USG Boral Building Products Analyst and Investor Tour
Indonesia | China - 2 & 4 June 2014
Introduction by Mike Kane

Boral Gypsum – now a part of the USG Boral JV – is integral to Boral’s long term growth aspirations

1H FY2014\(^1\) Revenue (pre-JV formation)

<table>
<thead>
<tr>
<th>Gypsum, 19%</th>
<th>1H13</th>
<th>1H14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boral Gypsum ROFE(^2) %</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

Boral Group

- Targeting 15% ROFE\(^2\) through cycle
- Relentless focus on costs, margins & cash generation
- Maintain strong balance sheet

Boral Gypsum

- Expect to deliver underlying 15% ROFE through the cycle
- Deliver USG Boral synergies
- Long-term growth platform leveraging market growth, increasing product penetration, innovation and adjacent products

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1. For the half year ended 31 December 2013 for continuing operations only
2. Moving Annual Total EBIT return on divisional funds employed (segment assets less segment liabilities). EBIT excludes significant items
3. Gypsum reported ROFE for Boral will be lower due to equity accounting impacts of reporting post tax EBIT due to commencement of the USG Boral joint venture.
Combined volumes across Asia and Australia have been growing at CAGR of 6% p.a.

<table>
<thead>
<tr>
<th>A$m</th>
<th>FY12 proforma</th>
<th>FY13</th>
<th>1H FY14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>911</td>
<td>919</td>
<td>537</td>
</tr>
<tr>
<td>EBITDA</td>
<td>126</td>
<td>125</td>
<td>77</td>
</tr>
<tr>
<td>EBIT</td>
<td>88</td>
<td>83</td>
<td>55</td>
</tr>
<tr>
<td>EBIT margin (%)</td>
<td>9.7%</td>
<td>9.0%</td>
<td>10.2%</td>
</tr>
</tbody>
</table>

Plasterboard sales volume

<table>
<thead>
<tr>
<th>Year</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>1H FY13</th>
<th>1H FY14</th>
</tr>
</thead>
<tbody>
<tr>
<td>281</td>
<td>308</td>
<td>292</td>
<td>325</td>
<td>359</td>
<td>378</td>
<td>391</td>
<td>200</td>
<td>217</td>
<td></td>
</tr>
</tbody>
</table>

Revenue by country

- Australia: 34%
- China: 14%
- Korea: 21%
- Indonesia: 7%
- Thailand: 13%
- Other: 11%

Growth is supported by strong economic growth across Asia.

Comparison to developed markets

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP Growth</th>
<th>Population Growth</th>
<th>Population (m)</th>
<th>Rate of Urbanisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>6.0%</td>
<td>0.5%</td>
<td>1.354m</td>
<td>2.9%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>5.2%</td>
<td>1.2%</td>
<td>80m</td>
<td>3.0%</td>
</tr>
<tr>
<td>India</td>
<td>5.7%</td>
<td>1.3%</td>
<td>1.223m</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Source: IMF databank and CIA World Factbook.
1. Assumes theoretical consolidation of Boral Gypsum Asia for FY2012; acquired on 9 Dec-11
2. For the six months ended 31 Dec-2013
3. Includes plasterboard ceiling tiles volume
Growth is also underpinned by product penetration opportunities

<table>
<thead>
<tr>
<th>Early Stage</th>
<th>Growth</th>
<th>Developed</th>
<th>Matured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Stage</td>
<td>Growth led by residential ceiling and commercial projects</td>
<td>Market led by wall penetration</td>
<td>Market matured</td>
</tr>
</tbody>
</table>

- **Early Stage**
  - Market size: 15~25% strong growth, but fluctuating
  - Markets: Philippines, India, Laos, Cambodia, China local cities

- **Growth**
  - Market size: 10~15% strong and steady growth
  - Markets: China metro cities and most of metro cities in SEA region

- **Developed**
  - Market size: 3~5% low market growth
  - Markets: Korea and Shanghai

- **Matured**
  - Market size: No market growth
  - Markets: Japan

**Traditional housing**
- Traditional building materials
- No ceiling required

**Budget housing**
- Concrete and bricks
- Concealed ceiling required

**Modern and high-end housing**
- Concrete and bricks
- Concealed ceiling required
- Partitions with fire and acoustic requirements

**Sustainable construction**
- High-rise buildings
- Light weight system required
- Drywall required

**The strategic joint venture with USG further strengthens and secures growth prospects**

**Boral**
- Leading manufacturing and distribution platform across Australia & 8 countries in Asia
- 
  #1 or #2 position in markets served
  ~US$1.35b of assets

**USG**
- Exclusive access to world-leading technologies in perpetuity in the Territory
- Strategic assets in Asia, New Zealand and the Middle East
  ~US$250m of assets and intellectual property

**USG Boral Building Products**
- ~US$1.6b joint venture

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1. Actual structure is via two JV legal entities
2. Asset values subject to finalisation of fair valuation, completion adjustments and final foreign exchange rates at the date of completion
3. Encompasses Asia, Australia, New Zealand and the Middle East
Agenda

**DAY 1 – Indonesia**
1. **USG BORAL OVERVIEW**  
   FREDERIC DE ROUGEMONT  
   Bill Hogan  
   Tony Charnock  
   Yan Xu  
   Yan Xu

2. Sales & Marketing
3. Asia Pacific
4. Indonesia
5. Cilegon Plant

**DAY 3 – China**
6. Technology & Manufacturing  
   Joe Holmes
7. Asia / Middle East  
   Dan Casey
8. China
9. Star-USG JV & Ceiling Tile Plant  
   Frederic De Rougemont
The Opportunity

• **Build on our industrial platform** as market leader and driver of innovation in building products and systems

• **Leverage USG Boral partnership** to achieve strong revenue and earnings growth
  – Technology
  – Enhanced product platform
  – New strategic assets (gypsum, acoustic ceilings, compounds)

• **Develop a powerful brand across all markets**
  – Accelerate adoption of light and dry solutions vs bricks and mortar

• **Leverage integrated capabilities**
  – Strong management team driving integration and change management plan

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Overview

Plasterboard & ceiling tile industry leader across Australasia, Asia & ME

Unparalleled capability in wall, ceilings and floor lining systems across Australia, NZ, Asia and the Middle East (ME)

<table>
<thead>
<tr>
<th>Revenue by country¹</th>
<th>Plasterboard market share, %²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>Australia</td>
</tr>
<tr>
<td>Malaysia/Sing.</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Thailand</td>
<td>Korea</td>
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<tr>
<td>China</td>
<td>Malaysia Singapore</td>
</tr>
<tr>
<td>India</td>
<td>Thailand</td>
</tr>
<tr>
<td>Middle East &amp; Other</td>
<td>Korea</td>
</tr>
</tbody>
</table>

- ~US$1.0bn annualised revenue
- ~3,200 employees

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1. Based on management estimates. Includes USG Boral share of JV revenues
2. Based on management estimates of plasterboard sales volume, excluding ceiling tiles
Overview

Extensive infrastructure generating ~US$1bn p.a. in revenue

<table>
<thead>
<tr>
<th></th>
<th>Plasterboard</th>
<th>Metal products</th>
<th>Mineral fibre ceiling tile/grid</th>
<th>Joint Compound</th>
<th>Gypsum</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Capacity (m²)</td>
<td>Board lines</td>
<td>Ceiling lines</td>
<td>Plants</td>
<td>Plants</td>
<td>Plants</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>25</td>
<td>6</td>
<td>12</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Australia</td>
<td>86</td>
<td>3</td>
<td>1</td>
<td>1³</td>
<td>1</td>
<td>1³</td>
</tr>
<tr>
<td>New Z’land</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>Grid</td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td>153</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>155</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>Tile &amp; grid²</td>
<td>3</td>
</tr>
<tr>
<td>Thailand</td>
<td>105¹</td>
<td>3¹</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>65</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td>42</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>9</td>
<td>1</td>
<td></td>
<td></td>
<td>2³</td>
<td>1</td>
</tr>
<tr>
<td>Malay./Sing</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
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<tr>
<td>Saudi Arab.</td>
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<td></td>
<td></td>
<td>1⁴</td>
<td></td>
</tr>
<tr>
<td>Oman</td>
<td>8²</td>
<td>1²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. 71% ownership interest in SGI. Boonya gypsum mine and PLT are 100% owned
2. Owned in JV with Zawawi Minerals; own 55% mine and 50% of plasterboard plant
3. 50/50 JV with CSR (Rondo) – one plant only in India
4. 45/55 JV with local partner Saudi Structured Contracting Company
5. 50/50 Star-USG JV with BBMG Group
6. 50/50 JV with CSR (GRA)

Overview

Expect to realise synergies of US$50m within three years of technology roll-out

Targeted synergy breakdown

Cost synergies
- Plant trials have validated potential to achieve weight targets and sag resistance

Adjacent products
- Synergies have commenced with compounds and mineral fibre ceiling tiles being quick wins

Revenue growth
- Facilitated by market specific two-SKU approach
  - NextGen technology to be introduced in more mature markets: Australia & Korea
  - USG classic plasterboard in remaining markets
  - Customer value proposition developed by market segment & customer/key influencer
  - Differentiated quality

Integration costs
- Expect upfront integration expenditure to exceed synergies for first 2 years of JV
Overview

Business Priorities / Challenges

1. Revenue growth
   - Price premium for advanced technology
   - New adjacent products
   - Accelerate penetration of our solutions

3. Manage costs
   - Deliver manufacturing and transport synergies
   - Optimise the organisation
   - Procurement
   - Operations optimisation

2. Mobilisation
   - Deliver NextGen roll out on time
     - Technical testing
     - Employee training
   - Develop sales & marketing capabilities

4. Optimise capacity
   - Optimise plant utilisation
   - Plan additional capacity as needed

Overview

1. Revenue growth
Leveraging an enhanced product portfolio and sales & marketing capabilities

In Australia, distributors and installers are manufacturer owned as well as independently owned
2. Mobilisation

- Executive team changes – completed
- Integration of operations
- Technical & IP training
- Marketing/branding strategy
- Sales & marketing training
- Employee engagement

Deliver on NextGen roll out & synergies

3. Manage costs

In addition to delivering cost synergies, commenced “Step Change” cost reduction program covering all cash costs

<table>
<thead>
<tr>
<th>“Step Change” Cost Program</th>
<th>Cost Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workstream Improvement Category</td>
<td>Transport Cost for goods delivered</td>
</tr>
<tr>
<td>% of Total Cash Costs(^1)</td>
<td>5–10%</td>
</tr>
<tr>
<td>Organisation</td>
<td></td>
</tr>
<tr>
<td>Procurement &amp; Sourcing</td>
<td><img src="%E2%9C%93" alt=" " /></td>
</tr>
<tr>
<td>Operational Excellence</td>
<td><img src="%E2%9C%93" alt=" " /></td>
</tr>
<tr>
<td>Detailed Cost Reviews</td>
<td><img src="%E2%9C%93" alt=" " /></td>
</tr>
</tbody>
</table>

- Detailed programs developed for all workstream improvement categories
- Workstream teams staffed by dedicated internal resources supplemented by senior employees from shareholders USG and Boral
- All controlled entities in scope

\(^1\) % cash costs for JV controlled entities across all product groups
4. Optimise capacity

- Margins and earnings to benefit as recent capacity expansions are fully leveraged
- Capacity expanded by 277m² since FY2007 supporting sales volume CAGR¹ of 6% p.a.
- ~75m² in recent expansions in Indonesia, China and Vietnam
- Additional capacity requirements planned as needed
- Current focus is to infuse USG technology into existing plants

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1. Compound annual growth rate
2. Includes plasterboard and ceiling tile volume
3. Based on total production capacity at financial year end
4. Capacity at year end for FY14F includes 45m² capacity expansions in Vietnam and China
## Overview

**Delivering customers an enhanced product portfolio**

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Application</th>
<th>Manufacturing locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boral manuf. to include USG IP</td>
<td>Plasterboard</td>
<td>Internal walling/ ceiling</td>
<td>Refer slide 5</td>
</tr>
<tr>
<td>Plasterboard ceiling tiles</td>
<td>Plasterboard ceiling tiles</td>
<td>Ceilings</td>
<td>Refer slide 5</td>
</tr>
<tr>
<td>Cornice</td>
<td>Decorative cornice</td>
<td>Finishing for ceilings</td>
<td>Australia</td>
</tr>
<tr>
<td>Joint compound</td>
<td>Readymix</td>
<td>Jointing, skimming, bonding</td>
<td>Refer slide 5</td>
</tr>
<tr>
<td>Other Metal products</td>
<td>Metal products</td>
<td>Internal wall framing and ceiling systems</td>
<td>Refer slide 5</td>
</tr>
<tr>
<td>Mineral fibre ceiling tiles</td>
<td>Mineral fibre ceiling tiles</td>
<td>Acoustic ceilings</td>
<td>US, China (JV), Saudi Arabia (JV)</td>
</tr>
<tr>
<td>Ceiling (metal) grid</td>
<td>Metal exposed grid</td>
<td>Ceiling grid for &quot;lay in&quot; tile system</td>
<td>US, NZ, China (JV)</td>
</tr>
<tr>
<td>USG Adjacent Products</td>
<td>Cement board</td>
<td>Tilebacker board (flooring and walls), exterior walls (render system)</td>
<td>US</td>
</tr>
<tr>
<td>Durock®</td>
<td>Gypsum fibre board</td>
<td>Flooring, technical wall application – interior</td>
<td>US</td>
</tr>
<tr>
<td>Fiberock®</td>
<td>Gypsum fibre roof board</td>
<td>High performance roof board for low slope roofing systems</td>
<td>US</td>
</tr>
<tr>
<td>Securock®</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Overview

Boral USG end market revenue exposure in key countries\textsuperscript{1,2}

1. Australia end-market exposure based on revenue for the six months ending 31 December 2013

Retail – sold through retail channel. Project – sold to identified commercial & residential large projects.

Overview

Korea

- Detached dwellings, 40%
- Multi-residential, 16%
- Alterations & Additions, 22%
- Non-residential, 22%

Thailand

- Retail, 70%
- Project, 30%

Indonesia

- Retail, 72%
- Project, 28%

China

- Retail, 55%
- Project, 45%

Agenda

\textbf{DAY 1 – Indonesia}

1. USG Boral Overview
2. SALES & MARKETING – BILL HOGAN
3. Asia Pacific
4. Indonesia
5. Cilegon Plant

\textbf{DAY 3 – China}

6. Technology & Manufacturing
7. Asia / Middle East
8. China
9. Star-USG JV & Ceiling Tile Plant
• We have a Plan to Win
• Revenue growth from NextGen technologies accounts for nearly 50% of synergy attainment
  – Our marketing strategies – brand, portfolio and pricing – are key elements of our Plan to Win
• Adjacent products account for 25-30% of synergy attainment
  – Category Management and Architectural Sales accelerate adoption and increase penetration
• Having the skills to sell our value is paramount
Our Plan to Win

Brand Strategy

Corporate brand

Product descriptor  Product brand  Product descriptor  Product brand
“NextGen” market research scope

- Attractiveness of attributes
  - Positioning
- Willingness to pay a premium
  - By market, segment, customer type
- Approach
  - 2,000 interviews; 14 markets; 3 customer types

Outcome informs strategy: Market, Pricing, Capital Expenditure

Unlocking our full potential

Plasterboard Manufacturer

Full Portfolio Company
Category Management

- Mineral Fibre Ceilings
- Performance Substrates
- Join Compound and Accessories
- Plasterboard
Architectural Sales creates power

Prior State

- Limited Spec position
- Lower Margin Product Mix
- Limited Contractor Loyalty
- Open Dealer Network

Future State

- Strong Spec Position
- Price is Secondary
- Contractor Loyalty
- Select Dealer Network
- Higher Margin Product Mix

Architectural Sales pays dividends

Activity:

- Driving Basis of Design
- Bid Scanning Activities
- Post–bid effort
- Pre-Bid Approval
- Post Bid

Project Stage:

- Optimal zone of influence for product selection and driving USG Boral specifications
- Work to gain pre-bid approval if not in project specifications
- Zone 1
- Zone 2
- Zone 3

Outcome:

- Proactive
- Reactive
- Price is all you have
Sales Excellence

1. Pricing management
2. Sales force management
3. Organisation design and execution
4. Customer management

Focused Agenda

- We have a Plan to Win
- Our #1 priority is to launch and secure a price premium for NextGen technology
- Build organisational skills to create, manage, and sell our full portfolio, increase our margins, shift the power in the channel and create loyalty with the end user
Agenda

**DAY 1 – Indonesia**
1. USG Boral Overview
2. Sales & Marketing
3. ASIA PACIFIC – TONY CHARNOCK
4. Indonesia
5. Cilegon Plant

**DAY 3 – China**
6. Technology & Manufacturing
7. Asia / Middle East
8. China
9. Star-USG JV & Ceiling Tile Plant

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**Asia Pacific**

**USG Boral manufacturing footprint**

AU, IND, MAL/SIN, PHI, NZ

Thailand exports to Malaysia/Singapore, Philippines, New Zealand as well as a number of other countries

- Plasterboard plant
- Plasterboard ceiling plant
- Metal products plant
- Ceiling (metal) grid
- Gypsum mine
- Joint compound plant

1. Based on management estimates. Asia/Middle East managed/presented under Dan Casey
2. Metal plants in Australia and Malaysia held in 50/50 JV with CSR (Rondo)
3. Gypsum mine in Australia held in 50/50 JV with CSR (GRA)
### Leveraging combined product offering

**(including JV businesses)**

<table>
<thead>
<tr>
<th>Product</th>
<th>Australia</th>
<th>New Zealand</th>
<th>Indonesia</th>
<th>Philippines</th>
<th>Malaysia</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boral manuf. to include USG IP</td>
<td></td>
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<tr>
<td>Standard &amp; Technical board</td>
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<tr>
<td>Cornice</td>
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<tr>
<td>Plasterboard ceiling tile</td>
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<tr>
<td>Joint compound</td>
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<td>Other</td>
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<tr>
<td>Metal products</td>
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<tr>
<td>USG Adjacent Products</td>
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<tr>
<td>Mineral fibre ceiling tile</td>
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<tr>
<td>Ceiling (metal) grid</td>
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<tr>
<td>Durock®</td>
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<tr>
<td>Fiberock®</td>
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<tr>
<td>Securock®</td>
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<tr>
<td>Trading products</td>
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<tr>
<td>Insulation</td>
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<tr>
<td>Other (incl. JHX fibre cement)</td>
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</tbody>
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#### Plasterboard demand in Asia Pacific – penetration upside

**Plasterboard market size**

- **Australia**: 300 m²
- **New Zealand**: 250 m²
- **Indonesia**: 350 m²
- **Philippines**: 400 m²

**CAGR**

- **Australia**: 16%
- **New Zealand**: 15%
- **Indonesia**: 5%
- **Philippines**: 1%

#### Plasterboard demand per capita

- **Philippines**: 0.1 m²
- **Malaysia**: 0.4 m²
- **Singapore**: 1.1 m²
- **Indonesia**: 0.4 m²
- **New Zealand**: 5.7 m²
- **Australia**: 6.1 m²

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1. Management estimates. Excludes ceiling tiles
Singapore penetration success

- Residential wall penetration ~50% of dry area partitions in private residential projects; no penetration in public housing
- In March 2014, Government announced mandate to convert all dry area partitions to drywall solutions in non-landed public & private residential projects
  - Expect full impact from 2017
- Assuming “plasterboard” systems/solutions adopted, additional incremental growth of 20-30% could be delivered
- USG Boral market share 50-55%; strong specified offerings tailored to residential wall requirements

Australia: Market dynamics & opportunities

- USG Boral #1 capacity position
- Good traction with Mar-14 price increase: ~5% secured
- Knauf importing gypsum
- Increase in residential demand lifting industry capacity utilisation

Opportunities
- Launch of NextGen planned for end of calendar year 2014
- Revenue growth from leveraging expanded product and systems portfolio
  - Acoustic ceiling tiles
  - Substrates including roofing
  - Joint compound

1. Management estimates based on FY14 production volume
Malaysia/Singapore, Philippines & NZ: Market dynamics & opportunities

### Market Position
- **MAL:** #1 in PB¹ & MF¹ ceiling tiles
- #2 in joint compound; key competitor ASG
- **SIN:** #1 PB & MF tiles

### Market Dynamics
- Growth opportunity from government mandated use of drywall in Singapore
- 100% import market for PB, joint compound & PB ceiling tiles
- Supply cost challenges due to port congestion & trucking regulations
- Winstone Wall Boards (Fletcher) only local manufacturer

### Opportunities
- Penetration of PB
- Sale of expanded product & systems offer
- Penetration of PB
- Sale of expanded product & systems offer
- Build on solid position in non-PB products

### Plasterboard Competitors
- St Gobain
- Euroboard (local)
- Knauf – imports
- Small Thai players
- St Gobain – imports
- Knauf – imports
- Limited Chinese imports
- Winstone Wall Boards
- Knauf – import ex Australia

---

1. PB – plasterboard, MF – Mineral fibre

### Priorities
- **Drive revenue growth**
  - Higher penetration of plasterboard products
  - Increased focus on sales of adjacent products and technical boards; leverage our full products and systems offering
- **Deliver on USG technology rollout**
  - Wave 1 focused on Australia and Indonesia
- **Recover escalating input costs:** energy, labour, raw materials
- **Adopt strict capital investment criteria** to lift capital returns
- **Lower cost base through ‘Earn the Right to Grow’ program**
- **Improve safety performance** through better awareness of risk and introduction of behavioural-based programmes
Asia Pacific

Asia: Channel to Market

USG Boral

Large Project Sales

Plasterboard Distributors

Smaller Project & Retail Sales

LARGE INSTALLERS

Sub-distributors

SMALL INSTALLERS (repairs + small / medium projects)

Developers & Building Owners

End Markets

- Residential Low Rise
- Residential High Rise
- Commercial E.g. Hotels, Hospitals, Leisure, Non-Residential High Rise
- Repairs, Maintenance, Upgrades
### Australia: Channel to Market

<table>
<thead>
<tr>
<th>Gypsum</th>
<th>Gypsum Resources Australia (GRA)</th>
<th>Imports/Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturers</td>
<td>USG Boral</td>
<td>CSR</td>
</tr>
<tr>
<td>Distributors</td>
<td>Company owned stores (USG Boral, CSR only)</td>
<td>Independently-owned stores</td>
</tr>
<tr>
<td>Installers</td>
<td>Company contracting offer (USG Boral, CSR, BGC (WA only))</td>
<td>Independently-owned contractors</td>
</tr>
<tr>
<td>Customer</td>
<td>Builders / Developers / Owners</td>
<td></td>
</tr>
<tr>
<td>End Markets</td>
<td>Residential detached</td>
<td>Residential – multi</td>
</tr>
</tbody>
</table>

### Agenda

**DAY 1 – Indonesia**
1. USG Boral Overview
2. Sales & Marketing
3. Asia Pacific
4. **INDONESIA – YAN XU**
5. Cilegon Plant

**DAY 3 – China**
6. Technology & Manufacturing
7. Asia / Middle East
8. China
9. Star-USG JV & Ceiling Tile Plant
USG Boral manufacturing footprint

- ~320 employees

<table>
<thead>
<tr>
<th>Plant name</th>
<th>Gypsum type</th>
<th>Capacity m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cilegon 1 &amp; 2</td>
<td>Natural Gypsum</td>
<td>51</td>
</tr>
<tr>
<td>Gresik</td>
<td>Natural Gypsum</td>
<td>14</td>
</tr>
<tr>
<td>Sunter (Metal)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Competitive landscape & opportunities

- **Competitors**
  - **Siam Indo**
    - In high-end Retail
    - Presence in compound & metal
  - **Knauf**
    - In high-end Project
    - Presence in compound & metal
  - **Aplus**
    - In mid & low-end Retail
    - #1 in joint compound
  - **Saint Gobain (Gyproc)**
    - In mid & low-end Retail
    - New domestic plasterboard plant under construction to be ready for FY2015
    - Currently importing
  - **Fibre Cement Board**
    - Competes for ceiling application in low-end residential

Market share

- USG Boral largely competes in high-end Retail & Project segments

Opportunities

- Fast growing market with strong demand
- Superior product quality with USG technology
- More complete product portfolio – MF ceiling tiles, Fibrocks®

---

1. Management estimates based on plasterboard sales volumes, excluding ceiling tiles (FY2013)
High plasterboard growth
Supported by economic growth & product penetration

- Average GDP growth over 6 yrs to CY2013 of ~6%¹
- Fast growing middle class and decreased dependency ratio driving increased residential demand
- Jakarta CBD is fastest growing rental office market in Asia Pacific²

Indonesia GDP growth¹

Cilegon expansion supporting demand

- Domestic plasterboard revenue CAGR of ~20% over 4 yrs to FY2013
- Strong market position established through leading Jayaboard brand
  - Increased market share
  - High volume growth
  - Modest price growth

Cilegon plasterboard plant
- Line 2 capacity expansion of 30 m²
  - Completed Mar-13 quarter
  - Now optimised with line 1 on-load sharing
- Supplies domestic market
  - Volume to Jabodetabek (greater Jakarta region), West Java, and Sumatera

1. Source: World Bank, Bank Indonesia
2. Source: Asian Real Snapshot (Spring 2013 by KPMG)
3. Management estimate. Excludes ceiling tiles
Substantial distribution network
Supporting Retail & Project markets

62 exclusive distributors across Indonesia

Pakubuwono Signature Project
- 107,000m² of plasterboard supplied in 2014
- Plasterboard system both for ceiling & partition
- Prestigious high-rise residential

Cost and price management

Weaker rupiah has increased production cost

- ~80% of variable costs paid in USD
  - Gypsum and paper imported
  - Energy paid in USD
- Domestic currency (Rupiah) weakened relative to USD by around 20% over last two years
- Price increases starting from Nov-2013 across all products
  - Good traction on price increases to date
  - Plasterboard price increase of around 15% achieved
- Continued focus on Operation Excellence program to reduce costs
Priorities

- **Revenue growth**
  - Solidify #1 market position in board
  - Continue developing drywall partition market
  - Strengthen market position in MF ceiling tiles and joint compound
  - Develop Fiberock® and Securock® market
  - Strengthen specification capabilities & value offer through direct sales to market

- **Improve margins**
  - Optimise price and cost management
  - Maximise customer conversion to lightweight board

- **Safety** for employees and customers
Jayaboard – “Top of Mind” brand

USG Boral plasterboard brand, Jayaboard, voted preferred brand

Top Brand award 2011, 2012
(One of the most popular brands across all industries)

(Most popular brand in Plasterboard industry)

Architect Choice award 2012, 2014
(Preferred brand by Architects)

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Overview

Background

  - 2nd hand plant from France
- 2004: Compound plant upgraded
- 2013: 2nd plasterboard line expansion

Key facts

- Two plasterboard lines
  - Line 1: 21m²
  - Line 2: 30m²
- Total investment in line 2 of ~US$22m
- Two compound/plaster lines
- All volume supplied to Jabodetabek (greater Jakarta region), West Java, and Sumatera
- ~120 employees + ~80 contractors: loading, packaging, security
- 30% shipped by container

Products manufactured

Plasterboard

- Standard
- Soundstop
- Firestop
- Wetarea

Compounds

Casting plaster
Cilegon Plant

Production volume

Plasterboard production volume
$m^2$

Compound/Plaster production volume
$K$ tonne

Performance

Line speed

Overall Equipment Efficiency (OEE)

Introduction of Lean Manufacturing
Total area: 90,000 m²

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**DAY 3 – China**
6. **TECHNOLOGY & MANUFACTURING – JOE HOLMES**
7. Asia / Middle East
8. China
9. Star-USG JV & Ceiling Tile Plant
USG NextGen technology – delivering superior quality differentiation

NextGen technology
• Proprietary raw materials
• Proprietary equipment delivery systems
• Building block processes

What it delivers
• Superior sag performance with improved score and snap
• Improved weight to strength ratio
• Reduced gypsum requirement

USG Boral deployment team

Joe Holmes
CTO

Manufacturing Support
(R&D, Technical Services, and Product Systems Development)

Antal Suveg
Technology Program Director

Manufacturing Directors

REGIONAL SUPPORT TEAMS

USG Technical
Brent Groza
Chuck Whittington

USG CIC
Mike Hough

USG Manufacturing
Rusty Moore

Boral Technical
Sasha Trandafilovic
Peter Cychowski

USG Technical
Jim Wittbold
Te Hua Lau

USG CIC
Chris Lee

USG Manufacturing
Ted Maciejko

Boral Technical
K-Hyuk Ji
Thibaud Lam

USG Technical
Fred Jones
Bill Cecchini

USG CIC
Chuck Cochran

USG Manufacturing
John Fall

Boral Project Manager
Chris Kitcher
Tausik Haryanto
Hyun Hee Han
Tosapol Thanayaraj

Plant Teams
Boral Engineering
Jong-Hyun Kim
NextGen plasterboard will start to be delivered to markets by the end of CY2014

US$50m capital rollout program

Wave 1:
• Launch in initial markets
  ◦ Australia, Korea, Indonesia, Thailand, Export Markets

Wave 2:
• Fill the market gaps –
  ◦ Australia, China, Vietnam
• Improve product quality

Waves 3 & 4:
• Build on success

Manufacturing Priorities

Safety
• Front line supervisory skills
• Employee engagement
• Enhanced reporting transparency

Quality
• Statistical quality control
• Beat the competition
• Operate at steady state condition

Operating Efficiency
• Lean principles
• Technical services
**Lightweight process requirements facilitate cost reduction**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 1 Establish process foundation| • Minimise feed rate variation  
• Control stucco & additive quality  
• Implement robust process controls  
• Train operators               | • Steady state operations equal lower cost             |
| 2 Optimise hydration         | • Eliminate high cost additives  
• Add set control systems  
• Enhance gypsum crystal growth | • Raw material reduction lowers costs                 |
| 3 Install key lightweight technologies | • Improve core structure formation  
• Introduce strength development additives  
• Reduce gypsum usage             | • Proprietary technology differentiates product and reduces costs |

**Cost Reduction Opportunities**

- **Raw material reduction**
  - Gypsum and associated water
  - Accelerator

- **Variation control**
  - Stucco uniformity
  - Improved quality

- **Manufacturing support**
  - Uniformity task force
  - Troubleshooting
  - Leveraging best practices
Training for improved manufacturing operations

- **Safety training** at company-wide plant manager meeting, May-14
- **USG Boral Fundamentals of Plasterboard Training**, March-14
  - Manufacturing and process teams
  - Training on NextGen technology, raw materials, process improvements, best practices
- **Continuing training & development opportunities** to maintain standards across corporation
- **Extensive IP training** (all manufacturing directors and plant managers)

Protecting our Intellectual Property

- **IP Protection** is a key priority with training on IP Security commenced March-14 and extensive IP policies developed
- **USG** has licensed over 740 Patents & Applications and 233 Trademarks & Applications to USG Boral for use in the Territory
- **BORAL** has assigned over 112 Patents & Applications and licensed 400 Trademarks & Applications to USG Boral for use in the Territory
- **JV Board Technical Committee** formed to:
  - Provide oversight on Licensed Technology implementation
  - Coordinate selection/transfer of qualified newly developed IP by USG and/or Boral to USG Boral
  - Furnish guidance to any proposed joint development between USG Boral and shareholders
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8. China
9. Star-USG JV & Ceiling Tile Plant

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**USG Boral manufacturing footprint**
CH, KR, TH, VN, IN, UAE and JVs (Star-USG, USG ME, Oman)

1. Based on management estimates. Asia Pacific managed/presented under Tony Charnock
2. 50% owned plasterboard plant in Oman is under construction
3. 45% interest in Saudi Arabia MF ceiling tile, metal grid, metal stud and joint compound plant
4. In China, MF ceiling tile owned 50% through Star-USG JV
5. Metal plant near Mumbai in India owned 50% through Rondo JV
6. Gypsum mine in Oman 55% owned
Leveraging combined product offering (including JV businesses)

<table>
<thead>
<tr>
<th>Product</th>
<th>Korea</th>
<th>China</th>
<th>Thailand</th>
<th>Vietnam</th>
<th>India</th>
<th>Saudi/UAE</th>
<th>Export/other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boral manuf. to integrate USG IP</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Standard &amp; Technical board</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Plasterboard ceiling tile</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Joint compound</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Perforated Plasterboard Panels</td>
<td></td>
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<tr>
<td>Other</td>
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<tr>
<td>Metal products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USG Adjacent Products</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Mineral fibre ceiling tile</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Ceiling (metal) grid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Durock®</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Fiberock®</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Securock®</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Asia / Middle East

Plasterboard demand growth and penetration upside in Asia/Middle East

Plasterboard market size

<table>
<thead>
<tr>
<th>Country</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>200</td>
<td>250</td>
<td>300</td>
<td>350</td>
<td>400</td>
<td>450</td>
</tr>
<tr>
<td>Thailand</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
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<tr>
<td>Vietnam</td>
<td>50</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
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<tr>
<td>India</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
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<tr>
<td>UAE</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>140</td>
<td>160</td>
<td>180</td>
</tr>
</tbody>
</table>

CAGR

1. Source: management estimates. Excludes ceiling tiles
2. China market size discussed in China section of this presentation
3. CAGR – cumulative average growth rate

Plasterboard demand per capita

<table>
<thead>
<tr>
<th>Country</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14F</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1.4</td>
<td>1.0</td>
<td>0.8</td>
<td>0.6</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>UAE</td>
<td>4.6</td>
<td>4.0</td>
<td>3.4</td>
<td>2.8</td>
<td>2.2</td>
<td>1.6</td>
</tr>
<tr>
<td>India</td>
<td>0.2</td>
<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Korea</td>
<td>4.2</td>
<td>4.2</td>
<td>4.2</td>
<td>4.2</td>
<td>4.2</td>
<td>4.2</td>
</tr>
</tbody>
</table>
Unique benefits of plasterboard lining systems driving adoption

**Environmental benefits**
- Low embodied and lifecycle energy
- Recyclable
- Can be manufactured from recycled inputs

**Flexibility and Performance**
- Ease of reconfiguration and repair
- Job site cleanliness & safety
- Design solutions for specific requirements (e.g. fire, acoustic, wet area, impact)

**Lightweight**
- Reduced building mass & foundation costs
- Lower thermal mass

Note that these unique benefits driving adoption of plasterboard are also relevant to Asia Pacific markets.

---

**Korea: Market dynamics & opportunities**

**Key Competitors**

<table>
<thead>
<tr>
<th>Brand</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCC</td>
<td>Only other domestic manufacturer with estimated plasterboard capacity of 170m²</td>
</tr>
<tr>
<td></td>
<td>#1 in plasterboard &amp; MF ceiling tiles</td>
</tr>
<tr>
<td>Byucksan</td>
<td>Plasterboard &amp; plasterboard ceiling tiles supplied by USG Boral under OEM¹</td>
</tr>
<tr>
<td></td>
<td>Manufactures fibre cement &amp; MF ceiling tile</td>
</tr>
<tr>
<td>Terraco</td>
<td>#1 in compounds with ~90% market share</td>
</tr>
</tbody>
</table>

**Plasterboard market share²**

- USG Boral/ Byucksan: 40 - 45%
- KCC

**Opportunities**

1. Uplift in housing & non-residential activity vs 2013 driven by Government new real estate policy³ to boost construction
2. First significant price increase in over 5 yrs implemented March-14
3. Continued increase in demand for green and energy efficient products & buildings
4. Expansion of product portfolio base
5. Development of new channels to penetrate adjacent products eg. joint compound
6. Accelerating residential PB demand:
   - Shift to small size units: use higher drywall ratio than larger units
   - Legal requirement for more ‘green’/ energy efficient buildings

¹ OEM – Overall Equipment Manufacture
² Management estimates CY2013; excluding ceiling tile
³ Permanent acquisition tax cut and abolishment of increased capital gains tax on multiple home owners
⁴ FGD – Flue Gas Desulphurisation (gypsum obtained from power plants)
**Thailand: Market dynamics & opportunities**

**Key Competitors**

<table>
<thead>
<tr>
<th>Competitor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>St Gobain</td>
<td>Major competitor in PB, compound &amp; metal products</td>
</tr>
<tr>
<td></td>
<td>Small position in PB ceiling tiles</td>
</tr>
<tr>
<td>Knauf</td>
<td>Small position in plasterboard only</td>
</tr>
<tr>
<td></td>
<td>New entrant with local manufacturing</td>
</tr>
<tr>
<td>Plaster glass</td>
<td>#1 in cast gypsum ceiling tiles</td>
</tr>
</tbody>
</table>

**USG Boral market share¹**

- **USG Boral (SGI)**: 50 – 55%
- **St Gobain (BPB)**: 43 - 45%
- **Knauf**: Small position in plasterboard only
  - New entrant with local manufacturing

**Opportunities**

- USG Boral #1 market share in plasterboard (PB), joint compound, PB ceiling tile & metal products
- Recent political unrest has dampened strong underlying construction growth
  - Risk that impact may be greater in medium term
- Highly competitive pricing - no material price growth since FY2010

**Vietnam, India and UAE: Market dynamics & opportunities**

**USG Boral Market Position**

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>#2 in plasterboard</td>
</tr>
<tr>
<td>India</td>
<td>#2 in plasterboard, Entering ceilings market as a second player</td>
</tr>
<tr>
<td>UAE</td>
<td>#3 in plasterboard, #1 joint compound</td>
</tr>
</tbody>
</table>

**Market Dynamics**

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>Moderate growth in high-end market</td>
</tr>
<tr>
<td>India</td>
<td>Expect continued high growth</td>
</tr>
<tr>
<td>UAE</td>
<td>Competitive pricing – driven by market over capacity</td>
</tr>
</tbody>
</table>

**Opportunities**

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>Leverage Ho Chi Minh capacity expansion</td>
</tr>
<tr>
<td></td>
<td>Leveraging project sales to build adjacent product opportunities</td>
</tr>
<tr>
<td>India</td>
<td>Build profitability in North &amp; strengthen position in South (Vietnam and Oman)</td>
</tr>
<tr>
<td></td>
<td>Leverage new putty business</td>
</tr>
<tr>
<td>UAE</td>
<td>Build integrated approach across Middle East</td>
</tr>
<tr>
<td></td>
<td>Leverage sourcing plasterboard from Oman</td>
</tr>
</tbody>
</table>

**Plasterboard Competitors**

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>St Gobain</td>
</tr>
<tr>
<td></td>
<td>Knauf – new entrant; importing from Thailand</td>
</tr>
<tr>
<td>India</td>
<td>St Gobain</td>
</tr>
<tr>
<td></td>
<td>Other imports</td>
</tr>
<tr>
<td></td>
<td>Potential new domestic entrant (small capacity)</td>
</tr>
<tr>
<td>UAE</td>
<td>St Gobain</td>
</tr>
<tr>
<td></td>
<td>Knauf</td>
</tr>
<tr>
<td></td>
<td>Gypsumma</td>
</tr>
<tr>
<td></td>
<td>Other imports</td>
</tr>
</tbody>
</table>

¹ Management estimates CY2013; excluding ceiling tile
**Ho Chi Minh plant upgrade will support domestic and export growth**

- Plasterboard capacity expansion of 30m m² ramping up
  - Delivers lower cost modern equipment platform to leverage USG technologies
  - Expect cost benefits through board line efficiency improvements and improved stucco calcining energy efficiency
- Production will support growth in region through exports – primarily to India
- Elimination of Thailand imports into Vietnam will give immediate landed cost benefit
- Existing 12m m² line 1 operating at 100% capacity will be mothballed
- Technical boards (fire rated) will be launched to further build product range capability

**Middle East JV businesses**

**Oman Gypsum JV**
- **55% owned** in JV with Zawawi Minerals (Zawawi)
- World class facility capable of producing 3mt p.a. with proven reserves of 47mt
- Gypsum exports commenced Mar-14
- Will largely serve cement players in India (India is short gypsum) and USG Boral plasterboard plants in Oman and potentially India

**Oman Plasterboard JV**
- **50% owned** in JV with Zawawi
- Construction of 8m m² world class plant funded by USG and Zawawi
- Expected to commence production Q1 CY2015
- Primarily for export to India and greater Middle East; and Oman domestic

**Saudi Arabia JV**
- **45% owned** in JV with local Saudi partner, who has operational control
- JV established 1994
- Manufacturers **MF ceiling tile, metal grid, joint compound, metal products**
- #1 joint compound position in Middle East
- Largely supplies domestic Saudi Arabia market
  - Also exports to Gulf States, Turkey, Greece, Lebanon
Priorities

- **Revenue Growth:** Continuous penetration drive
  - Through sales excellence and creative product/system solutions
  - Deliver USG technology rollouts (NextGen and joint compound) and develop adjacent product businesses

- **Cost improvement:** Lower the break-even for all businesses
  - Specific restructuring of China, Vietnam and India to meet current market positions

- **By country**
  - **Korea:** NextGen roll-out and expand product portfolio – MF ceiling tile and joint compound
  - **Thailand:** Next Gen roll-out and develop new territories; up market (outside Bangkok) and adjacent countries
  - **Vietnam:** Strengthen market position, leveraging increased plant capacity and capability
  - **India:** Build plasterboard market position through exports from Vietnam and Oman; achieve targets for new wall putty business
  - **Middle East:** Build integrated approach with USG Boral, Oman and Saudi Arabia JV

- **Safety:** Deliver continuous improvement leading to zero-harm environment

Supplementary Information
## Korea manufacturing footprint

~45% of population live in Seoul metropolitan area which accounts for ~45% of PB sales

<table>
<thead>
<tr>
<th>Plant</th>
<th>Plasterboard Capacity m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dang-jin 1 &amp; 2</td>
<td>72</td>
</tr>
<tr>
<td>Ulsan</td>
<td>46</td>
</tr>
<tr>
<td>Yeo-su</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>153</td>
</tr>
</tbody>
</table>

### Dangjin
- Target area: Seoul, Kyung-gi
- Built in 1995
- Technical & standard board
- Ceiling tile plant
  - Gyptex line 1 opened 2004
  - Gyptex line 2 opened 2010

### Ulsan
- Target area: Chung-chund do, Kyung-san do
- PB plant built in 1995
- Technical & standard board
- Ceiling tile plant
  - Gyptex line 1 opened 2004
  - Gyptex line 2 opened 2010

### Yosu
- Target area: Jeo-ra do
- Built in 1986
- Technical & standard board
- Joint compound

## Thailand manufacturing footprint

Asia / Middle East

<table>
<thead>
<tr>
<th>Location</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boonya - Pichit</td>
<td>Gypsum mine</td>
</tr>
<tr>
<td></td>
<td>240km from Bangkok</td>
</tr>
<tr>
<td></td>
<td>Opened in 2006</td>
</tr>
<tr>
<td>Saraburi plant</td>
<td>Board plant</td>
</tr>
<tr>
<td></td>
<td>Saraburi, 90km from Bangkok</td>
</tr>
<tr>
<td></td>
<td>line 1 capacity: 50m m²</td>
</tr>
<tr>
<td></td>
<td>line 2 capacity: 35m m²</td>
</tr>
<tr>
<td></td>
<td>Commenced 1997, upgraded 2010</td>
</tr>
<tr>
<td>Metal &amp; ceiling tile</td>
<td>Metal products, ceiling tiles, fabrication</td>
</tr>
<tr>
<td>Saraburi, 90km from Bangkok</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commenced in 2009</td>
</tr>
<tr>
<td>Pakin – Bangkok</td>
<td>Thailand Head office</td>
</tr>
<tr>
<td></td>
<td>(Thailand Team, Export Team, USG Boral Support)</td>
</tr>
<tr>
<td>Boral Prestia Thailand</td>
<td>Plaster plant</td>
</tr>
<tr>
<td></td>
<td>Chonburi, 120km from Bangkok</td>
</tr>
<tr>
<td></td>
<td>Building Compounds &amp; Industrial Plasters</td>
</tr>
<tr>
<td></td>
<td>Commenced in 1993</td>
</tr>
<tr>
<td>Songkhla</td>
<td>Board plant</td>
</tr>
<tr>
<td></td>
<td>900km from Bangkok</td>
</tr>
<tr>
<td></td>
<td>20m m² capacity</td>
</tr>
<tr>
<td></td>
<td>Commenced in 1998</td>
</tr>
</tbody>
</table>
Agenda

DAY 1 – Indonesia
1. USG Boral Overview
2. Sales & Marketing
3. Asia Pacific
4. Indonesia
5. Cilegon plasterboard plant

DAY 3 – China
6. Technology & Manufacturing
7. Asia / Middle East
8. CHINA – GAVIN BURTON
9. Star-USG JV & Ceiling Tile Plant

Shanghai Tower Project
632 m high
Boral shaftwall system

Changing the way buildings are designed and built in China
USG Boral manufacturing footprint

<table>
<thead>
<tr>
<th>Plasterboard plants</th>
<th>Gypsum Type</th>
<th>Capacity m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pudong (Shanghai)</td>
<td>Synthetic</td>
<td>30</td>
</tr>
<tr>
<td>Chengdu</td>
<td>Synthetic</td>
<td>12</td>
</tr>
<tr>
<td>Chongqing 2</td>
<td>Synthetic</td>
<td>13</td>
</tr>
<tr>
<td>Chongqing 3/4</td>
<td>Synthetic</td>
<td>30</td>
</tr>
<tr>
<td>Baoshan (Shanghai)</td>
<td>Synthetic</td>
<td>35</td>
</tr>
<tr>
<td>Shandong</td>
<td>Natural/Synthetic</td>
<td>35</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>155</strong></td>
</tr>
</tbody>
</table>

- Green circle: Plasterboard plant
- Yellow square: Plasterboard ceiling plant
- Orange triangle: Metal products plant
- Blue diamond: Joint compound plant
- Black square: Mineral fibre ceiling tile & grid plant

Leading positions in key regional areas focused on high-end

High-end (HE) segment in China estimated at 400m²

<table>
<thead>
<tr>
<th>Region</th>
<th>USG Boral capacity m²</th>
<th>Estimate of USG Boral share of HE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTH</td>
<td>35</td>
<td>~8%</td>
</tr>
<tr>
<td>WEST</td>
<td>55</td>
<td>~60%</td>
</tr>
<tr>
<td>EAST</td>
<td>65</td>
<td>~35%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>155</strong></td>
<td></td>
</tr>
</tbody>
</table>
High plasterboard market growth

Total China PB market size, m$^2$

- **2008 - 2013: CAGR of 14%**

<table>
<thead>
<tr>
<th>CY</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,060</td>
<td>1,260</td>
<td>1,480</td>
<td>1,700</td>
<td>1,850</td>
<td>2,050</td>
</tr>
</tbody>
</table>

Key regions, m$^2$

- **East**
  - CAGR of 9%

- **North**
  - CAGR of 14%

- **West**
  - CAGR of 17%

- **Plasterboard penetration**
  - for China is 1.4 m$^2$ p.a./capita
  - for Shanghai is 3.2 m$^2$ p.a./capita
  - Beijing is 2.8 m$^2$ p.a./capita

- **Overall penetration remains well below developed countries**
  - Korea penetration is 4.2 m$^2$ p.a./capita

Significant opportunity for plasterboard penetration in residential segment

Current building practices adopt heavy construction techniques

<table>
<thead>
<tr>
<th>Region</th>
<th>Major Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>East &amp; South</td>
<td>Sand aerated concrete blocks</td>
</tr>
<tr>
<td>West</td>
<td>Shale hollow bricks</td>
</tr>
<tr>
<td>North</td>
<td>Concrete hollow blocks</td>
</tr>
</tbody>
</table>

Leading residential developers are starting to trial drywall partitions

- Residential construction lags commercial in adoption of drywall
  - Less need for technical solutions
  - Need for heavy load hanging
  - Security concerns
- Joint research study with Vanke
- Awarded 4 Vanke Shenzhen projects
- Leverage Tongji University study
- The prize is big
- The challenge - keep providing unique differentiated offers

Vanke Shenzhen
**China**

**Capacity available to meet growth**
Current capacity utilisation at ~65%

USG Boral plasterboard sales volume in China [in m²]

*2000-2013 CAGR: 15%*

**Profitability suffered from fast expansion but now recovering**

China EBITDA¹, CNY

- **FY10**: 2009 stimulus & Baoshan capacity improved profit
- **FY11-FY13**: capacity added combined with market slowdown negatively impacted profit
- **FY14**: capacity absorbed & cost reduction activities to deliver

**Pricing remains highly competitive**
Example: East China price movements (9.5mm board)

¹ Excludes Star-USG JV earnings
Managing costs – Reducing breakeven

Break-even volume for USG Boral China

*We have reduced break-even point by 18% since Nov-13*

- Continuous process improvement (energy, paper weight, board weight, lean (OEE))
- Headcount optimisation (plant ‘One Team’ and SG&A)
- Logistics (network optimisation)

1. OEM – Overall Equipment Manufacture

China

Priorities

Revenue growth
- Leverage NextGen – fill up our capacity with premium price board
- Adjacent / Star-USG products
- Project / architectural sales excellence
- “Conquer the North” – grow Boral share and high-end market
- Build the brand and increase partition penetration
- Leverage compounds, metals capacity & market leadership

Lower the breakeven – ‘Earn the Right to Grow’
- Manufacturing excellence
- Overhead reduction (Plant and SG&A)
- Price management

Engage our People
- Keep them safe
- Compelling vision
- Develop and provide opportunities
### Overview of manufacturing plants

<table>
<thead>
<tr>
<th>Region</th>
<th>Plant Name</th>
<th>Key fact</th>
<th>Core markets</th>
<th>Served population</th>
</tr>
</thead>
</table>
| EAST   | PUDONG      | • Opened in 1998  
         | SHANGHAI    | • 30m m² capacity | • Shanghai  
         |               |                      | • Zhejiang  
         |               |                      | • Jiangsu    | 150m |
| EAST   | BAOSHAN     | • Opened in 2010  
         | SHANGHAI    | • 35m m² capacity | • Shanghai  
         |               |                      | • Zhejiang  
         |               |                      | • Jiangsu    | 150m |
| C&W    | CHONGQING   | • Opened in 2001  
         |               | • 43m m² capacity | • Chongqing  
         |               |                      | • Hubei  
         |               | after expansion    | • Guizhou  
         |               |                       | • Yunnan      | 170m |
| NORTH  | CHENGDU     | • Opened in 2008  
         |               | • 12m m² capacity | • Sichuan    | 72m |
| NORTH  | TAI‘AN      | • Acquired in 2011 
         | SHANDONG     | • 35m m² capacity | • Beijing  
         |               |                      | • Tianjin    | 250m |
         |               |                      | • Shandong    | 250m |
         |               |                      | • Hebei  
         |               |                       | • Henan       | 250m |
Metal contribution growth

FY08 - FY14F CAGR: 36%

Market characteristics
- Highly fragmented (BNBM is the market leader with 7% share)
- Short delivery lead time requirement

Strategy
- Production close to market: 2 USG Boral plants + 3 OEMs
- Sell full system (Quality guarantee)
- Residential penetration – switch from timber to metal

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9. Star-USG JV & Ceiling Tile Plant – FREDERIC DE ROUGEMONT
Star-USG JV Overview

**Star-USG JV**
- Large mineral fibre ceiling tile manufacturing base in China
  - Plus 5 lines manufacturing metal grid
  - Plant commissioned Mar-2010
  - ~400 employees

**Zhangjiakou Star-USG**
- Mineral wool manufacturing plant
  - Plant built 2003
  - Incorporated into JV in Jan-10
  - ~45 employees

**Star-USG Building Materials Co Ltd**
- Star-USG JV established Nov-07
- BBMG Group (Global Fortune 500 in China) has operational control

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**Star-USG JV**

**Mineral fibre ceiling tile and metal grid plant**

- Plant located near Dachang (Hebei province)
- Plant area covers 50,000 m²
- One of the largest and most modern mineral fibre ceiling tile plants in the world
- Built to deliver the highest quality commercial ceilings products to Asian customers
- Provides more competitive service levels
Full product range, focusing on innovation for high-end specifications

Mineral fibre ceiling tile

Mineral wool

Metal grid

#2 ceiling tile position in high- & mid-end of China ceiling tile market

Indicative price points

High-end 25+ ¥/m²
Mid-end 18-25 ¥/m²
Low-end 12-18 ¥/m²
<12 ¥/m²

Armstrong, Star-USG, Dragon, imports
Armstrong, Star-USG, Dragon
Second-tier brands (Luofeier/Meiluda)
Hebei Tile

Approximate share of total market in China

Star-USG will support USG Boral demand for mineral fibre tile and metal grid across Australasia, Asia and Middle East markets

1. USG Boral will also supply mineral fibre tile and metal grid to Australasia, Asia and Middle East markets from its Saudi Arabia JV and the US