Welcome

Plasterboard Australia Overview

Safety Briefing, Plant and LEAN overview

Tour of production facilities

Lunch and discussion
Ross Batstone, Divisional Managing Director, Boral Building Products, 4 May 2012
Boral Building Products Australia

BORAL BUILDING PRODUCTS AUSTRALIA BUSINESS IS HIGHLY LEVERAGED TO NEW HOUSING CONSTRUCTION

Boral Building Products – Australian businesses

<table>
<thead>
<tr>
<th>(A$m)</th>
<th>1H FY10</th>
<th>2H FY10</th>
<th>1H FY11</th>
<th>2H FY11</th>
<th>1H FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>608</td>
<td>598</td>
<td>624</td>
<td>526</td>
<td>530</td>
</tr>
<tr>
<td>EBITDA</td>
<td>67</td>
<td>74</td>
<td>73</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>EBIT</td>
<td>37</td>
<td>46</td>
<td>46</td>
<td>22</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Revenue (A$m)</th>
<th>1H FY12</th>
<th>1H FY11</th>
<th>Var %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plasterboard</td>
<td>192</td>
<td>210</td>
<td>(8%)</td>
</tr>
<tr>
<td>Clay &amp; Concrete</td>
<td>229</td>
<td>271</td>
<td>(16%)</td>
</tr>
<tr>
<td>Timber</td>
<td>109</td>
<td>143</td>
<td>(24%)</td>
</tr>
</tbody>
</table>

- Boral Building Products relies primarily on new housing construction in Australia, including alterations and additions
- Declines in residential construction and reduced government stimulus work has impacted volumes particularly since 2H FY2011
- A streamlined organisational structure has been implemented to maximise the potential of all businesses, particularly Clay & Concrete Products
- The right-sizing of installed brick capacity, improvements in operating efficiency and reduction in overhead costs will provide cost benefits
- Further residential activity declines impacting Building Products performance in 2H FY2012
Results for the half year ended 31 December 2011
BORAL BUILDING PRODUCTS
Clay & Concrete Restructuring as announced to the market in February 2012

- We will exit the QLD Roofing business and close the Carole Park plant
- East Coast Masonry has been loss making for the past 5 years
- We will market test the sale of the East Coast Masonry business
- EBIT losses from QLD Masonry and Roofing were $8m in FY11 and a further $10m in overhead savings will result from the restructuring
- The Cairns and Mackay operations were successfully divested in early 2012

Revenue Comparisons
Clay & Concrete Products

Profit Comparisons
Clay & Concrete Products

6 East Coast Masonry sites: 266 employees
QLD Roofing: 32 employees
THE AUSTRALIAN BUILDING PRODUCTS PORTFOLIO IS UNDERGOING SIGNIFICANT CHANGE

- In June 2011, we closed our Plywood business based at Ipswich (QLD) and our Masonry plant located at Somersby (NSW)
- We have reduced operating brick capacity from 620 to 390 million SBE (37%) over the last 12 months through permanent plant closure or temporary mothballing:
  - 60 million SBE permanently closed in QLD at Darra (completed June 2011), 65 million SBE mothballed in NSW at Badgerys Creek (completed April 2012) and 105 million SBE mothballed in WA at Middle Swan (completed April 2012)
  - Sales volumes are now greater than operating capacity, to help inventory reduction with LEAN
- We are closing our Roof Tile business in QLD (to be complete June 2012)
- We have sold our Cairns/Mackay based Masonry businesses (completed April 2012)
- We are market testing the sale of our remaining Masonry businesses in QLD, NSW and Victoria (targeting June 2012 for resolution)
- We are streamlining Overhead structures in Clay & Concrete and in Building Products
- When complete these measures are expected to reduce the number of Building Products’ employees (excludes Asia) by 800 (28%) from a total of 2,880 in January 2011
BORAL MASONRY – CAPACITY TO BE REDUCED BY 70%

<table>
<thead>
<tr>
<th>(A$m)</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>119</td>
<td>122</td>
<td>114</td>
<td>121</td>
<td>124</td>
</tr>
</tbody>
</table>

Capacity ('000 tonnes) | Previous | Post sale / closures |
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>252</td>
<td>0</td>
</tr>
<tr>
<td>VIC</td>
<td>120</td>
<td>0</td>
</tr>
<tr>
<td>QLD</td>
<td>315</td>
<td>0</td>
</tr>
<tr>
<td>SA</td>
<td>122</td>
<td>122</td>
</tr>
<tr>
<td>WA</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td>Total</td>
<td>979</td>
<td>292</td>
</tr>
</tbody>
</table>

Boral Building Products Australia
Boral Building Products Australia

BORAL BRICKS – CAPACITY REDUCED BY 37%

<table>
<thead>
<tr>
<th></th>
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<th>FY10</th>
<th>FY11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>305</td>
<td>307</td>
<td>277</td>
<td>292</td>
<td>260</td>
</tr>
</tbody>
</table>

(A$m)

<table>
<thead>
<tr>
<th>Capacity (million SBEs)</th>
<th>Previous</th>
<th>Post closures / mothballing</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>127</td>
<td>62</td>
</tr>
<tr>
<td>VIC</td>
<td>118</td>
<td>118</td>
</tr>
<tr>
<td>QLD</td>
<td>105</td>
<td>45</td>
</tr>
<tr>
<td>WA</td>
<td>270</td>
<td>165</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>620</td>
<td>390</td>
</tr>
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Boral Building Products Australia

BORAL BRICKS – CAPACITY REDUCED BY 37%

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<tr>
<td>VIC</td>
<td>118</td>
<td>118</td>
</tr>
<tr>
<td>QLD</td>
<td>105</td>
<td>45</td>
</tr>
<tr>
<td>WA</td>
<td>270</td>
<td>165</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>620</td>
<td>390</td>
</tr>
</tbody>
</table>
BORAL BUILDING PRODUCTS AUSTRALIA

BORAL ROOFING – CAPACITY REDUCED BY 21%

Revenue

<table>
<thead>
<tr>
<th>(A$m)</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>108</td>
<td>120</td>
<td>119</td>
<td>124</td>
<td>115</td>
</tr>
</tbody>
</table>

Capacity (million tiles)

<table>
<thead>
<tr>
<th>State</th>
<th>Previous</th>
<th>Post closure</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW – Terracotta</td>
<td>17.2</td>
<td>17.2</td>
</tr>
<tr>
<td>NSW – Concrete</td>
<td>26.0</td>
<td>26.0</td>
</tr>
<tr>
<td>VIC – Concrete</td>
<td>21.0</td>
<td>21.0</td>
</tr>
<tr>
<td>QLD – Concrete</td>
<td>22.0</td>
<td>0</td>
</tr>
<tr>
<td>SA – Concrete</td>
<td>16.6</td>
<td>16.6</td>
</tr>
<tr>
<td>Total</td>
<td>102.8</td>
<td>80.8</td>
</tr>
</tbody>
</table>

Map showing locations of concrete and terracotta roof tile plants.
WE HAD FORECAST 136,000 COMMENCEMENTS FOR THE YEAR ENDING JUNE 2012 – BEFORE Q3 RAIN IMPACTED

Australian Dwelling Commencements

Source: ABS 8752.0 Table 33 to 1H 2012, Boral forecast for 2H 2012

Equates to 63.5k 2H starts which is:

- 26% below 2H FY10
- 15% below 2H FY11
- 4th lowest 2H in 30 years
- Rain has impacted actual east coast starts and the timing of materials usage
- WA and SA are weaker than we had expected
THE LOW LEVEL OF STRUCTURAL SOFTWOOD FRAMING SALES EVIDENCES WEAK NEW HOUSE CONSTRUCTION

Australian Softwood Framing Timber Sales Volumes by Source (Rolling Three Months Average)

FY2008 156,861 Starts
FY2009 130,620 Starts
FY2010 164,746 Starts
FY2011 156,410 Starts
FY2012 136,000 Starts

Total Australian Softwood Framing Sales Volumes
Domestic Framing Sales Volume¹
Structural Imports²

¹ Source: Domestic Framing Sales from Industry sales data compiled by the Australian Forests Products Association using untreated Structural softwood products less than 120mm in width and Treated H2F Structural Sales
² Source: ABS import statistics for structural softwood imports from Europe and USA
**TODAY MOST DRIVERS OF NEW DWELLING VOLUMES LOOK TO BE UNFAVOURABLE**

<table>
<thead>
<tr>
<th>Broad Economic Impacts</th>
<th>Short Term Demand</th>
<th>Supply Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>A range of factors, including Europe, rising energy costs, employment prospects outside of resources, interest rates and uncertainty with the carbon tax, seem to be weighing against confidence to spend</td>
<td>Affordability and the confidence to buy a new dwelling or to renovate</td>
<td>Supply of adequate affordable land (where people want to live)</td>
</tr>
<tr>
<td>Purchasing power of “gen Y”</td>
<td>Relative price point of new and existing dwellings and the perception prices may fall</td>
<td>Government charges and infrastructure levies that are biased against new developments</td>
</tr>
<tr>
<td><strong>Long Term (Underlying) Demand</strong></td>
<td>Withdrawal of stimulus programs</td>
<td>Tight funding, particularly for Developers</td>
</tr>
<tr>
<td>Continued strong population growth</td>
<td><strong>Supply Issues</strong></td>
<td>Skilled trades shortages and higher costs with new regulations and the carbon tax</td>
</tr>
<tr>
<td>Dwelling stock deficiency levels (NSW the main area of undersupply, but also QLD and WA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact of “fly in, fly out” workforces?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**KEY:**
- Positive for dwelling construction
- Negative for dwelling construction
NEW DWELLINGS CONSTRUCTION IS A KEY DRIVER OF AUSTRALIAN PLASTERBOARD DEMAND

1 Source: ABS 8301.0
2 Source: Boral estimate

Comparison of Australian Plasterboard Production and FY2011 Australian Plasterboard Demand by Region and Market Segment.
PRICING HAS IMPROVED CONSISTENTLY SINCE 2007, DESPITE FLAT VOLUMES AND CAPACITY INCREASES

**Plasterboard Producer Price Index**

**Plasterboard Production Versus Industry Capacity**

**Current Industry Plasterboard Capacity (millions of m²)**

<table>
<thead>
<tr>
<th></th>
<th>QLD</th>
<th>NSW</th>
<th>VIC</th>
<th>WA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boral</td>
<td>40</td>
<td>18</td>
<td>28</td>
<td></td>
<td>86</td>
</tr>
<tr>
<td>CSR</td>
<td>20</td>
<td>21</td>
<td>28</td>
<td>7</td>
<td>76</td>
</tr>
<tr>
<td>Knauf</td>
<td></td>
<td></td>
<td>18</td>
<td>17</td>
<td>35</td>
</tr>
<tr>
<td>BGC</td>
<td></td>
<td></td>
<td></td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>57</td>
<td>73</td>
<td>20</td>
<td>210</td>
</tr>
</tbody>
</table>

¹ ABS 6427.0 Table 11  
² Production: ABS 8301.0; Capacity: Boral estimates
UNIT PRODUCTION COSTS ARE ADVERSELY IMPACTED AS OUTPUT FALLS, BECAUSE OF THE IMPACT OF FIXED COSTS

**Typical Unit Production Cost Breakdown Index**

10mm Recessed Edge Plasterboard Product

<table>
<thead>
<tr>
<th></th>
<th>48 weeks p.a., 7 days per week, 24 hours per day</th>
<th>48 weeks p.a., 5 days per week, 24 hours per day</th>
<th>48 weeks p.a., 5 days per week, 16 hours per day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials</strong></td>
<td>51</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total Variable Cost</strong></td>
<td><strong>62</strong></td>
<td><strong>62</strong></td>
<td><strong>62</strong></td>
</tr>
<tr>
<td><strong>People</strong></td>
<td>18</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td><strong>Other Cash</strong></td>
<td>12</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td>8</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total Fixed Cost</strong></td>
<td><strong>38</strong></td>
<td><strong>45</strong></td>
<td><strong>58</strong></td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td><strong>100</strong></td>
<td><strong>107</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>
Boral supplies from Pinkenba & Port Melbourne plants by sea

Boral supplies from its east coast plants

Boral capacity is 40 million m² at Pinkenba

Boral capacity is 18 million m² at Camellia

Boral capacity is 28 million m² at Port Melbourne

- Plasterboard production
- Plasterboard distribution
- GRA Gypsum mine (Boral/CSR JV)
- Rondo Building Systems (Boral/CSR JV) production
- Rondo Building Systems distribution
Boral Plasterboard Australia

PINKENBA PLANT, QUEENSLAND – RECEIVES GYPSUM DIRECTLY FROM SHIP – CLOSE TO MAJOR ROADS
Boral Plasterboard Australia

CAMELLIA PLANT, NSW – WELL LOCATED TO SERVICE NSW AND ACT MARKETS
Boral Plasterboard Australia

PORT MELBOURNE PLANT, VICTORIA – RECEIVES GYPSUM DIRECTLY FROM SHIP – CLOSE TO MAJOR ROADS
Port Melbourne upgrade status

- Wet commissioning underway
- Experienced team from Pinkenba assisting with start-up

The new 40,000 tonnes gypsum store

The new gypsum receiving/conveying system over Lorimer Street

The new gypsum receiving system hopper at Wharf 26
NEW PLANTS IN QLD AND VICTORIA GIVE BORAL LOW PRODUCTION COSTS

Major Cost Advantages at New Plants

- **Gypsum**
  - Direct gypsum delivery to wharf eliminates cartage costs
  - Self-unloading ships reduce discharge time

- **Energy**
  - New mills and dryers reduce energy use

- **Sustainability**
  - No gypsum trucks on-road
  - Enclosed gypsum storage
  - Low processing energy
  - Water harvesting (Pinkenba only)
BORAL OPERATES THROUGHOUT THE PLASTERBOARD SUPPLY CHAIN AND SERVICES ALL END USER SEGMENTS

End Use

Installers

Distributors

Manufacturers

Raw Materials

Boral Interior Linings

CSR

BGC (WA only)

Independently owned

Imports

Specialist plasterboard distributors

Unbranded

Hardware/ Merchants

50% of Gypsum Resources Australia (GRA)

Others
A KEY FOCUS IS THE DESIGN/SUPPLY OF SUSTAINABLE, APPLICATION SPECIFIC BUILDING SYSTEMS

- **Partiwall®**: Separating walls for attached dwellings
- **Multiframe™**: Complete Timber framed solution for low rise apartment buildings
- **IntRwall®**: Separating walls for high rise apartment buildings
- **OutRwall®**: Fire rated external walls for residential and commercial buildings
- **Fireclad®**: Fire rated external walls for industrial buildings
- **Firewall®**: Separating walls for industrial buildings
WE ALSO PACKAGE OUR OFFERS FOR SPECIFIC MARKET SEGMENTS
THE OUTLOOK FOR PLASTERBOARD GROWTH IS POSITIVE

**Attractive characteristics**
- Flexibility in design
- Lightweight
- Strong environmental credentials
- Naturally fire resistant

**Low substitution risk**
- Low material cost
- Short installation times
- Ease of fixing (lower skilled trade)

**Innovative solutions**
- High performance boards for speciality needs
  - Fire, acoustic, impact
- Systems solutions have created new categories
  - Multi-residential partitions

**Continued global demand growth**
- Demand in emerging markets increases with adoption of modern building methods
- Continued innovation should increase penetration in existing markets
**Boral Plasterboard Australia**

**PLASTERBOARD LINING SYSTEMS HAVE UNIQUE BENEFITS WHICH HAVE HELPED TO DRIVE ADOPTION**

- **Lightweight**
  - Reduced building mass – reduced foundation costs
  - Lower thermal mass

- **Flexibility and Performance**
  - Ease of reconfiguration and repair
  - Naturally fire resistant
  - Various design solutions for specific requirements (fire, acoustic, wet area, impact etc.)

- **Environment**
  - Low embodied and lifecycle energy
  - Recyclable
  - Can be manufactured from recycled inputs
  - Proven safe to use

**Increased Adoption**

- **Education systems**
- **Enviro board**
- **EchoSTOP ceiling panels**
Boral is now the leading Asia Pacific plasterboard wall and ceilings solution supplier (and a leading global player) with:

- Plasterboard plants in Australia, China, India, Indonesia, Malaysia, South Korea, Thailand, and Vietnam (533 million m² of capacity with a further 120 million m² either under construction or planned)
- Plasterboard ceiling tile plants in China, Indonesia, Malaysia, South Korea, Thailand and Vietnam
- Metal stud and track plants in China, India, Indonesia, Philippines, Thailand and Vietnam
- Jointing compounds and building plaster plants in Australia, China, Indonesia, Malaysia, South Korea and Thailand

**Best Practices**

- Working actively with our Asian operations to share manufacturing, engineering, product range/quality and customer service best practices

**Procurement**

- Leveraging increased scale for purchasing raw materials
- Working to increase lower cost Asian sourcing

**Network**

- Investigating potential to leverage regional manufacturing footprint and to grow innovation and system penetration
END