property, including those relating to land remediation and/or Asbestos or Asbestos products removal, arising out of or in connection with Asbestos or Asbestos products manufactured, sold, distributed or used by or on behalf of the Liable Entities;

(iv) any Excluded Marlew Claim;

(v) any liabilities of the Liable Entities other than AICF Funded Liabilities.

Excluded Marlew Claim means a Marlew Claim:

(a) covered by the indemnities granted by the Minister of Mineral Resources under the deed between the Minister, Fuller Earthmoving Pty Limited and James Hardie Industries Limited dated 11 March 1996; or

(b) by a current or former employee of Marlew in relation to an exposure to Asbestos in the course of such employment to the extent:

   (i) the loss is recoverable under a Worker's Compensation Scheme or Policy; or

(ii) the Claimant is not unable to recover damages from a Marlew Joint Tortfeasor in accordance with the Marlew Legislation;

(c) by an individual who was or is an employee of a person other than Marlew arising from exposure to Asbestos in the course of such employment by that other person where such loss is recoverable from that person or under a Worker's Compensation Scheme or Policy; or

(d) in which another defendant (or its insurer) is a Marlew Joint Tortfeasor from whom the plaintiff is entitled to recover compensation in proceedings in the Dust Diseases Tribunal, and the Claimant is not unable to recover damages from that Marlew Joint Tortfeasor in accordance with the Marlew Legislation.

Former James Hardie Companies means Amaca, Amaba and ABN 60.

Insurance and Other Recoveries means any proceeds which may reasonably be expected to be recovered or recoverable for the account of a Former James Hardie Company or to result in the satisfaction (in whole or part) of a liability of a Former James Hardie Company (of any nature) to a third party, under any product liability insurance policy or public liability insurance policy or commutation of such policy or under any other contract, including any contract of indemnity, but excluding any such amount recovered or recoverable under a Worker's Compensation Scheme or Policy.

Liable Entities see Former James Hardie Companies.

Marlew means Marlew Mining Pty Ltd (in liquidation), ACN 000 049 650, previously known as Asbestos Mines Pty Ltd.

Marlew Claim means, subject to the limitation on Statutory Recoveries, a claim which satisfies one of the following paragraphs and which is not an Excluded Marlew Claim:

(a) any present or future personal injury or death claim by an individual or the legal personal representative of an individual, for damages under common law or other law (excluding any law introduced or imposed in breach of the restrictions on adverse regulatory or legislative action against the James Hardie Group under the Amended Final Funding Agreement, and which breach has been notified to the NSW Government in accordance with the Amended Final Funding Agreement) which:

(i) arose or arises from exposure to Asbestos in the Baryulgil region from Asbestos Mining Activities at Baryulgil conducted by Marlew, provided that:

A. the individual's exposure to Asbestos occurred wholly within Australia; or

B. where the individual has been exposed to Asbestos both within and outside Australia, the amount of damages included in the Marlew Claim shall be limited to the amount attributable to the proportion of the exposure which caused or contributed to the loss or damage giving rise to the Marlew Claim which occurred in Australia;

(ii) is commenced in New South Wales in the Dust Diseases Tribunal; and

(iii) is or could have been made against Marlew had Marlew not been in external administration or wound up, or could be made against Marlew on the assumption (other than as contemplated under the Marlew legislation) that Marlew will not be in the future in external administration;

(b) any claim made under compensation to relatives legislation by a relative of a deceased individual (or personal representative of such a relative) or (where permitted by law) the legal personal representative of a deceased individual in each case where the individual, but for such individual's death, would have been entitled to bring a claim of the kind described in paragraph (a); or

(c) a Contribution Claim relating to a claim described in paragraphs (a) or (b).

Marlew Joint Tortfeasor means any person who is or would be jointly and severally liable with Marlew in respect of a Marlew Claim, had Marlew not been in external administration or wound up, or on the assumption that Marlew will not in the future be, in external administration or wound up other than as contemplated under the Marlew Legislation.

Payable Liability means any of the following:

(a) any Proven Claim (whether arising before or after the date of this deed);

(b) Operating Expenses;

(c) Claims Legal Costs;

(d) any liability of a Former James Hardie Company to the AICFL, however arising, in respect of any amounts paid by the AICFL in respect of any liability or otherwise on behalf of the Former James Hardie Company;

(e) any claim that was made or brought in legal proceedings against a Former James Hardie Company commenced before 1 December 2005;

(f) if regulations are made pursuant to section 30 of the Transaction Legislation and if and to the extent the AICFL and James Hardie have notified the NSW Government that any such liability is to be included in the scope of Payable Liability, any liability of a Former James Hardie Company to pay amounts received by it from an insurer in respect of a liability to a third party incurred by it for which it is or was insured under a contract of insurance entered into before 2 December 2005; and

(g) Statutory Recoveries within the meaning and subject to the limits set out in the Amended Final Funding Agreement,

but in the cases of paragraphs (a), (c) and (e) excludes any such liabilities or claims to the extent that they have been recovered or are recoverable under a Worker's Compensation Scheme or Policy.

Period Actuarial Estimate means, in respect of a period, the central estimate of the present value (determined using the discount rate used in the relevant actuarial report) of the liabilities of the Former James Hardie Companies and Marlew in respect of expected Proven Claims and Claims Legal Costs (in each case which are reasonably expected to become payable in that period), before allowing for Insurance and Other Recoveries, calculated in accordance with the Amended Final Funding Agreement.

Personal Asbestos Claim means any present or future personal injury or death claim by an individual or the legal personal representative of an individual, for damages under common law or under other law (excluding any law introduced or imposed in breach of the restrictions on adverse regulatory or legislative action against the James Hardie Group under the Amended Final Funding Agreement, and which breach has been notified to the NSW Government under the Amended Final Funding Agreement) which:

(a) arises from exposure to Asbestos occurring in Australia, provided that:

  (i) the individual's exposure to Asbestos occurred wholly within Australia; or

  (ii) where the individual has been exposed to Asbestos both within and outside Australia, damages included in the Marlew Claim shall be limited to the amount attributable to the proportion of the exposure which caused or contributed to the loss or damage giving rise to the Personal Asbestos Claim which occurred in Australia;

(b) is made in proceedings in an Australian court or tribunal; and

(c) is made against:

  (i) all or any of the Liable Entities; or

  (ii) any member of the James Hardie Group from time to time;

(d) any claim made under compensation to relatives legislation by a relative of a deceased individual (or personal representative of such a relative) or (where permitted by law) the legal personal representative of a deceased individual in each case where the individual, but for such individual's death, would have been entitled to bring a claim of the kind described in paragraph (a); or

(e) a Contribution Claim made in relation to a claim described in paragraph (a) or (b)

but excludes all claims covered by a Worker's Compensation Scheme or Policy.

Proven Claim means a proven Personal Asbestos Claim in respect of which final judgment has been given against, or a binding settlement has been entered into by, a Former James Hardie Company, to the extent to which that entity incurs liability under that judgment or settlement, or a Proven Marlew Claim.

Statutory Recoveries means any statutory entitlement of the NSW Government or any Other Government or any governmental agency or authority of any such government ("Relevant Body") to impose liability on or to recover an amount or amounts from any person in respect of any payments made or to be made or benefits provided by a Relevant Body in respect of claims (other than as a defendant or in settlement of any claim, including a cross-claim or claim for contribution).

Term means the period

(i) from the date on which the principal obligations under the Amended Final Funding Agreement will commence to 31 March 2045,

(ii) as may be extended in accordance with the terms of the Amended Final Funding Agreement.

Term Central Estimate means the central estimate of the present value (determined using the discount rate used in the relevant Annual Actuarial Report) of the liabilities of the Former James Hardie Companies and Marlew in respect of expected Proven Claims and Claims Legal Costs (in each case reasonably expected to become payable in the relevant period) after allowing for Insurance and Other Recoveries during that period, from and including the day following the end of the Financial Year preceding that Payment Date up to and including the last day of the Term (excluding any automatic or potential extension of the Term, unless or until the Term has been extended).

Workers Compensation Scheme or Policy means any of the following:

(a) any worker's compensation scheme established by any law of the Commonwealth or of any State or Territory;

(b) any fund established to cover liabilities under insurance policies upon the actual or prospective insolvency of the insurer (including without limitation the Insurer Guarantee Fund established under the Worker's Compensation Act 1987 (NSW)); and

(c) any policy of insurance issued under or pursuant to such a scheme.

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Notification of dividend / distribution

Announcement Summary

Entity name

JAMES HARDIE INDUSTRIES PLC

Security on which the Distribution will be paid

JHX - CHESS DEPOSITARY INTERESTS 1:1

Announcement Type

New announcement

Date of this announcement

Tuesday May 21, 2019

Distribution Amount

USD 0.26000000

Ex Date

Wednesday June 5, 2019

Record Date

Thursday June 6, 2019

Payment Date

Friday August 2, 2019

Refer to below for full details of the announcement

Announcement Details

Part 1 - Entity and announcement details

1.1 Name of +Entity

JAMES HARDIE INDUSTRIES PLC

1.2 Registered Number Type

ARBN

Registration Number

097829895

1.3 ASX issuer code

JHX

1.4 The announcement is

New announcement

1.5 Date of this announcement

Tuesday May 21, 2019

1.6 ASX +Security Code

Notification of dividend / distribution

ASX +Security Description

CHESS DEPOSITARY INTERESTS 1:1

Part 2A - All dividends/distributions basic details

2A.1 Type of dividend/distribution

Ordinary

2A.2 The Dividend/distribution:

relates to a period of six months

2A.3 The dividend/distribution relates to the financial reporting or payment period ending ended/ending (date)

Sunday March 31, 2019

2A.4 +Record Date

Thursday June 6, 2019

2A.5 Ex Date

Wednesday June 5, 2019

2A.6 Payment Date

Friday August 2, 2019

2A.7 Are any of the below approvals required for the dividend/distribution before business day 0 of the timetable?

- Security holder approval
- Court approval
- Lodgement of court order with +ASIC
- ACCC approval
- FIRB approval
- Another approval/condition external to the entity required before business day 0 of the timetable for the dividend/distribution.

No

2A.8 Currency in which the dividend/distribution is made ("primary currency")

USD - US Dollar

2A.9 Total dividend/distribution payment amount per +security (in primary currency) for all dividends/distributions notified in this form

USD 0.26000000

2A.9a AUD equivalent to total dividend/distribution amount per +security

2A.9b If AUD equivalent not known, date for information to be released

Estimated or Actual?

Friday June 7, 2019

2A.10 Does the entity have arrangements relating to the currency in which the dividend/distribution is paid to securityholders that it wishes to disclose to the market?

Yes

2A.11 Does the entity have a securities plan for dividends/distributions on this +security?

We do not have a securities plan for dividends/distributions on this security

2A.12 Does the +entity have tax component information apart from franking?

No

2A.13 Withholding tax rate applicable to the dividend/distribution

20.000000

Part 2B - Currency Information

2B.1 Does the entity default to payment in certain currencies dependent upon certain attributes such as the banking instruction or registered address of the +securityholder? (For example NZD to residents of New Zealand and/or USD to residents of the U.S.A.).

No

2B.2 Please provide a description of your currency arrangements

The dividend is payable in Australian currency unless the securityholder elects otherwise.

Part 3A - Ordinary dividend/distribution

3A.1 Is the ordinary dividend/distribution estimated at this time?

No

3A.1a Ordinary dividend/distribution estimated amount per +security

USD

3A.1b Ordinary Dividend/distribution amount per security

USD 0.26000000

3A.2 Is the ordinary dividend/distribution franked?

No

3A.3 Percentage of ordinary dividend/distribution that is franked

0.0000 %

3A.4 Ordinary dividend/distribution franked amount per +security

USD 0.00000000

3A.5 Percentage amount of dividend which is unfranked

100.0000 %

3A.6 Ordinary dividend/distribution unfranked amount per +security excluding conduit foreign income amount

USD 0.26000000

Part 5 - Further information

5.1 Please provide any further information applicable to this dividend/distribution

5.2 Additional information for inclusion in the Announcement Summary

Media Release

20 May 2019

Exhibit 99.8

RETIREMENT OF NON-EXECUTIVE DIRECTORS

The Board of James Hardie Industries plc (James Hardie) announces that Alison Littley and Rudolf van der Meer will retire as non-executive directors with effect from the conclusion of the Annual General Meeting of the Company on 9 August 2019. The retirements are part of the Board's succession plan.

The Board expresses its thanks to Ms Littley and Mr van der Meer for their valued contribution to James Hardie and wishes them both well in their retirement.

- End -

Media/Analyst Enquires:

Jason Miele
Vice President, Investor & Media Relations

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Email:	media@jameshardie.com.au

Forward Looking Statements

This Media Release contains forward-looking statements. James Hardie Industries plc (the "Company") may from time to time make forward-looking statements in its periodic reports filed with or furnished to the Securities and Exchange Commission, on Forms 20-F and 6-K, in its annual reports to shareholders, in offering circulars, invitation memoranda and prospectuses, in media releases and other written materials and in oral statements made by the Company's officers, directors or employees to analysts, institutional investors, existing and potential lenders, representatives of the media and others. Statements that are not historical facts are forward-looking statements and such forward-looking statements are statements made pursuant to the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995.

Examples of forward-looking statements include:

- statements about the Company's future performance;
- projections of the Company's results of operations or financial condition;
- statements regarding the Company's plans, objectives or goals, including those relating to strategies, initiatives, competition, acquisitions, dispositions and/or its products;
- expectations concerning the costs associated with the suspension or closure of operations at any of the Company's plants and future plans with respect to any such plants;
- expectations concerning the costs associated with the significant capital expenditure projects at any of the Company's plants and future plans with respect to any such projects;
- expectations regarding the extension or renewal of the Company's credit facilities including changes to terms, covenants or ratios;
- expectations concerning dividend payments and share buy-backs;
- statements concerning the Company's corporate and tax domiciles and structures and potential changes to them, including potential tax charges;
- statements regarding tax liabilities and related audits, reviews and proceedings;
- statements regarding the possible consequences and/or potential outcome of legal proceedings brought against us and the potential liabilities, if any, associated with such proceedings;
- expectations about the timing and amount of contributions to AICF, a special purpose fund for the compensation of proven Australian asbestos-related personal injury and death claims;
- expectations concerning the adequacy of the Company's warranty provisions and estimates for future warranty-related costs;
- statements regarding the Company's ability to manage legal and regulatory matters (including but not limited to product liability, environmental, intellectual property and competition law matters) and to resolve any such pending legal and regulatory matters within current estimates and in anticipation of certain third-party recoveries; and
- statements about economic conditions, such as changes in the US economic or housing market conditions or changes in the market conditions in the Asia Pacific region, the levels of new home construction and home renovations, unemployment levels, changes in consumer income, changes or stability in housing values, the availability of mortgages and other financing, mortgage and other interest rates, housing affordability and supply, the levels of foreclosures and home resales, currency exchange rates, and builder and consumer confidence.

Words such as "believe," "anticipate," "plan," "expect," "intend," "target," "estimate," "project," "predict," "forecast," "guideline," "aim," "will," "should," "likely," "continue," "may," "objective," "outlook" and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. Readers are cautioned not to place undue reliance on these forward-looking statements and all such forward-looking statements are qualified in their entirety by reference to the following cautionary statements.

Forward-looking statements are based on the Company's current expectations, estimates and assumptions and because forward-looking statements address future results, events and conditions, they, by their very nature, involve inherent risks and uncertainties, many of which are unforeseeable and beyond the Company's control. Such known and unknown risks, uncertainties and other factors may cause actual results, performance or other achievements to differ materially from the anticipated results, performance or achievements expressed, projected or implied by these forward-looking statements. These factors, some of which are discussed under “Risk Factors” in Section 3 of the Form 20-F filed with the Securities and Exchange Commission on 21 May 2019, include, but are not limited to: all matters relating to or arising out of the prior manufacture of products that contained asbestos by current and former Company subsidiaries; required contributions to AICF, any shortfall in AICF and the effect of currency exchange rate movements on the amount recorded in the Company’s financial statements as an asbestos liability; the continuation or termination of the governmental loan facility to AICF; compliance with and changes in tax laws and treatments; competition and product pricing in the markets in which the Company operates; the consequences of product failures or defects; exposure to environmental, asbestos, putative consumer class action or other legal proceedings; general economic and market conditions; the supply and cost of raw materials; possible increases in competition and the potential that competitors could copy the Company’s products; reliance on a small number of customers; a customer’s inability to pay; compliance with and changes in environmental and health and safety laws; risks of conducting business internationally; compliance with and changes in laws and regulations; currency exchange risks; dependence on customer preference and the concentration of the Company’s customer base on large format retail customers, distributors and dealers; dependence on residential and commercial construction markets; the effect of adverse changes in climate or weather patterns; possible inability to renew credit facilities on terms favorable to the Company, or at all; acquisition or sale of businesses and business segments; changes in the Company’s key management personnel; inherent limitations on internal controls; use of accounting estimates; the integration of Fermacell into our business; and all other risks identified in the Company’s reports filed with Australian, Irish and US securities regulatory agencies and exchanges (as appropriate). The Company cautions you that the foregoing list of factors is not exhaustive and that other risks and uncertainties may cause actual results to differ materially from those referenced in the Company’s forward-looking statements. Forward-looking statements speak only as of the date they are made and are statements of the Company’s current expectations concerning future results, events and conditions. The Company assumes no obligation to update any forward-looking statements or information except as required by law.