INVESTOR SITE
TOUR & PRESENTATIONS

Boral North America

Sacramento and Napa, California
19–20 September 2019
### Schedule

**Thursday and Friday, 19-20 September 2019**

<table>
<thead>
<tr>
<th>Sep 19 – Time</th>
<th>Agenda</th>
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<tbody>
<tr>
<td>12:00 p.m. – 1:00 p.m.</td>
<td>Lunch</td>
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<tr>
<td>1:00 p.m. – 5:00 p.m.</td>
<td>Management presentations and Q&amp;A</td>
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<tr>
<td>6:00 p.m. – 9:00 p.m.</td>
<td>Dinner – Magnolia Terrace</td>
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<table>
<thead>
<tr>
<th>Sep 20 – Time</th>
<th>Agenda</th>
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<tbody>
<tr>
<td>6:45 a.m. – 7:20 a.m.</td>
<td>Breakfast – Sycamore Ballroom</td>
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<tr>
<td>7:20 a.m. – 8:50 a.m.</td>
<td>Drive to Napa stone plant</td>
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<tr>
<td>9:00 a.m. – 12:00 p.m.</td>
<td>Safety briefing; Tour of Napa facility</td>
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<tr>
<td>12:00 p.m. – 1:00 p.m.</td>
<td>Lunch – Napa facility</td>
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<tr>
<td>1:00 p.m.</td>
<td>Bus departures to Sacramento and San Francisco airports</td>
</tr>
</tbody>
</table>
Introduction

- Boral North America: Mike Kane
- Fly Ash: David Mariner
- Stone: Keith Depew
- Roofing:Victoria Sherwood
- Light Building Products: Joel Charlton
- Windows: David Decker

Eldorado Stone - Stacked Stone, Silver Lining
Boral’s revenue exposures

While Boral has cyclical exposures, it has portfolio benefits from diverse end market and diverse geographic exposures.

**End market exposures, %**

- Australian RHS&B & other engineering: 25%
- Australian non-residential: 10%
- Australian detached dwelling: 4%
- Australian multi-dwelling: 14%
- Australian alterations & additions: 7%
- Asia & Middle East: 9%
- USA single-family: 9%
- USA multi-family: 5%
- USA repair & remodel: 7%
- USA non-residential: 9%
- USA infrastructure: 5%
- Other: 7%

**Geographic exposures, %**

- Australia: 59%
- North America: 32%
- Asia: 9%

1. End market exposures based on FY2019 revenue, includes Boral’s 50% share of underlying revenue from USG Boral and Meridian Brick joint ventures, which are not included in Group reported revenue.
2. Based on FY2019 revenues adjusted to reflect USG Boral announced transaction. i.e. Asia includes Boral’s 50% share of revenue from expanded USGB JV (total revenue of ~US$900m), and Australia includes 100% of USG Boral Australia.
Boral’s balance sheet remains strong

Gearing expected to remain within comfortable range following the Knauf transaction

### Gearing (net debt / net debt + equity), %

<table>
<thead>
<tr>
<th>Year</th>
<th>Gearing</th>
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<tr>
<td>FY13</td>
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<td>FY17</td>
<td>27</td>
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<td>FY18</td>
<td>30</td>
</tr>
<tr>
<td>FY19</td>
<td>27</td>
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*Funding for the USG Boral / Knauf transaction has been structured to maintain current credit rating (Baa2 / BBB)*

Boral’s integration / resizing costs will be reducing, A$m

<table>
<thead>
<tr>
<th>Year</th>
<th>A$m</th>
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<tr>
<td>FY13</td>
<td>126</td>
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<tr>
<td>FY14</td>
<td>203</td>
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<tr>
<td>FY15</td>
<td>211</td>
</tr>
<tr>
<td>FY16</td>
<td>281</td>
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<tr>
<td>FY17</td>
<td>288</td>
</tr>
<tr>
<td>FY18</td>
<td>375</td>
</tr>
<tr>
<td>FY19</td>
<td>340</td>
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*Headwaters integration costs expected to be ~US$10m in FY2020*

After a significant capital investment phase, targeting to reduce capex to be broadly in line with depreciation in coming years

### Total capital expenditure, A$m

**Meridian integration costs**
**Cost reduction and rightsizing**
**HW acquisition & integration costs**

#### Significant proportion of capital has been invested into the Australian business

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<thead>
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<th>Year</th>
<th>A$m</th>
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<tbody>
<tr>
<td>FY13</td>
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<tr>
<td>FY14</td>
<td>85</td>
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<td>FY15</td>
<td>79</td>
</tr>
<tr>
<td>FY16</td>
<td>76</td>
</tr>
<tr>
<td>FY17</td>
<td>85</td>
</tr>
<tr>
<td>FY18</td>
<td>67</td>
</tr>
<tr>
<td>FY19</td>
<td>65</td>
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### Australia %

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
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<tr>
<td>FY17</td>
<td>75</td>
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<tr>
<td>FY18</td>
<td>73</td>
</tr>
<tr>
<td>FY19</td>
<td>33</td>
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*1. Stay in business capital expenditure
2. Excludes amortisation of acquired intangibles*
Boral Australia: highlights

Boral Australia is a leading integrated construction materials business

Highlights

- Participates across multiple segments including strong infrastructure activity
  - multi-year pipeline of major roads and infrastructure work
  - projects may be delayed but they are not lost, with sustainable margins retained
- Self improvement initiatives continue to deliver benefits:
  - Commercial Excellence
  - Operational Excellence (including supply chain optimisation of ~5-10%)
  - Organisational Effectiveness & Rightsizing (~$13m in FY19)
- Capital investment to drive future efficiency
  - New 1.3m tonne clinker grinding plant and cementitious storage facility at Port of Geelong (due by the end of CY20)
  - ~$1.5b of investment in Australian business in past 5-6 years including major quarry upgrades and investments in downstream concrete and asphalt assets
- Ongoing earnings from property business averaging ~$34m pa

Consistent margin profile through cycle, EBITDA/sales %

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<thead>
<tr>
<th></th>
<th>FY14</th>
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<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>13.5</td>
<td>15.7</td>
<td>15.6</td>
<td>16.7</td>
<td>17.6</td>
<td>16.6</td>
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<tr>
<td>Revenue $b</td>
<td>3.3</td>
<td>3.1</td>
<td>2.9</td>
<td>3.3</td>
<td>3.6</td>
<td>3.6</td>
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Strong above cost capital returns, ROFE\(^3\) %

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<tr>
<th></th>
<th>FY14</th>
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<th>FY17</th>
<th>FY18</th>
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<tr>
<td></td>
<td>11.0</td>
<td>13.7</td>
<td>13.5</td>
<td>14.6</td>
<td>17.5</td>
<td>15.1</td>
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Medium-term outlook

- Continued growth in infrastructure in coming years with Macromonitor forecasting higher volumes in asphalt in FY20, FY21 and FY22
- Forecasters expecting a more modest downturn in residential construction relative to past cycles

1. Supply chain cost base of $650-750m. Delivered ~$15m savings in FY2019
2. FY14-FY15 results are Boral’s CMC division. FY16 onwards are Boral Australia results
3. Return on funds employed (ROFE) is based on total EBIT before significant items on funds employed at period end
Boral Australia is well-positioned with its fully integrated downstream concrete and asphalt offering

Major transport infrastructure construction projects
VWD by financial year, A$b

The shifting nature of major transport infrastructure is supporting an increase in asphalt volumes over concrete. Other engineering work such as Snowy Hydro and Warragamba Dam will lift industry concrete volumes from FY21

Soft concrete volumes driven by more tunnelling
Premix demand from major transport construction, million m$^3$

Growing asphalt volumes driven by Vic demand
Asphalt demand from major transport construction, million tonnes

1. Macromonitor August 2019 Forecasts. Major projects defined as >$75m of VWD. NOTE: demand from major transport construction represents ~5% of total industry concrete volumes and ~15% of total industry asphalt volumes in FY19 & FY20
USG Boral: highlights

USG Boral is a well performing, highly attractive business with strong growth potential

**Highlights**

- **Strong long-term growth outlook**
  - exposure to growing Asian economies
  - increasing penetration of gypsum-based products
  - continued growth through product innovation

- **With strong growth expected in China**
  - good brand recognition; positioned at the high-quality end of the market; presence in higher GDP and higher margin areas

- **Operational improvement program - Project Horizon**
  - Rightsizing and LEAN improvement initiative – targeting to deliver annualised cost savings of ~A$21m by FY21; ~240 FTE reduction (~7% of the total USG Boral employee base); one-off costs ~$8-9m largely recognised in FY19

- **Anticipated expansion of Asia JV with Knauf strengthens the business, creating substantial value**
  - synergies of ~US$30m pa in year 4
  - additional manufacturing capacity; multi-tier branding opportunities; access to world-leading innovation and product development

- **Completion of transaction will return 100% ownership of USG Boral Australia & NZ providing attractive cash flows to Boral from a high performing strong business**

**With a growing revenue profile, US$m**

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<thead>
<tr>
<th></th>
<th>FY14</th>
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<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
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<tr>
<td></td>
<td>1,091</td>
<td>1,268</td>
<td>1,397</td>
<td>1,478</td>
<td>1,575</td>
<td>1,606</td>
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**Consistent margin profile, EBITDA/sales %**

<table>
<thead>
<tr>
<th></th>
<th>FY14</th>
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<th>FY18</th>
<th>FY19</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>13.6</td>
<td>15.9</td>
<td>18.0</td>
<td>19.2</td>
<td>17.0</td>
<td>15.7</td>
</tr>
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**Medium-term outlook**

- Expected to deliver US$30m synergies in year 4, to be progressively delivered, as a result of anticipated expanded Asia JV with Knauf

- Expected benefits from Project Horizon to deliver margin improvement offsetting cyclical softness in Australia and South Korea

- Improved cash flows and ROFE from owning 100% of USGB Australia & New Zealand if and until Knauf exercises its call option
USG Boral: strength of new expanded Asia JV

Once completed, the expanded USG Boral Asia JV will deliver a stronger platform in Asia

**Operating footprint**
(number of operating sites)

- USG Boral plasterboard plants: 15
- USG Boral other plants: 20
- USG Boral gypsum mines: 1
- KNAUF plasterboard plants: 9
- KNAUF other plants: 16
- KNAUF gypsum mines: 1

**Plasterboard manufacturing capacity**, million m²

USG Boral’s 562 m² plus Knauf’s 220 m² creates 782 m²

**FY2019 pro-forma revenue**, US$ million

~US$900 million revenue business

1. Other plants include USB Boral JV owned mineral fibre ceiling tile, metal ceiling grid, metal products, joint compounds, mineral wool and cornice production
2. Includes new capacity coming on line in USG Boral Vietnam and India, and Knauf’s new capacity in the Philippines
USG Boral Australia & NZ will deliver strong cash flow

USG Boral Australia has strong share with >40% of revenues derived from segments other than residential; significant cash flow is expected from owning 100% of the business¹

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**Indicative P&L from USG Boral Australia & NZ acquisition, A$m**

- EBITDA: 105
  - p.31 FY19 results presentation³
- Depreciation & amortisation: (21)
  - p.31 FY19 results presentation (implied)
- EBIT: 84
- Tax: (25)
  - ~30% tax rate
- NPAT: ~59

**Indicative cashflow from USG Boral Australia & NZ acquisition, A$m**

- EBITDA: 105
  - p.31 FY19 results presentation
- Tax: (25)
- Change in working capital: -
  - not material
- Capex: (21)
  - assume equal to depreciation
- Cash flow: ~59

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1. Knauf has a call option to buy 50% share for US$200 million (with potential adjustments primarily in relation to Knauf paying 50% of growth capital expenditure invested into the business under Boral’s ownership) within five years. The grant and exercise of the call option will be subject to Australian and NZ regulatory approvals.
2. USG Boral management estimates, with segment exposures based on FY2019 revenue
3. See next slide for a copy of p.31 FY19 results presentation
p.31 FY19 results presentation: Pro-forma earnings and reporting

USG Boral Plasterboard division’s underlying results

<table>
<thead>
<tr>
<th>A$ million</th>
<th>FY2019 ACTUAL</th>
<th>FY2019 Pro-forma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% of current JV</td>
<td>1,606</td>
<td></td>
</tr>
<tr>
<td>100% of expanded JV + Australia NZ</td>
<td>1,849</td>
<td></td>
</tr>
<tr>
<td>EBITDA¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% of current JV</td>
<td>252</td>
<td></td>
</tr>
<tr>
<td>100% of expanded JV + Australia NZ</td>
<td>286</td>
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Boral’s results for USG Boral Plasterboard division

<table>
<thead>
<tr>
<th>A$ million</th>
<th>FY2019 ACTUAL</th>
<th>FY2019 Pro-forma</th>
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<tbody>
<tr>
<td>Revenue</td>
<td>57</td>
<td>576</td>
</tr>
<tr>
<td>EBITDA¹</td>
<td>57</td>
<td>127²</td>
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<tr>
<td>EBIT¹</td>
<td>57</td>
<td>106</td>
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</table>

1. EBITDA and EBIT adjusted for one-offs and excluding significant items
2. A$127m of EBITDA consists of A$105m of EBITDA from USG Boral Australia & NZ (this includes a full year of the revised IP cost), and A$22m of post tax equity income from the USG Boral Asia JV (this includes a full year of the revised IP cost and a full year of the increased interest cost due USG Boral Asia JV borrowing up to US$200m of debt).

BORAL’S REPORTING IMPLICATIONS

- Share of equity earnings from expanded USG Boral Asia JV and fully consolidated earnings from USG Boral Australia & NZ, to be combined and reported under USG Boral Plasterboard division
- ROFE will be reported with share of JV equity earnings adjusted to an equivalent EBIT basis
- ~3-5% EPS accretive on pro-forma FY2019 basis
- Boral’s transaction costs ~A$20 million in FY2020 and 50% share of one-off implementation costs estimated at ~US$10 million over 3 years – to be reported as significant items
- Synergies of US$30 million pa expected in year 4 to be progressively delivered

Before synergies, Boral’s funding costs and purchase price accounting (PPA) adjustments
Boral North America: highlights

Boral North America is a leader in fly ash and building products, with highly attractive growth prospects

**Highlights**

- Strong positions in all key segments where the business operates
- A transformed business after the Headwaters acquisition
  - More diverse end-markets / reduced exposure to high fixed-cost businesses
- Strong and expanding margins and improving ROFE profile
- Headwaters synergies
  - US$71m p.a of synergies delivered since closing the acquisition
  - On track to deliver US$115m of synergies by end of FY2021
- Capital investment driving future efficiency
  - US$114m of capital invested during FY2019
  - Including investments in fly ash reclaim and storage to take total storage to 600k ton

With a **growing revenue profile**, US$m

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<tr>
<td>622</td>
<td>695</td>
<td>751</td>
<td>823</td>
<td>1,539</td>
<td>1,592</td>
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**An expanding margin profile**, EBITDA/sales, %

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<th>FY14</th>
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<tr>
<td>0.4</td>
<td>6.0</td>
<td>9.0</td>
<td>11.5</td>
<td>17.5</td>
<td>18.6</td>
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**And improving returns on funds employed**, ROFE %

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<tr>
<td>-5.8</td>
<td>0.7</td>
<td>5.0</td>
<td>4.3</td>
<td>4.4</td>
<td>5.6</td>
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**Medium-term outlook**

- Delivery of ROFE above the cost of capital (currently ~9% equivalent) underpinned by remaining ~$45m synergies and market returning to long-term average levels of ~1.5m housing starts
- Fly Ash growth and other growth opportunities will further strengthen ROFE above the cost of capital and offset any lower than expected levels of market recovery

1. Return on funds employed (ROFE) is based on total EBIT before significant items on funds employed at period end
A multi-year transformation to build 3 strong divisions

Boral’s divisions are focused on execution of strategy after a period of transformation

Our objectives are clear …

1. **BORAL AUSTRALIA**
   - Maximise returns from fully integrated, leading construction materials business
     - Profitably supply the market including multi-year growth in major roads and infrastructure
     - Harness #1 supplier of choice in the eyes of our customers and fully integrated position
     - Deliver benefits from quarry, cement and plant network reinvestments
     - Maintain strong returns and margins through customer, commercial and operational excellence programs

2. **BORAL NORTH AMERICA**
   - Execute plans and deliver returns from transformed fly ash and building products business
     - Drive improved returns on funds employed (ROFE)
     - Leverage growth from the Headwaters acquisition including on track delivery of our four-year synergy target of US$115m
     - Grow through market recovery, innovation, and by delivering our fly ash strategy to increase volumes for the long term for our customers and utility suppliers

3. **USG BORAL**
   - Fully extract value from strategic investments in Asia and Australia/NZ and deliver long-term growth
     - Deliver significant value through anticipated new expanded USG Boral Asia JV with Knauf
     - Maintain strong returns and harness opportunities from Australian business
     - Grow through product penetration and innovation for customers including next gen Sheetrock®
     - Deliver business improvement initiatives to respond to near-term cyclical and competitive pressures

4. **BORAL GROUP**
   - Deliver returns that exceed the cost of capital and maintain a strong balance sheet
     - Continue to drive performance to deliver returns above the cost of capital
     - Maintain prudent balance sheet management while funding growth and paying a good dividend
     - Multi-year reinvestments and cost of transformation coming to an end
     - Rating agency affirmed credit rating BBB/Baa2
Boral is a great business
Each of Boral’s divisions have attractive performance and growth attributes, and should be considered relative to the markets in which they operate

Highlights
● Boral offers a portfolio of businesses with diverse building and construction materials end markets and geographic exposures in Australia, North America and Asia
  — Boral Australia – a leading integrated construction materials business maintaining solid margins and delivering good returns
  — Boral North America – a leader in fly ash and building products, with strategies to grow returns and capture future growth
  — USG Boral – a leading plasterboard business with an anticipated expanded & strengthened growth platform in Asia and enhanced cashflows from Australia
  — Within each geography, Boral has strong positions, with leading brands and products, and well-invested asset positions
  — Operating in competitive environments, Boral has proven capabilities around safety, product & service delivery, technical know how and innovation
● Delivering strong EBITDA margins\(^1\) of 17.6% with opportunities for further improvement
● Strong and improving cash flows from operating activities
● Executing strategies to grow ROFE\(^2\) from 8.2% to above cost of capital
● Delivering attractive dividends per share: 26.5 cents in FY2019
● Boral’s portfolio is supported by prudent balance sheet management – funding growth while maintaining metrics to support credit ratings of BBB/Baa2

1. Before significant items
2. Return on funds employed (ROFE) is based on total EBIT before significant items on funds employed at period end
## Agenda

<table>
<thead>
<tr>
<th>Introduction</th>
<th>Mike Kane</th>
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<tbody>
<tr>
<td>Boral North America</td>
<td>David Mariner</td>
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<tr>
<td>Fly Ash</td>
<td>Keith Depew</td>
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<td>Stone</td>
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<td>Roofing</td>
<td>Darren Schulz</td>
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<tr>
<td>Light Building Products</td>
<td>Joel Charlton</td>
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<tr>
<td>Windows</td>
<td>David Decker</td>
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Boral Roofing Concrete Tile – Saxony 900 Slate, White
Agenda – Boral North America

- Business Overview
- Year in Review
- Strategic Priorities
Boral North America ("BNA") overview
A leader in fly ash and building products

Overview

Revenue¹

US$1.59b

PEOPLE²

6,937
EMPLOYEES

200
CONTRACTORS

SITES

223
OPERATING³

42
DISTRIBUTION

Revenue¹ by business unit – US$m

1. For continuing operations based on 12 months ended 30 June 2019; pie chart includes Boral’s 50% share of revenue from the Meridian Brick JV, which is not included in reported revenue of US$1.59b
2. As at 30 June 2019, people on a full-time equivalent basis, includes Meridian Brick employees and sites
3. As at 30 June 2019. Operating sites include 44 clay mines and 4 R&D sites. Excludes mothballed plants and distribution locations
Extensive national footprint
Strong national networks in building products and fly ash

Revenue\(^1\) by geography\(^2\), %

- Southeast
- Southwest
- West
- Midwest
- Northeast
- International

223 operating sites\(^3\)

- Fly ash: 124
- Roofing: 11
- Light Building Products: 8
- Stone: 8
- Windows: 4
- Meridian Brick: 20

1. Based on FY19 external revenue, including Boral’s 50% share of Meridian Brick JV revenue, which is not included in reported revenue
2. Southeast – AL, FL, GA, KY, MS, NC, SC, TN, VA, WV; Southwest – AR, LA, OK, TX; West – AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY; Midwest – IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; Northeast – CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT
3. As at June 2019. Includes 44 clay mines and four R&D sites. Excludes mothballed plants and distribution sites
Safety: a key focus across the business

Significant improvements in safety culture and performance

Boral North America employee and contractor RIFR¹ (per million hours worked)

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<tr>
<td>MTIFR</td>
<td>0.7</td>
<td>0.4</td>
<td>0.8</td>
<td>0.3</td>
<td>0.7</td>
<td>2.3</td>
</tr>
</tbody>
</table>

FY17 progress

- FY19 RIFR of 7.6 down from 8.9 in FY18, and LTIFR of 0.7 versus 1.2 last year
- Implementing Zero Harm Today culture across all sites, emphasizing hazard and risk awareness
- Embedded safety absolutes and expanded hazard reporting
- Improving pedestrian and mobile equipment interaction by using hard barriers – ongoing
- Reducing respirable silica dust generation to meet higher standards

¹ Recordable incident frequency rate (RIFR) per million hours worked is made up of lost time incident frequency rate (LTIFR) and medical treatment incident rate (MTIFR). Includes employees and contractors. FY19, FY18 and FY17PF include 100%-owned businesses including Headwaters and all joint ventures regardless of equity interest. Prior years include 100%-owned businesses and 50%-owned joint venture operations only. FY17 includes 2 months of Headwaters and 8 months of Meridian JV operations. FY17PF includes a full 12 months of Headwaters and Meridian Brick safety data for comparable purposes.
Boral North America leadership

President & CEO
David Mariner
(9 years, TIP 3)

Construction Materials
Keith Depew
(8 years, TIP 2)

Stone
Victoria Sherwood
(4 years, TIP 1)

Roofing
Darren Schulz
(14 years, TIP 1)

Light Building Products
Joel Charlton
(7 years, TIP 1)

Windows
David Decker
(5 years, TIP 2)

CFO
Oren Post
(20 years, TIP 6)

Legal
Ernie McLean
(25 years)

HR
Tommy Balas
(2 years, TIP 2)

Safety
Rich Stevens
(23 years, TIP 13)

Strategy
Alan Spear
(17 years, TIP 1)

Innovation Factory
Russell Hill
(27 years, TIP 7)

1. TIP – time in position
Agenda – Boral North America

- Business Overview
- Year in Review
- Strategic Priorities
## Boral North America strategic objectives

### FY19 progress

<table>
<thead>
<tr>
<th>Strategic objectives</th>
<th>FY19 progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Zero Harm Today</td>
<td>✓ Safety incident rates improved by 15%&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>✓ Headwaters businesses meeting Boral standards</td>
</tr>
<tr>
<td>2. <strong>Integrate</strong> business and deliver on <strong>synergies</strong></td>
<td>✓ Delivering synergies – US$32m in FY19, cumulative US$71m delivered; Year 4 target of US$115m on track</td>
</tr>
<tr>
<td></td>
<td>✓ Operational issues resolved</td>
</tr>
<tr>
<td>3. <strong>Grow</strong> our top line into new segments, channels and geographies</td>
<td>✓ Revenue growth in Roofing, Windows and Fly Ash marketing (ex-site services)</td>
</tr>
<tr>
<td></td>
<td>✓ Tru Exterior&lt;sup&gt;®&lt;/sup&gt; strong growth</td>
</tr>
<tr>
<td></td>
<td>✓ Stone share stabilized</td>
</tr>
<tr>
<td>4. <strong>Deliver</strong> returns that exceed cost of capital &amp; EBITDA margins &gt;20%</td>
<td>✓ Rebuilding Meridian Brick share after challenging year</td>
</tr>
<tr>
<td></td>
<td>✓ EBITDA margins up to 18.6%</td>
</tr>
<tr>
<td></td>
<td>✓ ROFE improved to 5.6%</td>
</tr>
</tbody>
</table>

1. Reflects total recordable incidents, which includes lost time incidents and medical time incidents
Our safety journey
Working to achieve zero harm today

FY19 Safety Highlights

- Focus on safety absolutes and hazard and risk recognition
- Critical control gemba walks conducted by BNA CEO at lowest performing sites
- Continued development of traffic management programs to minimize pedestrian and mobile equipment interactions
- Conducted company-wide safety cultural survey – results were above benchmark companies
- Implementing new EH&S management system for incident, near miss and observation management
- Continued focus and implementation of behavioral safety programs in FY20 (SafeStart and DuPont STOP)
Market drivers
New home construction lower in FY19 – other sectors moderately higher

| Residential¹ | - Single family starts down 3.4% from FY18  
| - Affordability and labor shortage main drag on growth  
| - Supply of homes for sale remains low  
| - Multi-family helped by push for urban development  
| - Extreme weather slowed activity |

| Non-Residential² | - Warehouse and office buildings are main drivers  
| - Recent activity – data centers, education and offices |

| Repair & Remodel³ | - Pace of growth slowing from prior years  
| - Home sales impact activity |

| Infrastructure⁴ | - Aging infrastructure continuing to drive demand  
| - Highways and bridges are the biggest driver  
| - Ability of governments to fund projects impact activity |

1. US Census seasonally adjusted annualized housing starts. Based on data up to July 2019  
2. Management estimate of square feet area using Dodge Data & Analytics and US Census data  
3. Moody’s retail sales of building products, July 2019  
4. Management estimate of ready mix demand using Dodge Data & Analytics, and Portland Cement Association shipments
Boral North America

Recap of FY19 results – contributing 36% share of underlying revenue

Boral’s FY19 revenue by division¹, %

- Boral Australia
- USG Boral
- Boral North America

Boral North America’s FY19 revenue by business¹, %

- Fly Ash
- Roofing
- Stone
- Light Building Products
- Windows
- Meridian Brick

<table>
<thead>
<tr>
<th>US$m</th>
<th>FY19</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,592</td>
<td>1,539</td>
</tr>
<tr>
<td>EBITDA²</td>
<td>297</td>
<td>270</td>
</tr>
<tr>
<td>EBITDA ROS²</td>
<td>18.6%</td>
<td>17.5</td>
</tr>
<tr>
<td>EBIT²</td>
<td>180</td>
<td>154</td>
</tr>
<tr>
<td>ROFE³, %</td>
<td>5.6</td>
<td>4.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY19 US$m</th>
<th>External revenue⁴</th>
<th>EBITDA⁴</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fly Ash</td>
<td>522</td>
<td>Steady</td>
<td>▼</td>
</tr>
<tr>
<td>Stone</td>
<td>269</td>
<td>Steady</td>
<td>▲</td>
</tr>
<tr>
<td>Roofing</td>
<td>367</td>
<td>▲ 15%</td>
<td>▲</td>
</tr>
<tr>
<td>LBP</td>
<td>277</td>
<td>Steady</td>
<td>▲</td>
</tr>
<tr>
<td>Windows</td>
<td>158</td>
<td>▲ 5%</td>
<td>▲</td>
</tr>
<tr>
<td>Meridian²</td>
<td>187</td>
<td>▼ -5%</td>
<td>▼</td>
</tr>
</tbody>
</table>

1. Includes Boral’s 50% share of underlying revenue from USG Boral and Meridian Brick joint ventures, which are not included in Group reported revenue. Excludes discontinued operations.
2. Excluding significant items
3. ROFE calculated on funds employed as at 30 June 2019 and average monthly funds employed as at 30 June 2018
4. Change from FY19 relative to FY18
5. Boral’s 50% interest in Meridian Brick FY19 revenue.
Synergies have supported EBITDA growth of US$55m over past 2 years, for continuing operations

- Volume & Weather: Modest market growth offset by utility closures in Fly Ash and weather impacts
- Operating costs: Inflation, raw materials, labor and Fly Ash cost increases

1 Excludes significant items and discontinued operations
Agenda – Boral North America

- Business Overview
- Year in Review
- Strategic Priorities
Boral North America – strategic objectives

FY20 focus

Strategic objectives

1. Zero Harm Today

2. *Deliver on synergies* and manage our cost base to offset cyclical challenges

3. *Grow our top line* into new segments, channels and geographies

4. *Deliver returns* that exceed cost of capital & EBITDA margins >20%

---

FY20 focus

- Continue Zero Harm Today journey
- Continue to execute on synergy opportunities targeting ~US$20m in FY20
- Execute continuous improvement and performance excellence programs within our manufacturing operations
- Expand fly ash supply
- Leverage strong brand recognition and distribution to grow our stone and siding and trim product lines
- Build on turnaround of our metal roofing business and further optimize our Florida roof tile operations
- Execute Windows expansion into Houston, TX
- Pricing to at least offset inflationary pressures
- Deliver EBITDA improvements in FY20 across businesses through continuous improvement initiatives
- Drive towards 20% EBITDA margins for division
Acquisition synergies of US$32m were ahead of our FY2019 US$25m target

FY2019 synergies by business¹

<table>
<thead>
<tr>
<th>Business</th>
<th>FY2018 delivered</th>
<th>FY2019 delivered</th>
<th>Total delivered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate &amp; Other²</td>
<td>$39m</td>
<td>$11.0m</td>
<td>$11.0m</td>
</tr>
<tr>
<td>Roofing</td>
<td>$2.8m</td>
<td>$4.5m</td>
<td>$4.5m</td>
</tr>
<tr>
<td>Stone</td>
<td>$7.0m</td>
<td>$6.4m</td>
<td>$6.4m</td>
</tr>
<tr>
<td>Fly Ash</td>
<td>$6.4m</td>
<td>$32m</td>
<td>$32m</td>
</tr>
<tr>
<td>LBP</td>
<td></td>
<td></td>
<td>$71m</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$71m</strong></td>
<td></td>
<td><strong>$71m</strong></td>
</tr>
</tbody>
</table>

FY2020 targets: ~$20m, FY2021 targets: ~$24m, Total targets: ~$115m

1. Synergies include cost synergies and estimated cross-selling and distribution revenue synergies, and excludes one-off integration costs estimated at US$90-$100m predominately in FY18 & FY19
2. Other includes Windows and Block (in year 1 only)
Boral North America is an attractive business

With opportunities and strategies for **further growth**

With a **growing revenue profile** (US$m)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues (US$m)</td>
<td>622</td>
<td>695</td>
<td>751</td>
<td>823</td>
<td>1,539</td>
<td>1,592</td>
</tr>
</tbody>
</table>

An **expanding margin profile** (EBITDA/sales, %)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA margin (%)</td>
<td>0.4</td>
<td>6.0</td>
<td>9.0</td>
<td>11.5</td>
<td>17.5</td>
<td>18.6</td>
</tr>
</tbody>
</table>

And **improving returns on funds employed** (ROFE, %)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROFE (%)</td>
<td>-5.8</td>
<td>0.7</td>
<td>5.0</td>
<td>4.3</td>
<td>4.4</td>
<td>5.6</td>
</tr>
</tbody>
</table>

- Aiming to grow our top line by building and maintaining leading positions in all key segments across our businesses
- Targeting revenue growth through price and volume gains as well as product development and market step-outs
- Aiming to deliver 20%+ EBITDA margins
- Delivery of remaining ~$45m synergies will support this goal
- Aiming to deliver ROFE above the cost of capital (currently ~9% equivalent)
- Delivery of remaining ~$45m synergies and market demand returning to long-term average levels of ~1.5m housing starts will underpin delivery of this goal
- Fly Ash growth and other growth opportunities will further strengthen ROFE above the cost of capital and offset any lower than expected levels of market recovery
Agenda

Introduction

Boral North America

Fly Ash

Stone

Roofing

Light Building Products

Windows

Mike Kane

David Mariner

Keith Depew

Victoria Sherwood

Darren Schulz

Joel Charlton

David Decker

Fly Ash facility in Austin, TX
Agenda – Fly ash

- Business Overview
- Industry Overview
- Year in Review & Strategic Update
1. Short tons equals 2,000 pounds or 907 kilograms
2. Source: Management estimates on FY19 results

Business overview
Boral is the only national fly ash marketer with a full service platform

Snapshot of Boral’s position

- FY19 revenue of ~US$522m
- Fly ash sales of ~7m short tons¹ in FY19 – predominantly to ready mix concrete industry
- National supply / distribution footprint with 124 operational sites providing full service portfolio to utilities and customers
- Leading fly ash beneficiation technologies
- Strong reputation with utilities & fly ash customers, with excellent quality, safety, environmental track record
- National coverage, ash sales in 45 states plus Canada

Fly ash sales by segment²

- 45% Infrastructure / Maintenance
- 35% New Residential
- 20% Non-residential

---

1. Short tons equals 2,000 pounds or 907 kilograms
2. Source: Management estimates on FY19 results
Business overview: our footprint

National footprint with strong infrastructure and full service offering

Contracts and services

- **Marketing/supply products** comprise 70 -80% of revenue
  - Fly ash marketing and site service contracts with utilities, terms range from 1 year to life of plant
  - Industry practice is to pay utilities royalty based on revenues

- **Site services** makes up 20-30% of revenue
  - variable year by year
  - Site services include day to day support of utility and larger project work
Utilities motivated by production costs & demand

Marketer

- Marketers need:
  - Manageable royalties and minimum volumes
  - Supply availability (seasonality)
  - Consistent quality

End user

- End users seek:
  - Low landed cost, consistent supply and quality

Boral’s Fly Ash business model

- Boral has relationships with utilities and end users as we connect fly ash resources to markets
- Low capital intensive operations
- Low ongoing operating costs, as proportion of revenue, with minimal plant and equipment required
- Percentage of revenue / royalty share with utilities
- Boral provides site services across 15 sites
- Boral creates value through technical know how (fly ash beneficiation), benefits of a national network and other capabilities (e.g. storage)
- Defined strategy to increase future volumes

1. Sites with only site service operations, Boral provides services at many marketing sites.
Business overview: Our value proposition
One stop shop, solutions provider for utilities and our end users

Value to utilities
- Historically, material was a waste stream and cost burden
- Marketers transformed the annual waste cost into a revenue stream through beneficiation and royalty payments
- A ‘full service’ solution offering for environmental / CCR\(^1\) reclamation

Value to end users
- ~20 years ago: Optional material, cost savings versus cement
- ~10 years ago: Cost savings material with marketable quality advantages versus cement
- Today: Required in many state DOT\(^2\) / federal project works to improve durability
- Use in concrete increases strength and improves properties

Products
- Concrete Fly Ash
- Micron3
- Celceram
- Gypsum

Services
- Disposal
- Wet to Dry Conversion
- Harvesting
- Fluidized Bed

1. Coal combustion residuals
2. Department of Transportation
Agenda – Fly ash

- Business Overview
- Industry Overview
- Year in Review & Strategic Update

Fly Ash facility in Austin, TX
Industry overview: Ample saleable ash despite closures
Additional 1 billion tons\(^1\) of fly ash currently in landfills and growing

2017 American Coal Ash Association volumes\(^2\)

Note: 2018 report available Nov ‘19

- CCP\(^3\) produced ~111m tons
- Fly ash produced ~38m tons
- Other CCP e.g. bottom ash, FGD\(^3\)
- Fly ash used ~24m tons
- Fly ash to landfill ~14m tons
- Ready mix concrete ~14m tons
- Other applications:
  - Blended cement/ clinker ~4.6m tons
  - Structural fills ~0.5m tons
  - Mining applications ~0.9m tons
  - Waste stabilization ~1.1m tons
  - Other e.g. road-base, engineered products, etc. ~2m tons

---

1. ~1 billion tons of fly ash currently landfilled (source: American Coal Ash Association) | ~1.5 billion tons of CCPs landfilled (source: US EPA)
2. ACAA 2017 Coal Combustion Product (CCP) Production & Use Survey report
3. CCP is Coal Combustion Products; FGD is flue gas desulfurization which includes gypsum and sludge
Industry overview: Coal remains a long term power source
Declines from retirements expected to slow in future

Electricity production\(^1\)

*Quadrillion BTU’s*

Coal will continue to be major part of energy production

Industry overview: EIA announced utility closures

The impact of announced utility closures is declining

Plant closures – total ash production, m tons

<table>
<thead>
<tr>
<th></th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>FY23</th>
<th>FY24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Boral closures</td>
<td>1.3</td>
<td>1.8</td>
<td>2.2</td>
<td>1.5</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Boral closures</td>
<td>0.8</td>
<td>1.0</td>
<td>0.8</td>
<td>0.9</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
</tr>
</tbody>
</table>

EIA announced closures, number of plants

<table>
<thead>
<tr>
<th></th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>FY23</th>
<th>FY24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Boral closures</td>
<td>10</td>
<td>9</td>
<td>15</td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Boral closures</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Plant closures – ash sold impacts, m tons

<table>
<thead>
<tr>
<th></th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>FY23</th>
<th>FY24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Boral closures</td>
<td>0.7</td>
<td>0.8</td>
<td>0.7</td>
<td>0.5</td>
<td>0.2</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Boral closures</td>
<td>0.3</td>
<td>0.5</td>
<td>0.3</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Negligible saleable ash from FY23 and FY24 closures

Plant closure impacts: FY18 – FY24

- 54 actual or announced closures; represents ~17% of 2017 plants
- Total saleable ash impacted ~3.5m tons p.a. (~15% of industry saleable ash)
- Boral FY18/19 closures impacted sales ~800k tons p.a.
- Boral closures FY20 forward include:
  - Navajo impact ~400k tons p.a. in FY20/21
  - Vistra closures of 4 Illinois plants announced August 2019 impact ~75k tons p.a. in FY20/21

1. EIA announced utility plant closures, adjusted for Boral financial years
2. EIA data tables for June 2019 Electric Power Monthly plus closures announced subsequent to the EIA publication
Construction driving fly ash volume

Ready mix demand expected to grow ~4% during FY20

- Fly ash demand underpinned by ready mix demand, substitution rates and growth in non-traditional products
- Fly ash growth could exceed ready mix growth as replacement rates increase
- Continued ready mix growth expectations driven by continued investment in national infrastructure
- Cement sales forecast of 100.1m tons\(^2\) in CY20, approaching domestic capacity of 104m tons\(^3\)
- Non-traditional products sales continue to improve in high strength concrete, filler applications, and engineered products

1. Dodge Data & Analytics, Infrastructure Ready Mix Demand
2. Portland Cement Association: Summer 2019 Forecast
3. USGS Annual Yearbook: July 10, 2018
Industry pricing dynamics
Boral pricing up 11% in FY19, driven by high demand and tightening supply

Pricing relationship

Cement¹
Pricing; indexed to Jun 2005

Fly ash²
Pricing; indexed to Jun 2005

Pricing relationship changing as supply declines

Boral reported 8%, 9%, and 11% in FY17, FY18 and FY19

Regional overview

MIDWEST
Above average pricing with tighter supply

NORTHEAST
Above average, driven by tighter supply and utility closures

WEST
Above average with tighter supply and high demand

SOUTHEAST
Strong pricing, driven by utility closures

SOUTHEAST
Average pricing and improving, expanding supply to meet demand

Price ranges from $40 to $100 per ton

2. Management estimate of industry fly ash average selling price (ASP), indexed to June 2005
## Industry overview: Competitive landscape

National and local operators serve the market and have different areas of focus.

### Examples of competitors

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
</table>
| **LafargeHolcim**         | - Midwest and Texas  
                          | - Complements cement manufacturing with downstream outlet                     |
| **Waste Management**      | - 10 fly ash locations, weighted towards Texas  
                          | - Waste management purchased FlyAshDirect in 2012  
                          | - Strengths in disposal, landfill management |
| **Charah**                | - Publicly traded; 14 fly ash locations  
                          | - Nuclear maintenance and services  
                          | - Active in remediation and compliance services (site services) |
| **SEFA**                  | - 9 locations, Southeastern US – TN, VA, SC  
                          | - Privately owned  
                          | - STAR beneficiation technology core to value proposition |
| **Other**                 | - Smaller regional players with modest source locations  
                          | - Separation Technologies owned by Titan America, a cement and concrete producer |

1. Per Company websites and management estimate.
## Industry overview: Regulatory environment

Changes in regulatory environment underpin opportunities

### Regulatory milestones

- **2008** – Kingston coal ash spill occurs
- **2009** – EPA initiates formal rulemaking for coal ash disposal under RCRA
- **2015** – Coal Ash Disposal Regulation put into effect
  - EPA completes final rule
  - States take over compliance with national standards
- **2018** – EPA proposes changes to regulation
  - Beneficial use exempt
- **2019** – North Carolina and Virginia enact legislation around landfills
- **Current** – EPA rule reconsideration process – underway since 2018 court ruling – now extending well into 2020

### Industry update

- Regulatory activity at the Federal and state level will continue to run its course
- Demand for fly ash will remain strong, and beneficial use will likely remain exempt from regulation
Agenda – Fly ash

- Business Overview
- Industry Overview
- Year in Review & Strategic Update

Fly Ash facility in Austin, TX
Fly ash strategic priorities
Integrating the businesses while growing our supply

**Strategic objectives**

1. Zero Harm Today
2. **Expand** marketable supply through storage, ash harvesting, wet to dry conversion, technology and imports
3. Deliver **synergy** value through integration, including best practices and technology
4. Leverage full **service offering** to market
5. **Maintain and grow** EBITDA margin

**FY19 progress**

- Safety *incidents down* ~55%\(^1\) from FY18; RIFR of 1.9
- **Expanded supply** through new sources coming on stream, better utilization and increased storage to capture seasonal supply
- First US *dry harvesting* operation in Pennsylvania fully operational
- Delivered incremental synergies of ~US$7.0m
- **Bundled service platform** includes marketing, plant services, synthetic gypsum, and circulated fluidized bed (CFB)
- Managing through dynamics of *utility closures*
- Achieved *price increase* of 11% based on supply/demand and service level

---

1. Reflects total recordable incidents, which includes lost time incidents and medical treatment incidents
**Year in review**

**Earnings impacted by completion of two large profitable site services projects**

<table>
<thead>
<tr>
<th></th>
<th><strong>FY19</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td></td>
</tr>
<tr>
<td>Fly Ash sales</td>
<td>$522m (steady)</td>
</tr>
<tr>
<td>Site Services</td>
<td>$405m (7%)</td>
</tr>
<tr>
<td></td>
<td>$117m (19%)</td>
</tr>
<tr>
<td>EBITDA on PY</td>
<td></td>
</tr>
<tr>
<td>Fly Ash</td>
<td>Steady</td>
</tr>
<tr>
<td>Site services</td>
<td></td>
</tr>
<tr>
<td>EBITDA margin</td>
<td>~ 22%</td>
</tr>
<tr>
<td>% of site services of total sales</td>
<td>~22%</td>
</tr>
<tr>
<td>Fly Ash sales volumes</td>
<td>7.0m tons</td>
</tr>
<tr>
<td>Price</td>
<td>(11%)</td>
</tr>
<tr>
<td>New domestic contracts secured</td>
<td>3 new contracts</td>
</tr>
<tr>
<td>Storage</td>
<td>70k tons added</td>
</tr>
</tbody>
</table>

- Volume decline offset by price increases
- Site services impacted by completion of Barry & Gaston projects
- Down from ~24% in FY18
- Down from 28% in FY18
- Down from 7.1m tons in FY18
- Potential ash supply ~320k tons p.a.
- Total storage across network is now 600k tons
Year in review: Ash volumes

New contracts and network utilization largely offset impact of closed plants

Fly ash volumes – FY18 to FY19

<table>
<thead>
<tr>
<th>m tons</th>
<th>FY2018</th>
<th>Plant closures</th>
<th>Weather &amp; Plant Performance</th>
<th>New sources</th>
<th>Network &amp; supply chain</th>
<th>FY2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td></td>
<td>(0.5)</td>
<td>(0.2)</td>
<td>0.2</td>
<td>0.4</td>
<td>7.0</td>
</tr>
</tbody>
</table>

FY19 Activity

- Plant closures in FY18 and FY19 impacted available ash
- Abnormal weather patterns, including flooding, impacted the Midwest and West regions
- New contracts helped offset impacts of plant closures
- Supply chain investments allowed more efficient use of available material
Site services work normalized in FY19
Offering utilities a wide range of civil, design, and engineering services

- Two major multi year projects concluded in FY19
  - Site Services ~20% of total Fly Ash revenues without major project work
- Services provided include:
  - Design: Onsite project expertise
  - Engineering: Support across many engineering applications
  - Project management: Leads in development of major onsite projects including CCR\(^1\) compliance
  - Civil: Day to day operations on disposal operations (i.e. landfilling)
- EBITDA margins strong but typically less than fly ash margins

\(^1\) Coal combustion residuals
Industry closures impacted Boral in FY19

Several closures were non-Boral sites, others had limited sales impact

### Industry Supply: Site Closures

<table>
<thead>
<tr>
<th>Region</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Central</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Boral Supply: Site Closures

<table>
<thead>
<tr>
<th>Region</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Central</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Full Closures</th>
<th>(# of plants)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18</td>
<td>10</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>FY19</td>
<td>12</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Production Impact</th>
<th>(m’s tons)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18</td>
<td>1.3</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>FY19</td>
<td>1.5</td>
<td>3.2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sales Impact</th>
<th>(m’s tons)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18</td>
<td>0.7</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>FY19</td>
<td>0.7</td>
<td>1.3</td>
<td></td>
</tr>
</tbody>
</table>

1. Source: EIA, publicly available announcements; management estimates
Ash supply – current status
Focus on good quality ash being landfilled has helped to hold volumes steady in FY19

<table>
<thead>
<tr>
<th></th>
<th>Domestic Contracted</th>
<th>Harvesting capacity</th>
<th>Import potential</th>
<th>Current Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.7m tons</td>
<td>0.1m</td>
<td>0.4m</td>
<td>15.2m tons</td>
<td></td>
</tr>
</tbody>
</table>

FY2019 volumes

- Domestic contracted tons down from FY18 due to utility plant closures
- Imports minimal in FY19; subject to utility infrastructure upgrades
- Harvesting activities ramping up
- Domestic landfilled remains an opportunity contingent on quality, network and location

1. Non-saleable due to a number of reasons including quality issues, uneconomical logistics, no collection systems in place, wet-sluicing employed
### Boral’s fly ash supply opportunities

**Progress made in FY2019 to grow supply of fly ash by ~1.5-2.0 million tons by 2021**

#### Capturing more from current contracts

- Expanded storage & network optimisation
  - Fixed and floating storage helps with seasonality and intermittent shuts
  - Added ~70k tons p.a. in FY19 including 200 rail cars for mobile storage
  - Current capacity ~600k tons with turns of 1 to 10 times p.a.
  - Captured additional ~400k tons in FY19

#### Growing total contracted volumes

- New domestic contracts
  - Three new contracts in FY19 – ~320k tons p.a.
  - New contracts and renewing contracts come available over time
  - Targeting best US available contracts

- Harvesting ash from landfill and wet ponds
  - Montour reclaim (PA) underway – initial tons in FY19 growing to >100k p.a. from ~2m ton source
  - FY18 conversion of wet to dry processes at two plants preceded new FY19 contracts
  - Other reclaim sites under investigation
  - Opportunities to harvest ponded ash – tendering underway

- Grinding & blending, technology
  - Expand volumes through new beneficiation technologies, grinding and blending, and partnerships
  - Natural pozzolans – new source in Utah can be blended with fly ash to extend supply – investigations underway

- Imports
  - FY19 commenced imports from Mexico; securing DOT approvals; optimising logistics to grow volumes
  - Long-term strategy to import international supply to key areas

---

**Boral’s fly ash supply opportunities**

**Progress made in FY2019 to grow supply of fly ash by ~1.5-2.0 million tons by 2021**

<table>
<thead>
<tr>
<th>Capturing more from current contracts</th>
<th>Growing total contracted volumes</th>
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</thead>
<tbody>
<tr>
<td>Expanded storage &amp; network optimisation</td>
<td>New domestic contracts</td>
</tr>
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<td>- Fixed and floating storage helps with seasonality and intermittent shuts</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Harvesting ash from landfill and wet ponds</th>
<th>Grinding &amp; blending, technology</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Montour reclaim (PA) underway – initial tons in FY19 growing to &gt;100k p.a. from ~2m ton source</td>
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</tr>
<tr>
<td>- Opportunities to harvest ponded ash – tendering underway</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Expanded storage and strengthened supply chain capability

In FY19, expanded storage by ~70k tons

**Progress**

- 600k tons of storage in network – 580 tons fixed and 20 tons floating
- US$21m of capital invested in storage in FY19
- Expanded rail car fleet by ~200 cars to resource longer hauls and provide floating storage
- Targeting additional railcars where economically feasible
- Rapid Deploy Terminal strategy underway (4 added in FY19)
- Additional 20k to 30k additional storage planned for FY20
- Ongoing review of future needs and opportunities
New domestic contracts

In FY19, Boral expanded supply by +300k tons through new domestic contracts

- Two sites in Alabama added in FY19 post wet to dry conversion project
- New contract in Florida commenced in FY19
- New sources contributed ~200k tons in FY19; anticipate growth to ~320k tons in FY20
- New contracts mainly providing supply to the Southeastern US
- Targeting several additional contracts in FY20 and beyond by offering bundled services, technology, and extensive distribution network
**Dry impoundment**

- Impoundments are landfills where fly ash has been disposed of in dry form
- Process includes removal of landfill materials, beneficiation and marketing
- Boral first to offer beneficiation service in USA, opening the first of its kind harvesting operation in a closed landfill in Montour, Pennsylvania
  - First shipment in FY19
  - Following weather impacts, plant now performing in line with expectations
  - Serves the attractive, underserved Northeast region
- Scalable operation:
  - US$6-8 million capital
  - ~100k tons p.a. current capacity
  - Margins in line with typical Fly Ash volume

**Opportunities**

- Further capacity utilization of Montour facility to increase sales
- In discussion with multiple utilities to deploy
- Regulatory environment to influence future activity
- Different royalty structure offsets higher costs and capital investment
- Opportunity to scale up with relatively modest capital requirement

![Stockpiled ash](image1)

![Harvesting site](image2)
### Ponded material

- Ponds are landfills where material has been disposed of in wet form
- Opportunity to harvest, beneficiate and market material; landfill unused and poor quality material
- Boral’s suite of services and technology provides a full service solution to utilities
  - Beneficiation technologies to improve ash to suitable quality
  - National network to move product to meet demand
- Changes in regulatory environment underpinning opportunities

### Opportunities

- ~1 billion tons estimated in ponds and landfills\(^1\)
- In discussion with multiple utilities; proposals underway
- Timing is dependent on utility and regulations

---

\(^1\) ~1 billion tons of fly ash currently landfilled (source: American Coal Ash Association) | ~1.5 billion tons of CCP’s landfilled (source: US EPA)
Grinding & blending

Extending supply with non-traditional materials via grinding and blending

**Grinding**
- Actively exploring several opportunities to grind non-traditional materials to supplement fly ash supply in key areas
- Engineering design and equipment to be standardized across future sites
- Targeting execution of 2 projects in next 12 to 24 months

**Blending**
- Options to improve quality or extend supply with non-traditional cementitious products.
- Blend traditional and non-traditional products to create a ‘P2’ product with improved cementitious qualities
- Blend traditional fly ash with natural pozzolan or bottom ash to extend supply
- Targeting investment into several key areas over next 12 to 18 months

---

Reserve Pile #1: Eureka, UT

Bottom ash reserves
Extending supply with non-domestic utility based sources

- Commenced in FY19
- Sourced initially from Mexico: modest volumes currently
- Signed exclusive US marketing rights agreements for 2 plants
- Further growth from Mexico requires infrastructure investment by utility: ~400k tons annual production
- Obtaining DOT approval in key areas
- Targeting to serve Texas and other areas with other Mexico sources
- Further locations / sources being pursued
Technology
Expanded suite of fly ash technologies to support growth and industry leadership

Process Technologies
- RestoreAir®
- Harvested ash processing and beneficiating
- Grinding and Blending
- Carbon Burn-Out
- Ammonia Slip Mitigation

Carbon mitigation options:
- LOI1 %
- Sweet Spot
- Bored Samples
- CBO
- Blending
- RestoreAir
- Sweet Spot

Product Technologies
- Performance Pozzolan (P2)
- Ground Bottom Ash
- Sintered Light Weight Aggregate
- GYPSYN
- MICRON3™
- Celceram®

Boral’s available process technologies can beneficiate ash at all levels of carbon content

Boral’s product technologies are securing expanded end uses and offering solutions to our customers

1. “Loss on ignition” – the amount of unburned carbon in fly ash
Providing other non-traditional services
Offering utilities services beyond traditional collection and marketing

**Synthetic materials**
- Leaders in synthetic gypsum dewatering equipment design, processing, and sales management
- Offer expertise on dewatering, water treatment, and separation technologies
- Margins in line with fly ash sales margins
- Secured long term extension on key contract during FY19
- Major construction project at TVA Cumberland to be completed in FY20

**LA Ash**
- Collects, processes, and markets circulating fluidized bed (CFB) by-products for utilities
- End uses include civil, environmental, oil field for soil stabilization, liquid solidification
- Returns traditional waste products to manufacturing process
- Margins in line with fly ash sales margins
Significant opportunity to grow volumes over time

Boral is well-placed to capture additional volumes, with timing difficult to control

<table>
<thead>
<tr>
<th>Additional volume opportunities (000’s tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Network optimization (and storage)</strong></td>
</tr>
<tr>
<td>- Minimize ash going to landfill</td>
</tr>
<tr>
<td>- Utilize national supply chain</td>
</tr>
<tr>
<td><strong>Domestic contracts</strong></td>
</tr>
<tr>
<td>- Full utilization of contracts gained in FY19</td>
</tr>
<tr>
<td>- New contracts bidding</td>
</tr>
<tr>
<td><strong>Harvesting ash from landfills and wet ponds</strong></td>
</tr>
<tr>
<td>- Montour to full capacity</td>
</tr>
<tr>
<td>- Future wet and dry impoundment</td>
</tr>
<tr>
<td><strong>Imports</strong></td>
</tr>
<tr>
<td>- Full utilization of contracts gained in FY19</td>
</tr>
<tr>
<td>- New contracts bidding</td>
</tr>
<tr>
<td><strong>Grinding and blending</strong></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
</tr>
</tbody>
</table>
Targeting to increase fly ash supply
Making progress to deliver targeted ~1.5m to ~2.0m tons over next 2 years

Ash outlook (millions of tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY17 Closures</th>
<th>2018 Plant performance &amp; weather</th>
<th>FY18 Closures</th>
<th>Strategic offsets</th>
<th>FY19 Closures</th>
<th>Initiatives</th>
<th>FY20</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY17</td>
<td>7.6m</td>
<td>0.3m</td>
<td>7.1m</td>
<td>0.5m</td>
<td>7.0m</td>
<td>~0.3m</td>
<td>7.0m+</td>
</tr>
</tbody>
</table>

1. Net of volume impacts due to weather disruptions, quality and intermittent closures
2. Includes impact of Navajo closure and Vistra closures of 4 Illinois plants announced August 2019
3. Available supply may take time to translate to actual sales

Business outlook

- **Price:** Continued opportunity to narrow gap with cement based on value proposition
- **Demand:** Underpinned by ready mix concrete and specifications
- **Supply:** By the end of FY21, we expect to supply ash at a run rate of at least 8.6m tons p.a., with volume growth coming from a range of initiatives including imports, new contracts, fixed and mobile storage, landfill reclamation, and mining natural pozzolans
- **Margin:** Targeting to maintain or exceed current performance
- **FY2020:** expect volume growth despite plant closures (Navajo and Illinois)
- **FY2020:** completion of TVA Cumberland Synmat will adversely impact revenues and earnings
<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Mike Kane</td>
</tr>
<tr>
<td>Boral North America</td>
<td>David Mariner</td>
</tr>
<tr>
<td>Fly Ash</td>
<td>Keith Depew</td>
</tr>
<tr>
<td>Stone</td>
<td>Victoria Sherwood</td>
</tr>
<tr>
<td>Roofing</td>
<td>Darren Schulz</td>
</tr>
<tr>
<td>Light Building Products</td>
<td>Joel Charlton</td>
</tr>
<tr>
<td>Windows</td>
<td>David Decker</td>
</tr>
</tbody>
</table>
Agenda – Stone

- Industry Overview
- Business Overview
- Year in Review and Strategic Priorities
Cladding and decorative stone market
Exterior cladding applications are the primary driver of stone demand

**NA cladding material**
*7.8b square feet*

- Fiber Cement: 3%
- Stone: 20%
- Stucco: 8%
- Brick: 19%
- Block: 2%
- Other: 10%
- Engineered Wood: 2%
- Vinyl: 10%

**Masonry cladding**
*1.8b square feet*

- Block: 14%
- Stone: 46%
- Stucco: 33%

**Decorative stone characteristics**

- Exterior cladding applications are the single largest demand driver for stone products
- Manufactured stone competes primarily with other masonry products for wall share
- Typically installed as an accent or secondary siding material

**Decorative stone**
*284m square feet*

- Natural stone: 35%
- Manufactured stone: 62%
- Mechanically fastened: 3%

---

1 Data based on study by DuckerFrontier; 2019
Demand trends
The segment has grown – CAGR 3.6% since 2013

Decorative Stone demand
(in million square feet installed coverage area)

- Growth in commercial, interior applications and outdoor living is outpacing growth in residential cladding applications
- Decorative stone wall share has declined slightly
- Mechanically fastened stone is a small, but fast growing product category - addresses labor shortages and a short installation season in colder climates
- Natural stone has gained some ground against manufactured stone over the past 5 years as new home construction has been skewed toward higher-end and custom homes

1. Source: June 2019 study by DuckerFrontier
Market segmentation – decorative stone

Cladding still drives demand, interior accents and outdoor living growing

**Interior finishes and outdoor uses growing ...**

<table>
<thead>
<tr>
<th>Exterior cladding</th>
<th>89%</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Primary end use for stone</td>
<td></td>
</tr>
<tr>
<td>• Both residential and commercial applications</td>
<td></td>
</tr>
<tr>
<td>• Secondary cladding and accents</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interior finishes</th>
<th>4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Segment growing based on design trends</td>
<td></td>
</tr>
<tr>
<td>• Offers qualities designers seek</td>
<td></td>
</tr>
<tr>
<td>• Fireplace, accent walls, kitchen islands</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outdoor living</th>
<th>7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Growing segment</td>
<td></td>
</tr>
<tr>
<td>• Outdoor kitchens, fireplaces and walls</td>
<td></td>
</tr>
<tr>
<td>• Outdoor living spaces becoming an expectation</td>
<td></td>
</tr>
</tbody>
</table>

**Increased use in light commercial and R&R applications...**

<table>
<thead>
<tr>
<th>Residential</th>
<th>45%</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Secondary cladding and accents</td>
<td></td>
</tr>
<tr>
<td>• Higher end homes</td>
<td></td>
</tr>
<tr>
<td>• Larger scale tract builders and multi-family drive demand</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-residential</th>
<th>23%</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hotels, retail and restaurants are primary drivers</td>
<td></td>
</tr>
<tr>
<td>• Specification driven</td>
<td></td>
</tr>
<tr>
<td>• Longer sales cycle</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R&amp;R</th>
<th>32%</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Approximately 1/3 going into interior accents and outdoor living</td>
<td></td>
</tr>
<tr>
<td>• Diverse customer base</td>
<td></td>
</tr>
</tbody>
</table>

1. Data for calendar 2018 based on June 2019 study by DuckerFrontier
## Competitive Landscape – Manufactured stone

**Comprised of national, regional and local players**

| Participants | Description | Manufacturers/Brands | Share |  |
|--------------|-------------|----------------------|-------|
| National 4   | - Multiple plant operations  
               - Complete product lines  
               - National scope with multiple channels to market including one-step, two-step, direct and install | Boral  
StoneCraft  
STONWORKS  
StoneCraft  
CULTURED STONE  
VERSETTA  
ProVia | National  
~45% to 50% |  |
| Regional ~20 | - Tend to be concentrated within one or two regions with growth potential  
               - Primary manufacturing site centrally located within its region | Creative Mines  
CENTURION STONE  
Boulder Creek  
ProVia  
Prestige | Regional  
~30% to 35% |  |
| Local >100   | - Operate with one primary location and limited product portfolio  
               - Manufacturing plant is primary distribution site  
               - Serving a localized radius (often 1-3 states) | Appleridge Stone  
CASCADE STONE  
CASTONE  
Zement | Local  
< 20% |  |

1. Data for calendar year 2018 based on June 2019 study by DuckerFrontier
Agenda – Stone

- Industry Overview
- Business Overview
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Business Overview

Largest manufacturer of stone products in North America

Snapshot of Boral’s capabilities

- FY19 revenue of US$269m\(^1\)
- 6 manufacturing plants to serve our customers in the US and Canada and international markets
- National distribution footprint with over 2,600 distribution points in one-step, two-step and retail channels
- Industry leading innovation and product development
- Strong brand recognition with comprehensive product line across all building sectors

Sales by Segment\(^2\)

1. Excludes sales of Versetta, which is sold through Light Building Products
2. Management estimates based on study conducted by DuckerFrontier
Business Overview - Our footprint
Plant network serving customers in all 50 US states and Canada

Boral Locations
- Mold Plant (2)
- Stone Plant (6)
- Warehouse (2)
Brand identity
Boral brands cover the entire spectrum of segments and applications

**Brand market participation**

- Product offering to address full spectrum of applications
- Premium lines account for 78% of total sales
- Products address demand trends
- Potential to streamline and focus offerings over time

<table>
<thead>
<tr>
<th>Brand</th>
<th>Premium</th>
<th>Mid-tier</th>
<th>Value</th>
<th>Premium easy install</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Quality – look &amp; feel</td>
<td>• Regional coverage</td>
<td>• Value priced</td>
<td>• Reduced installation cost</td>
</tr>
<tr>
<td></td>
<td>• Broad product offering</td>
<td>• Limited colors</td>
<td>• Limited offering</td>
<td>• Lumber channel</td>
</tr>
<tr>
<td></td>
<td>• Modern aesthetic</td>
<td>• Mid-level pricing</td>
<td>• Traditional styles</td>
<td></td>
</tr>
</tbody>
</table>

**Segments**

<table>
<thead>
<tr>
<th></th>
<th>New Residential</th>
<th>Commercial</th>
<th>Repair &amp; remodel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production</td>
<td>Custom single</td>
<td>Multi- family</td>
</tr>
<tr>
<td></td>
<td>builder</td>
<td>family</td>
<td></td>
</tr>
</tbody>
</table>

- Represents primary focus
Today’s portfolio of products satisfies the following three categories:

**Traditional / classic**
- Timeless shapes that reflect look and feel of natural stone
- Mature, cash-generating products

**Contemporary / modern**
- Trendy, dimensional stone shapes with monochromatic colors
- New, high growth products

**Mechanically fastened**
- Panelized stone products for easy installation to address labor shortages
- Increased adoption rate, high growth products

---

**Product classification**

Today’s portfolio of products satisfies the following three categories:
Agenda – Stone

- Industry Overview
- Business Overview
- Year in Review and Strategic Priorities
## FY19 Review

Solid performance in the face of market headwinds

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Growth(^1)</th>
<th>Commentary</th>
</tr>
</thead>
</table>
| Premium          | ↑            | • Volumes lower on soft housing starts in US and Canada  
                      • Share stabilized |
| Mid-tier         | ↓            | • Housing starts off 2% in Midwest |
| Value            | ⇔           | • Price increase offset housing-driven volume shortfall  
                      • Completed StoneCraft plant upgrades |
| Brand extensions | ↑            | • Outdoor living, fire bowls  
                      • Good growth, retail strategy |

1. FY19 revenue growth

### Revenue breakdown by type

- **Premium**: 78%
- **Mid-tier**: 10%
- **Value**: 10%
- **Brand extensions**: 2%

- **Mid-tier**
  - **Premium**: 78%
  - **Value**: 10%
  - **Brand extensions**: 2%
  - **Mid-tier**: 10%
**Stone strategic objectives**

**FY19 progress on sales stabilization and network optimization**

### Strategic objectives

1. **Zero Harm Today**
   - Improved safety indicators and reduced injury severity

2. Leverage brand portfolio and align sales efforts to *recapture share* and *grow* sales volumes
   - Stabilized share and re-energized key customer base
   - Successfully implemented *price increases* (averaged 3%) based on value proposition

3. **Optimize** plant network and execute operations initiatives to *deliver synergies*
   - Significant progress on optimizing manufacturing and distribution network
   - Delivered **US$6.4m in synergies**

4. **Increase** category awareness through marketing and new product development
   - Continued to **evolve sales organization** and go to market strategies

### FY19 progress

- **Improved safety** indicators and reduced injury severity
- **Stabilized share** and re-energized key customer base
- Successfully implemented *price increases* (averaged 3%) based on value proposition
- Significant progress on optimizing manufacturing and distribution network
- Delivered **US$6.4m in synergies**
- Continued to **evolve sales organization** and go to market strategies
### Background

- Merger of industry leaders – Eldorado and Cultured Stone – with recognized offerings through the value chain

- Share loss during FY18 due to uncertainty within the channel and customer base

- Sales resources segregated by brand and historical customer relationships as businesses came together

- With initial focus of integration on safety and stabilizing customer base, new product development slowed

### FY19 progress

- All brands under one name - Boral - now established

- Large emphasis on clarity of communication and rebuilding trust with channel partners

- Harmonizing of business processes underway with ERP conversion

- Re-aligned resources to support channel partners

- Some distribution changes necessary

- Aligned commercial efforts towards common strategy; upgraded talent and management with common focus on building demand through specification work

- Integrated product development efforts and now focused on next generation of new products
Grow sales: National accounts
Leveraging scale to capture share

**Background**

- Post acquisition, combined 2 national accounts teams to focus on maintaining/converting national builder and commercial business
- Pull through sales by targeting specifiers and decision makers – specify product early in the process
- Offer end-to-end training capabilities from design to compliance

**FY19 progress**

- Secured several national builder accounts – e.g. Toll Brothers
- Secured national specifications with commercial accounts - e.g. Burger King, Hilton Hotels
- Established national technical training capabilities
- Partnering with other Boral divisions where appropriate to present a full suite of products
Grow sales: Outdoor living
Leveraging Boral innovation capability across product suite

Background
- Line of products developed by Eldorado targeting outdoor living trends
- High end products including fire bowls, fireplace surrounds and components for outdoor kitchens
- Historically sold through Eldorado distribution channels and direct

FY19 progress
- Partnered with Boral Innovation Factory to support new product development efforts
- New product development includes next generation lightweight fire bowls
- Expanding sales to legacy Boral distribution channels
Deliver synergies: Optimizing our Eastern operations
Plant upgrades to improve performance and capacity

**Background**

- Well positioned to service large Northeast, Southeast, and European regions
- Chester plant (Cultured Stone and ProStone lines) cost improvement opportunities
- Holmesville (StoneCraft) plant – production cost inconsistent with value line proposition
- Greencastle (Eldorado Stone) upgrade begun pre-acquisition to address aging/inefficient operations
- Navarre distribution – small operation with limited customer value

**FY19 progress**

- Greencastle – completed upgrade and commissioned plant – October 2018
- Completing StoneCraft upgrade in November 2019 (Holmesville plant)
- Targeted performance improvement at Chester yielded significant cost reductions
- Divested Navarre warehouse to primary distribution partner
StoneCraft upgrade
Transformed manufacturing to lower costs

**Background**

- StoneCraft is a value tier product targeting production builders
- Production in former Headwaters plant in Holmesville, OH
- Highly manual, labor intensive and inefficient operation
- Production costs not aligned with a value tiered product line

**FY19 progress**

- Constructed best practice, low cost manufacturing platform to drive cost saving synergies
- Reduced direct labor headcount
- Introduced lean, scalable manufacturing process
- Capacity expanded for future growth
- Provides foundation needed to consolidate value lines
Deliver synergies - optimizing our Western operations
Consolidated production in two low cost, high capacity plants

Background

- Rosarita, Mexico (legacy Eldorado) is a large, low cost plant
- Napa (legacy Cultured Stone) – world class automated plant, low cost, stable mature work force
- Combined, Napa and Rosarita produce ~40% of total volume
- Rosarita produces a line of brand extensions – fire bowls, fireplace surrounds, outdoor living products
- Royal City (Legacy Eldorado) high cost, low volume

FY19 progress

- Rosarita – plant upgrades to improve costs and ready plant for expansion
- Closed Royal City and relocated production to Rosarita in November 2018
- Added distribution center in Tacoma, WA in connection with Royal City closure
- Performance excellence projects in Napa lowered production costs
Royal City closure
Significant cost savings realized with transfer of production

**Background**

- Royal City – small, high-cost plant producing Eldorado products
- Rosarita, MX
  - Low labor rates and fixed costs
  - Additional capacity available to grow
- Plant closure and production shift announced Q1 FY19

**FY19 progress**

- Closed Royal City and transferred production to Rosarita in November 2018
- Highly successful closure – no injuries, high productivity, retained key employees
- Tacoma distribution centre to serve customers
- Expected cost savings of US$4.5m per annum

![Cost savings chart](chart.png)
Stone strategic objectives
FY20 focus on sales growth and network optimization

<table>
<thead>
<tr>
<th>Strategic objectives</th>
<th>FY20 focus areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Zero Harm Today</td>
<td>- Continue to <em>improve safety incident rates</em> with focus on behavior</td>
</tr>
<tr>
<td>2. Leverage brand portfolio and align sales efforts to <em>grow</em> sales volumes</td>
<td>- <em>Refine our customer focus</em> beyond distribution network to drive demand</td>
</tr>
<tr>
<td>3. <em>Optimize</em> plant network and execute operations initiatives to <em>deliver synergies</em></td>
<td>- Continue to <em>deliver manufacturing synergies</em> and <em>optimize</em> the network</td>
</tr>
<tr>
<td>4. <em>Increase</em> category awareness through marketing and new product development</td>
<td>- <em>Complete integration</em> onto a single ERP (SAP) system</td>
</tr>
<tr>
<td></td>
<td>- Continue <em>product development</em> to address changing market demands and to rationalize and simplify product portfolio</td>
</tr>
<tr>
<td></td>
<td>Name</td>
</tr>
<tr>
<td>------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Introduction</td>
<td>Mike Kane</td>
</tr>
<tr>
<td>Boral North America</td>
<td>David Mariner</td>
</tr>
<tr>
<td>Fly Ash</td>
<td>Keith Depew</td>
</tr>
<tr>
<td>Stone</td>
<td>Victoria Sherwood</td>
</tr>
<tr>
<td>Roofing</td>
<td>Darren Schulz</td>
</tr>
<tr>
<td>Light Building Products</td>
<td>Joel Charlton</td>
</tr>
<tr>
<td>Windows</td>
<td>David Decker</td>
</tr>
</tbody>
</table>
Roofing strategic objectives
FY19 – a year of significant progress

Strategic objectives

1. Zero Harm Today

2. **Deliver synergies** through plant optimization and operational improvements

3. **Expand product offerings** beyond the traditional clay and concrete offerings

4. **Diversify end-market exposure** growing non-residential and re-roof segments

FY19 progress

- Safety *incidents up* 4%\(^1\) with improvement in H2
  - **Completed** metal plant performance improvement and cost improvements
  - Delivered **US$11m in synergies** and completed ERP conversion
  - Continuing growth from **cross-selling** components and services
  - **Revenue up 15%** led by stronger concrete sales and value-based price increases averaging 5%
  - Leveraged **Florida integration** to grow tile sales

---

1. Reflects total recordable incidents, which includes lost time incidents and medical treatment incidents
FY19 overview
Strong results on increased sales and operational improvements

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Growth¹</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tile</td>
<td></td>
<td>• Volume up 15% and price up 5% for concrete</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Significant growth from Florida integration</td>
</tr>
<tr>
<td>Metal</td>
<td></td>
<td>• Significant plant turnaround in 1H resulted in 2H growth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Positioned for sales growth in FY20 and beyond</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td>• Domestic growth²</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Export to UK</td>
</tr>
<tr>
<td>Components &amp; Services</td>
<td></td>
<td>• Cross-selling components</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Diversifying product range</td>
</tr>
</tbody>
</table>

Revenue breakdown by product category

- 72% Tile
- 16% Composite
- 5% Metal
- 7% Components & Services

---

1. FY19 revenue growth
2. Improvement vs FY18 is normalized for sale of Enviroshake in 1H FY18
Expand product offerings: Boral Steel

Turnaround results from FY19 “fix production” initiative

**Background**
- 3 legacy HW businesses rolled up – consolidation was underway at closing
- Plant was in poor condition
- Capacity constrained due to inefficient operations
- 6 distribution centers
- 3 brands / product lines, >8,400 SKUs
- Multiple channels to market

**FY19 progress**
- Consolidated into 1 product line
- Implemented LEAN manufacturing principles
- Significant cost and throughput improvements
- Consolidated 6 distribution centers into 1
- Rebranded – BoralSTEEL™
- Cleaned up channels; all through distribution
- Strong demand; now positioned to deliver benefits
Deliver synergies: Florida tile

Growth supported by integration and optimization of plant network

Background

- Acquired remaining minority interest in Entegra
- FY19 focus on safety
- Entegra plant underwent “fix”
- Began execution of Florida network optimization

FY19 progress

- Continued to upgrade plant performance
- Rationalized SKU’s / profiles
- Harmonized product lines
- Re-balanced production across 2 plants
- 24/7 demand profile
Roofing strategic objectives
FY20 focus on Florida optimization, steel sales growth and cross-selling

Strategic objectives

1. Zero Harm Today

2. *Deliver synergies* through plant optimization and operational improvements

3. *Expand product offerings* beyond traditional clay and concrete offerings

4. *Diversify end-market exposure* growing non-residential and re-roof segments

FY20 focus areas

- Continue to *drive down safety incidents* with emphasis on plants operating 24/7
- Continue to *deliver synergies* with key focus on expanding cross-selling opportunities
- *Further optimize integration of Florida* business:
  - sustain cost improvements on higher volumes
  - final steps in product portfolio optimization
- Enhance value to our customers with *broader components portfolio, better service, strengthened network*
- *Grow metal roofing* to sustained profitable volumes
Agenda

Introduction  
Mike Kane

Boral North America  
David Mariner

Fly Ash  
Keith Depew

Stone  
Victoria Sherwood

Roofing  
Darren Schulz

Light Building Products  
Joel Charlton

Windows  
David Decker
Light Building Products strategic objectives
FY19 progress on portfolio alignment and high growth products

Strategic objectives

1. **Zero Harm Today**

2. **Deliver synergies** and execute on continuous improvement projects to offset cost pressure

3. **Maintain and leverage** established products, and **develop and grow** new lightweight composite products

4. **Leverage distribution** footprint to accelerate penetration of new, high growth products

FY19 progress

- Zero LTIs; *safety incidents down* 22%\(^1\)
- Delivered \textasciitilde USD$4.5m in synergies (over $15m to date)
- *Revenue up* - led by strong siding & trim growth
- TruExterior® Siding and Trim - *significant improvements*
- Launched *new products* - Versetta® Northern Ash, accessories & fasteners; Tapco M2X™ and S2X™ gages

---

1. Reflects total recordable incidents, which includes lost time incidents and medical treatment incidents
# Light Building Products: portfolio overview

The portfolio consists of three main product categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Primary material</th>
<th>Brands</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Siding and Trim</strong></td>
<td><strong>Invest in high growth products</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinyl Siding</td>
<td>Vinyl</td>
<td>Grayne™</td>
<td></td>
</tr>
<tr>
<td>PVC Trim</td>
<td>Polyvinyl chloride (PVC)</td>
<td>Kleer®</td>
<td></td>
</tr>
<tr>
<td>Poly Ash Siding / Trim</td>
<td>Polyurethane</td>
<td>TruExterior®</td>
<td></td>
</tr>
<tr>
<td>Panelized Stone Siding</td>
<td>Concrete</td>
<td>Versetta®</td>
<td></td>
</tr>
<tr>
<td><strong>Shutters and Accessories</strong></td>
<td><strong>Nurture mature, cash-generating products</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decorative shutters, vents, blocks</td>
<td>Polyvinyl chloride (PVC)</td>
<td>Mid-America® / Builder’s Edge® / Vantage</td>
<td></td>
</tr>
<tr>
<td>Blocks and Mounts</td>
<td>Polyvinyl chloride (PVC)</td>
<td>Sturdimount</td>
<td></td>
</tr>
<tr>
<td>Functional Shutters</td>
<td>Composite</td>
<td>Atlantic®</td>
<td></td>
</tr>
<tr>
<td><strong>Specialty / Other</strong></td>
<td><strong>Nurture mature, cash-generating products</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal siding tools</td>
<td>Aluminum</td>
<td>Tapco Tools®</td>
<td></td>
</tr>
<tr>
<td>Egress wells</td>
<td>Polyethylene</td>
<td>Wellcraft®</td>
<td></td>
</tr>
</tbody>
</table>
FY19 overview
EBITDA higher and revenue steady in FY19 despite housing headwinds

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Growth¹</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Siding &amp; Trim</td>
<td></td>
<td>High growth, high return product groups with strong brand equity</td>
</tr>
<tr>
<td>Shuttters and Accessories</td>
<td></td>
<td>Slower housing activity impacted growth</td>
</tr>
<tr>
<td>Specialty, Other</td>
<td></td>
<td>Essential tools for the siding industry</td>
</tr>
</tbody>
</table>

Revenue breakdown by type

- Siding & Trim: 55%
- Shutters and Accessories: 33%
- Specialty, Other: 12%

¹. FY19 revenue growth
Grow lightweight composite products  
Focused on accelerating siding and trim products through the channel

**Background**
- Strategy to **invest** in earlier life cycle, high growth products
- Utilize full range of combined distribution channel – 1-step, 2-step, Retail
- Innovative, premium performance products that address customer pain points
- Partner with Innovation Factory to commercialize next generation LBP product / platform

**FY19 progress**
- **Versetta®**: launched Northern Ash, accessories & fasteners
- **Versetta®**: piloting retail program at ~130 Home Depot stores
- **TruExterior®**: exited unprofitable bevel siding, 9% price increase based on value proposition
- **Grayne™**: moved into 1-step distribution

---

Kleer®  TruExterior®  Versetta®  Grayne™
Maintain established products
“Nurture” shutters, accessories and tools portfolio

**Background**

- Nurture stage of life cycle - mature and stable businesses that provide attractive cash flows
- Maximize operating efficiencies and preserve margins
- Utilized combined sales network to deliver opportunistic growth and cross-sell opportunities

**FY19 progress**

- **Vantage**: Awarded Lowe’s east coast business in FY18, now working to streamline product offering to gain efficiencies
- **Atlantic®**: utilizing higher-end TruExterior® relationships to gain sales
- **Tools**: Launched M2X™ and S2X™ gages.
Deliver synergies
Addressing cost escalations through regrind\(^1\) program and strategic sourcing

**Background**

- Highest input cost is materials
- FY18 - Hurricane Harvey drove polymer supply disruptions and cost escalations

**FY19 progress**

- Leveraged material PVC purchases across division
- Secured multiple supply sources
- Synergies with Boral Windows continues
  - Regrind\(^1\) savings at Franklin facility

1. Regrind: recycled raw material that is used in manufacturing process

---

### Total COGS

- **Materials**: 49%
- **Other COGs**: 51%

### Materials Breakdown

- PVC: 21%
- Concentrates: 42%
- Other polymers: 12%
- Other material: 13%

Polymers are 46% of total materials

---

<table>
<thead>
<tr>
<th>Concentrates</th>
<th>PVC</th>
<th>Other polymers</th>
<th>Other material</th>
<th>Total COGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>42%</td>
<td>21%</td>
<td>13%</td>
<td>12%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Polymers are 46% of total materials
Light Building Products strategic objectives
FY20 focus on growth, margin and operational initiatives

**Strategic objectives**

1. **Zero Harm Today**

2. **Deliver synergies** and execute on continuous improvement projects to maintain margins

3. **Maintain and leverage** established products, and **develop and grow** new lightweight composite products

4. **Leverage distribution** footprint to accelerate penetration of new, high growth products

**FY20 focus areas**

- Build on strong FY19 safety performance
- Continue to **deliver synergies** (targeting ~US$15m in year 4)
- **Enhance margins** in Shutters and Accessories through raw material management and lean manufacturing
- **Leverage** operations and R&D resources
- **Grow siding and trim** channel and broaden customer offering; continue cost improvement journey
- Continue to **add tool accessories**
Introduction

Boral North America

Fly Ash

Stone

Roofing

Light Building Products

Windows

Mike Kane

David Mariner

Keith Depew

Victoria Sherwood

Darren Schulz

Joel Charlton

David Decker
Windows strategic priorities
Progress on streamlining operations and increasing capacity

### Strategic Objectives

1. **Zero Harm Today**  
   - Implementing behavioral safety program - 30% reduction in incident rate

2. **Execute** performance improvement programs to drive down costs and increase production  
   - Lean initiatives and investments in Texas plants lowered costs and increased capacity  
   - Improved operating costs at Magnolia

3. **Strengthen** multi-family capabilities

4. **Grow** sales and expand geographical presence  
   - Increased multi-family sales  
   - Revenue increased 5% despite poor weather and a soft housing market  
   - Laid groundwork for expansion into Houston in FY20

---

1. Reflects total recordable incidents, which includes lost time incidents and medical treatment incidents
FY19 overview
Revenue growth of 5% in FY19

<table>
<thead>
<tr>
<th>Product category</th>
<th>Growth</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential – single family</td>
<td>↑</td>
<td>• New customers in FY19 generated $15m of new sales</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Introduced side load window targeting entry level housing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Leveraging Boral brand recognition</td>
</tr>
<tr>
<td>Residential – multi-family</td>
<td>↑</td>
<td>• Focused effort beginning in FY18 – sales, marketing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increased sales 10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Good volume; competitive on price</td>
</tr>
<tr>
<td>Repair and remodel</td>
<td>⇐</td>
<td>• Limited offerings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sold through distribution network</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Primarily manufactured in Georgia</td>
</tr>
</tbody>
</table>

FY19 Revenue – end use segmentation
- Single family: 85%
- Multi-family: 10%
- Replacement: 5%

1. Growth in FY19 revenue compared to FY18
Performance improvement
Progress on driving down costs and increasing capacity

**Background**

- Highly manual manufacturing processes
- Tight labor market results in high turnover rate and reliance on temp labor
- Rising raw material costs
- Inefficient workflow - opportunities to decrease scrap and improve output
- Approaching capacity limits

**FY19 progress**

- Overhauled hiring practices and compensation – reduced turnover, labor costs and reliance on temp employees
- Reduced temporary labor from 20% to 4% of hourly workforce
- Added new production line at Carrollton plant - 14% increase in production capability
- Uniform vinyl profiles to address both material costs and manufacturing redundancy

*Before – main aisle*  
*After – main aisle*

*Before – extrusion aisle*  
*After – extrusion aisle*

*Inventory management*  
*Workflow improvements*
Grow sales: Houston expansion
Expanding geographical presence and addressing capacity constraints

Background

- Presence in Houston and South Texas limited
- Opportunity to deliver direct to jobsite in Houston
- Optimize network and expand geographical reach

FY19 Progress

- Secured building location and commenced purchasing equipment for Houston plant
- Purchased Houston distributor and commenced building Houston management team
- Equipment installation and commissioning to begin in Q2 FY20
- Full production and direct delivery in Houston to commence in 2H FY20

Houston facts:

- Population\(^1\) – over 7m, 5th largest metro in the US
- CY18 Starts\(^1\) – ~54k, 2nd highest in the US

Houston plant:

- Located in high growth NW Houston
- Facility sized for expansion
- Will service Houston MSA, South Texas and Louisiana markets

\(^1\) Oxford economics
Windows strategic priorities
FY20 - Capacity expansion to meet customer demand

Strategic Objectives

1. Zero Harm Today

2. **Execute** performance improvement programs to drive down costs and increase production

3. **Optimize** plant network

4. **Grow** sales and expand geographical presence

FY20 focus areas

- Implement Dupont STOP *behavioral safety training* across business
- *Continuous improvement* of manufacturing operations
- Develop *technology platform* to allow for more efficient and visible supply chain, inventory control, and scheduling
- *Optimize network* - grow Magnolia volume regionally
- Successful start up of *Houston manufacturing* operation
Appendix
Macroeconomic market overview
Single family impacted by labor shortage and affordability

Housing construction markets continue to recover

### Single and multi family housing starts

(‘000)

<table>
<thead>
<tr>
<th></th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-family</td>
<td>684</td>
<td>209</td>
<td>594</td>
<td>332</td>
<td>379</td>
<td>760</td>
<td>815</td>
<td>853</td>
</tr>
<tr>
<td>Single family</td>
<td>475</td>
<td>283</td>
<td>321</td>
<td>675</td>
<td>1,054</td>
<td>1,149</td>
<td>1,253</td>
<td>1,223</td>
</tr>
</tbody>
</table>

-2.4%

1. Source: US Census seasonally adjusted annualized housing starts, July 17, 2019 release

### Single Family Mix

(FY2019 % of Total)

- 70%
  - On pace with 71% long-term average

### Affordability Index

150
  - above historical average of 100

### New Housing Stock

0.33m
  - 10% up year-on-year; in line with 0.36m long-term average

### Existing Housing Stock

1.9m
  - Equivalent to June FY18; slightly below long-term average of 2.2m
Non-residential construction\(^1\)
(million square foot area)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>1,446</td>
<td>1,023</td>
<td>864</td>
<td>953</td>
<td>1,002</td>
<td>1,061</td>
<td>1,064</td>
<td>1,087</td>
</tr>
</tbody>
</table>

\(+2.1\%\)

FY19 breakdown by non-residential segment\(^2\), %

- Warehousing: 34%
- Education: 17%
- Office: 17%
- Retail: 10%
- Healthcare: 3%
- Hotel: 9%
- Public: 9%
- Religious: 1%

1. Source: Dodge Data & Analytics. Non-residential square feet area (millions), June 2019
2. Source: Dodge Data & Analytics
Repair and remodel (R&R)

Home improvement increasing, but at a slower pace than recent years

Building products retail sales

(Nominal US$b)

<table>
<thead>
<tr>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>325</td>
<td>312</td>
<td>281</td>
<td>257</td>
<td>262</td>
<td>278</td>
<td>291</td>
<td>308</td>
<td>324</td>
<td>343</td>
<td>357</td>
<td>373</td>
<td>382</td>
</tr>
</tbody>
</table>

+2.4%

1. Source: Moody’s retail sales of building products, July 2019
Highways continue to be the main driver in the infrastructure segment.

**Infrastructure activity, ready mix demand<sup>1</sup>**
(cubic yards, millions)

<table>
<thead>
<tr>
<th></th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>174</td>
<td>171</td>
<td>180</td>
<td>191</td>
<td>188</td>
<td>187</td>
<td>198</td>
<td>210</td>
</tr>
</tbody>
</table>

+5.8%

**Infrastructure cement consumption<sup>2</sup>, %**

- Highways: 64%
- Public utilities: 10%
- Oil and gas: 3%
- Conservation: 5%
- Sewer: 4%
- Water supply: 8%
- Other: 6%

---

1. Source: Dodge Data & Analytics, Infrastructure Ready Mix Demand, June 2019
2. Source: Portland Cement Association - Spring 2019
Boral North America’s markets
Outlook is for moderate growth across all segments

USA new residential: 48% of BNA revenue

USA repair & remodel: 27% of BNA revenue

USA non-residential: 11% of BNA revenue

USA infrastructure: 14% of BNA revenue

1. US Census seasonally adjusted annualized housing starts (July, 2019). Forecasts based on an average of analysts’ forecasts sourced from NAHB, MBA, Wells Fargo, NAR, Fannie Mae and Freddie Mac
2. Moody’s Retail Sales of Building Products (July 2019); Forecast based on Moody’s retail sales (July 2019), LIRA (July, 2019) and HIRA (November 2018)
3. Dodge Data & Analytics, Non-Residential Area (June 2019, Q2 2019 update), Forecast based on Dodge Data & Analytics (June 2019), Oxford Economics construction forecast (Q2 2019) and FMI US construction outlook (Q2 2019)
4. Dodge Data & Analytics, Infrastructure Ready Mix Demand (June 2019). Forecast based on Dodge Data & Analytics, Infrastructure Ready Mix Demand (June 2019) and PCA outlook (Spring 2019)
Housing starts fell across all regions in FY19
Forecasters¹ expect modest improvement in single family activity in FY20

¹. Based on the average of Dodge, Wells Fargo, NAR, NAHB, Fannie Mae, Freddie Mac and MBA analysts between Jan-Jun 2019. Historical data – US Census Bureau
². SOUTHEAST consists of AL, DE, FL, GA, KY, MD, MS, NC, SC, TN, WV, VA | SOUTHWEST consists of AR, LA, OK, TX | NORTHEAST consists of CT, MA, ME, NH, NJ, NY, PA, RI, VT | MIDWEST consists of IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI | WEST consists of AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY.
³. Based on external revenue, including Boral’s 50% share of Meridian Brick JV revenue which is not included in reported revenue
Headwaters synergies overview
Headwaters acquisition synergies
Businesses continued to deliver synergies in line with initial assumptions

<table>
<thead>
<tr>
<th>Synergy drivers by business, US$</th>
<th>Delivered in FY2019</th>
<th>Cumulative Delivered FY2019</th>
<th>Updated target within 4 years, pa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corporate</strong> – incl. executive headcount, public company costs, procurement</td>
<td>$2.1m</td>
<td>$11.6m</td>
<td>$15m</td>
</tr>
<tr>
<td><strong>Fly Ash</strong></td>
<td>Sub-total</td>
<td>$7.0m</td>
<td>$18.5m</td>
</tr>
<tr>
<td>■ Ash supply / network optimisation / logistics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Procurement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Sales coverage expansion &amp; high value product growth – <em>Boral faces local supply constraints in some locations, HW has ability to supply</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Organisational efficiencies – <em>e.g. consolidating finance systems and overlapping sales coverage, engineering support and operations</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Other including technology / R&amp;D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stone</strong></td>
<td>Sub-total</td>
<td>$6.4m</td>
<td>$4.5m$^1$</td>
</tr>
<tr>
<td>■ Plant network optimisation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Sales coverage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Procurement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Manufacturing equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Other including organisational efficiencies</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Recognizes the impact of share loss as a result of the acquisition
Headwaters acquisition synergies
Businesses continued to deliver synergies in line with initial assumptions

<table>
<thead>
<tr>
<th>Synergy drivers by business, US$</th>
<th>Delivered in FY2019</th>
<th>Cumulative Delivered FY2019</th>
<th>Updated target within 4 years, pa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Roofing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>$11.0m</td>
<td>$18.9m</td>
<td>&gt;$30m</td>
</tr>
<tr>
<td>Procurement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-selling portfolio – <em>e.g. re-sale products account for ~20% of Boral’s Roofing sales, while Headwaters has minimal exposure</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing &amp; network optimisation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing efficiencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other including organisational efficiencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Light Building Products</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>$4.5m</td>
<td>$15.2m</td>
<td>&gt;$16m</td>
</tr>
<tr>
<td>Procurement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales coverage, cross selling, retail presence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational efficiencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other: Including Block¹ &amp; Windows</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$31.7m</td>
<td>$70.7m</td>
<td>$115m</td>
</tr>
</tbody>
</table>

1. Prior year block synergies included in cumulative figure
Disclaimer

The material contained in this document is a presentation of information about the Group’s activities current at the date of the presentation, 19 September 2019. It is provided in summary form and does not purport to be complete. It should be read in conjunction with the Group’s periodic reporting and other announcements lodged with the Australian Securities Exchange (ASX).

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