



# Boral's Investor Site Tour

Construction Materials & Cement and USG Boral

Brisbane, Queensland | 25 November 2014



BORAL'S INVESTOR SITE TOUR – BRISBANE 2014

## Schedule – Tuesday 25 November



### Presentations and Q&A

8:00 a.m. – 9:30 a.m.	<b>CM&amp;C: Quarries, Asphalt and Major Projects  </b> Joe Goss, Grant Ledjott, Paul West, Paul Dalton & Wayne Manners
9:30 a.m. – 9:45 a.m.	<i>Break</i>
9:45 a.m. – 10:15 a.m.	<b>USG Boral: update on new technology products  </b> Frederic de Rougemont & Tony Charnock
10:15 a.m. – 10:30 a.m.	Wrap up and closing comments

### Site Visits

10:30 a.m. – 11:30 a.m.	Travel to Ormeau Quarry
11:30 a.m. – 12:30 p.m.	<b>Site Tour of Ormeau Quarry</b>
12:30 p.m. – 1:00 p.m.	<i>Lunch</i>
1:00 p.m. – 2:00 p.m.	Travel to Pinkenba
2:00 p.m. – 3:30 p.m.	<b>Site Tour of Pinkenba Plasterboard plant</b>
3:30 p.m. – 3:45 p.m.	Travel to Whinstanes
3:45 p.m. – 5:15 p.m.	<b>Site Tour of Whinstanes Asphalt plant</b>
5:15 p.m. – 5:45 p.m.	Travel to Hotel
6:30 p.m.	Dinner at Lincoln Room, Pullman Hotel



# Content

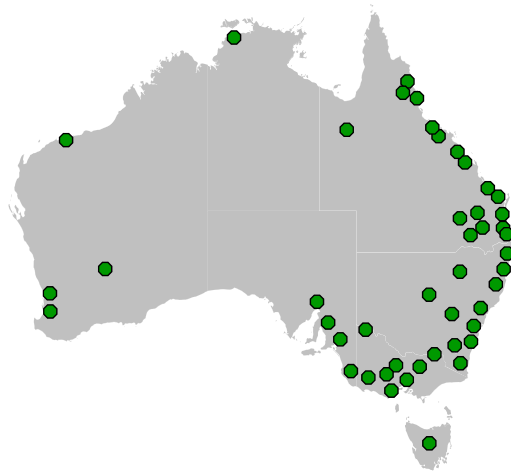
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- **Wrap up**



# Construction Materials & Cement: Scale and scope

## Business scale & scope

- 104 Quarry operations (total: >1 billion tonnes of reserves)
- 227 Concrete operations
- 44 Asphalt plants
- 1\* Bitumen terminal
- 1 Cement manufacturing site (~1.7m tpa capacity)
- 2\*\* Cement grinding sites
- 1 Lime manufacturing plant
- ~2,500 Trucks
- ~5,100 Employees



## FY2014 financial information

Total External Revenue	\$3,287m
EBIT <sup>1</sup>	\$277m
Net Assets <sup>2</sup>	\$2,171m
ROFE <sup>1,2</sup>	12.7%

\* Bitumen terminal is a joint venture  
 \*\* 1 Cement grinding site is a joint venture  
 Data as at 30 June 2014

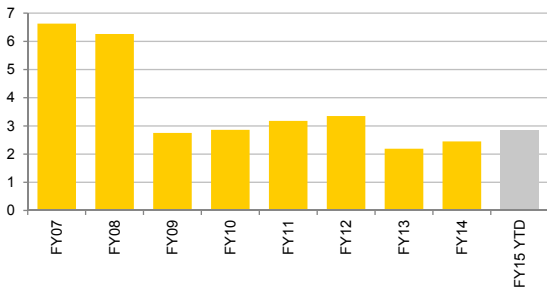
1. Excluding significant items  
 2. As at 30 June 2014



# Safety remains our first priority

## Divisional safety performance

LTIFR<sup>1</sup>



## Key focus areas & initiatives

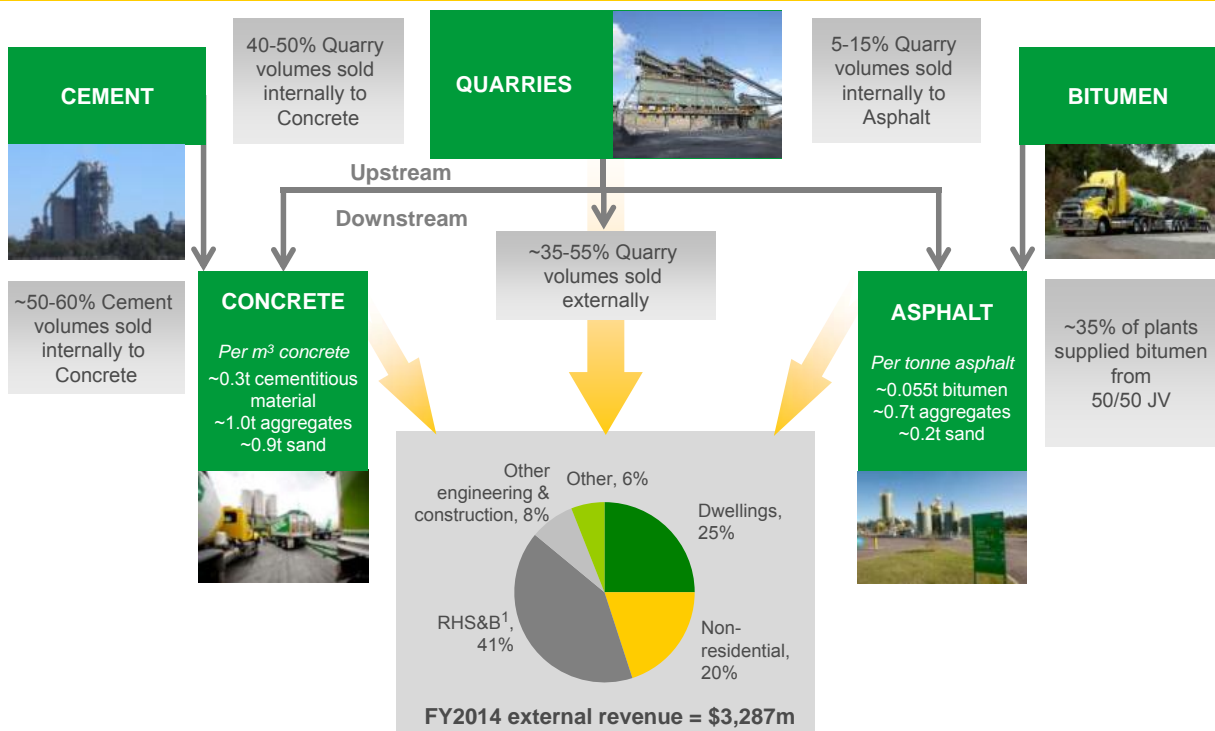
- Reinforce management commitment & leadership
- Employees understand their accountabilities & responsibilities for safety
- What we are doing:
  - ✓ Expanding safety interventions
  - ✓ Communicating 'safety absolutes'
  - ✓ Continuing Safestart rollout
  - ✓ Implementing contractor safety program



1. Lost Time Injury Frequency Rate (hours per million hours worked)



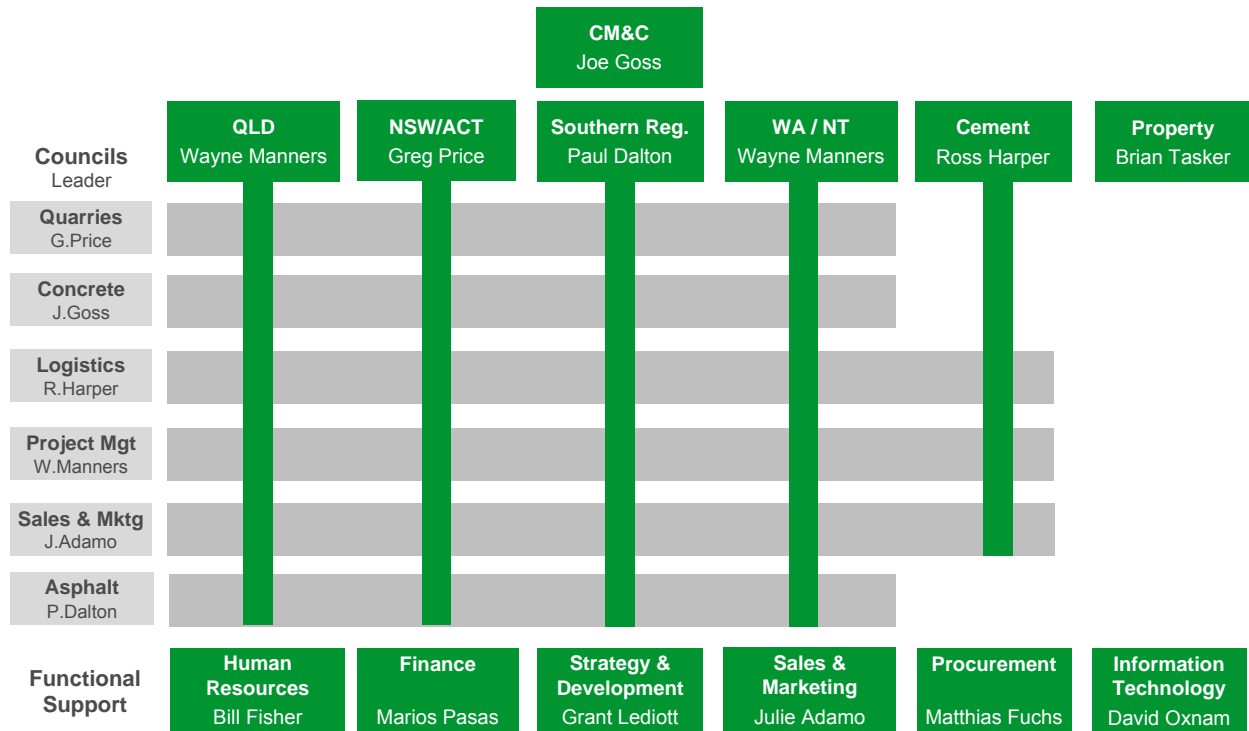
# CM&C – an integrated business model designed around strategic quarry reserves & downstream operations



1. Australian roads, highways, subdivisions & bridges



## Regional management structure with product and functional support



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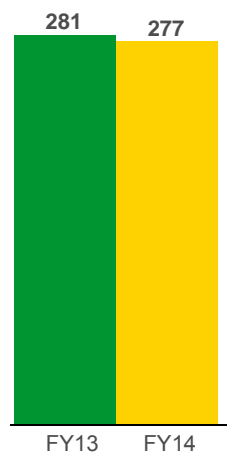
## Trading update and outlook (from 2014 AGM)

### Concrete, Quarries, Cement, Asphalt, Transport and Property

**Revenue**  
\$ million



**EBIT<sup>1</sup>**  
\$ million



1. Excluding significant items

### 1Q FY2015 trading update

- Demand levels broadly steady
  - Strong residential activity in NSW
  - Weaker roads & engineering volumes
  - Weaker than expected activity in QLD
- Pricing remains under pressure
- Heavy rainfall impacted earnings

### FY2015 outlook

- 1Q FY2015 earnings below our expectation but targeting catch up via:
  - Readjustment of cost base
  - Delivery of additional property sales
  - Select price increases in stronger markets
- Expectations dampened if unable to realise potential property sales & some price increases

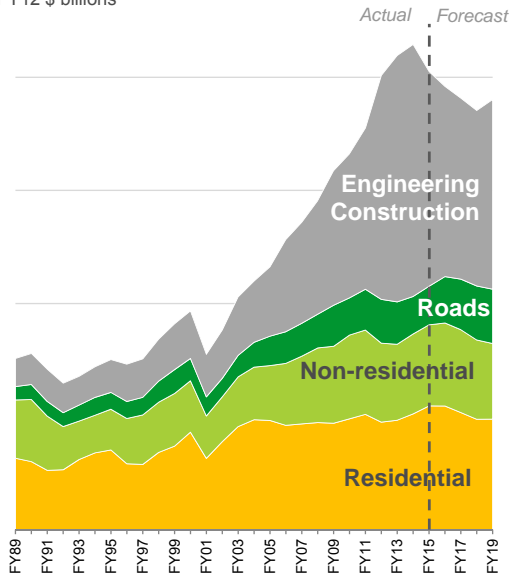
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# Market outlook

## Australian value of work done

FY12 \$ billions



FY15-  
FY19  
CAGR

% of  
CM&C  
external  
sales\*

(4%)

8%

Activity slowing, moving into production phases which are less construction materials intensive

8%

41%

Improvement forecast through FY15-19. State Gov't spending down; project delays may reduce early forecast period activity.

(2%)

20%

Flat with government health spend decline, retail flat and education to improve

(3%)

25%

Steady growth particularly in NSW with improvements expected in SEQ & VIC later in FY15 – FY19

Source: Macromonitor & BIS Shrapnel Roads = roads, highways, subdivisions & bridges \* FY14 sales; 'Other' sales account for ~6%



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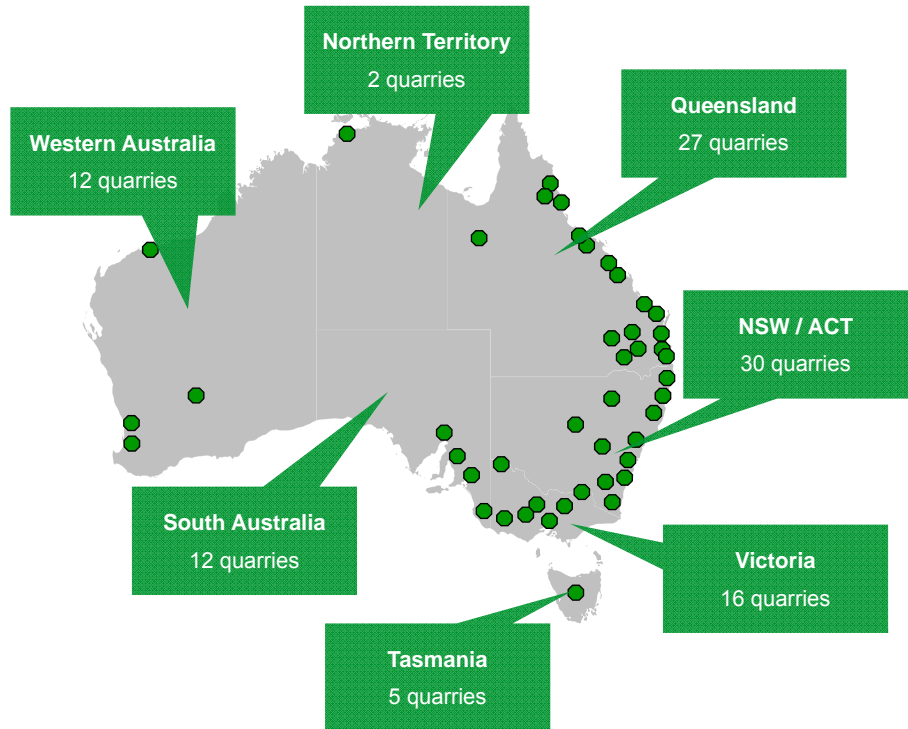
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## Boral is a major participant in the Australian quarry industry

### National operations

- 104 quarry operations
- 87 hard rock
- 17 sand / sand & gravel
- ~1,000 employees
- ~400 off-road heavy mobile equipment units



Data as at 30 June 2014



## Boral's quarries are market aligned with a long-term focus

Quarries are scarce strategic assets but scarcity alone will not deliver successful outcomes.

Boral's quarries have:

### Competitive and market-aligned positions

- Located in close proximity to market
- 'Right-sized' capacity to market demand
- Achieve cost competitiveness through operational excellence and effective distribution

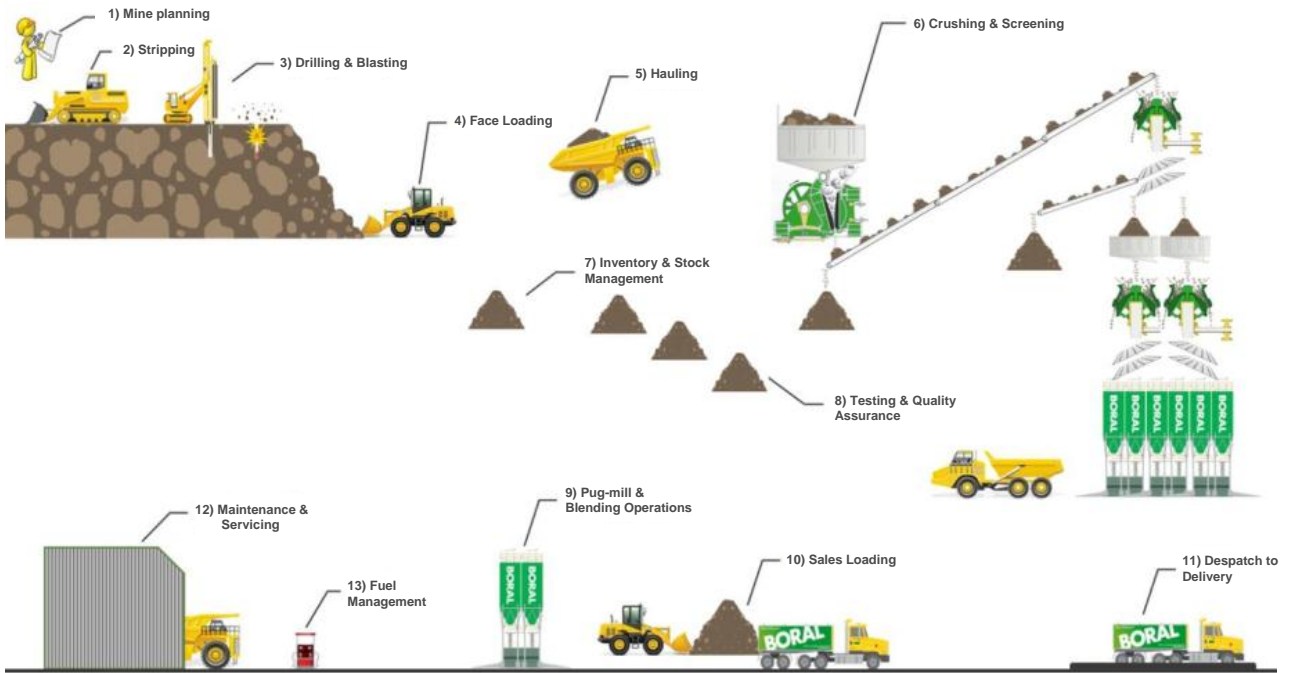
### Long-term sustainability

- Long-term, high quality reserves to underpin investment returns
- A whole-of-life perspective





# Quarrying process overview



# Quarrying cost drivers

**Geological Reserve:**

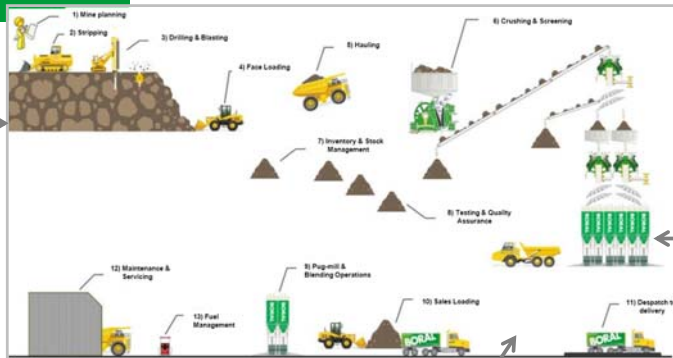
- Depth/ratio of overburden
- Number of benches
- Rock hardness/abrasiveness
- High/low value yield
- Rehabilitation

Typically ~25% of total costs

**Rock Processing:**

- Pit to plant haul distance
- Plant/operation scale
- Heavy machinery
- Load out configuration
- Maintenance spend – age, rock abrasiveness
- Automation
- Approval conditions

Typically ~40% of total costs



**Distribution:**

- Proximity to market
- Road/rail transportation
- Network coverage

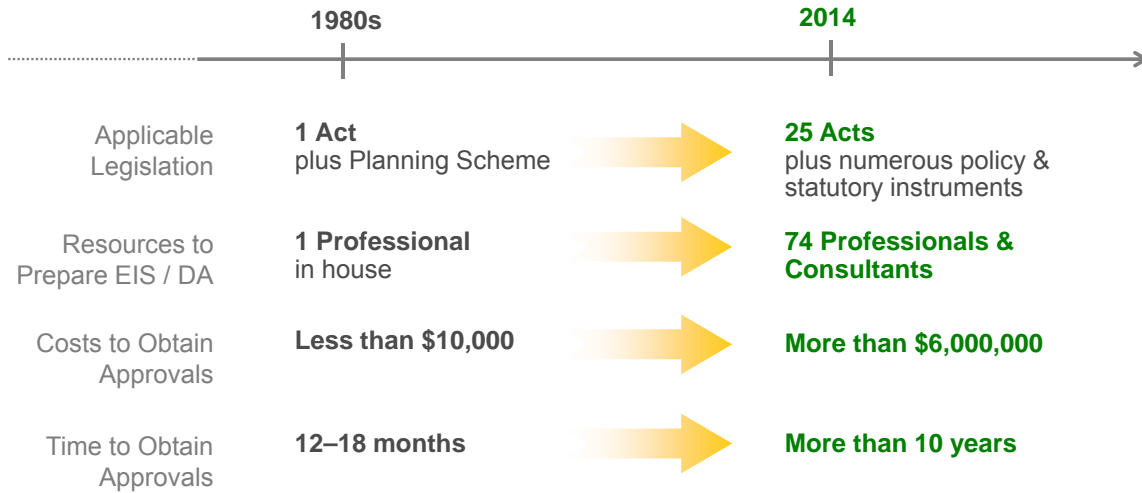
Typically ~35% of total costs



# Access to new quarry resources in Australia is getting harder due to the challenges of securing statutory approvals

## SEQ Greenfield Quarry Case Study

The Statutory Approval Process: 30 years on (neighbouring sites)



# Securing quarry approvals: the Peppertree Quarry journey

**Peppertree Quarry, NSW:**  
A 10-year process from initial requirement identification to construction completion

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Options to replace Emu Plains canvassed	Exploration and land acquisition	Land acquisition – quarry DA commenced	Community consultation – EIS exhibition	Development application approved	Begin work to secure dam water licence	Modification 1 – Exploratory test pit Maldon Rail Terminal DA commenced Environmental Management Plans prepared	Aboriginal heritage salvage Maldon Rail Terminal DA approved Stakeholder engagement plan initiated	Modification 2 – Water licence approved Limestone sand plant DA commenced Construction commenced	Modification 3 – Ongoing heritage Limestone sand plant DA approved Buffer land acquisitions	Construction completed





Protection and positioning of our quarry positions is a key focus, underpinning our integrated business model

Key challenges	CM&C key activities to mitigate
Land use encroachment	<ul style="list-style-type: none"> <li>• Securing buffer land adjacent to quarries</li> <li>• Site selection aligned with long-term urban growth plans</li> <li>• Plant design and site development to minimise impacts</li> </ul>
Increasing community expectations	<ul style="list-style-type: none"> <li>• Effective engagement through community liaison groups</li> <li>• Work with community groups on related projects</li> </ul>
Compliance with existing regulations	<ul style="list-style-type: none"> <li>• Proactively working with government departments</li> <li>• Internal compliance programs to manage risks</li> </ul>
Changing regulatory environment	<ul style="list-style-type: none"> <li>• Working with industry to effectively engage with governments</li> <li>• Stakeholder engagement to secure designated extractive industry areas</li> </ul>



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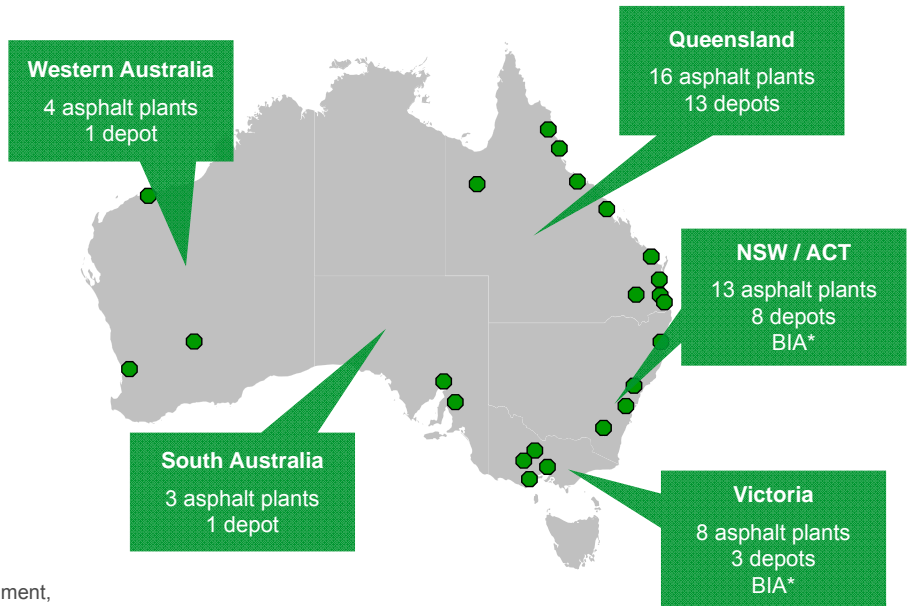
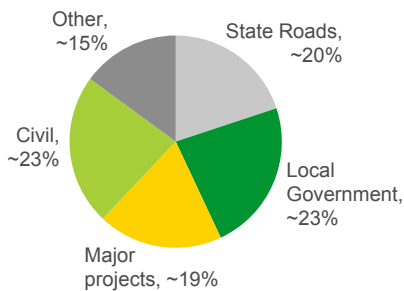
# Boral is one of Australia's largest Asphalt manufacturing & contracting businesses

## National operations

- 43 asphalt plants
- 26 depots
- 40 asphalt paving crews
- 40 spray seal crews
- ~900 employees
- Importer of bitumen directly and through BIA\*

Data as at 30 June 2014

## Indicative revenue split

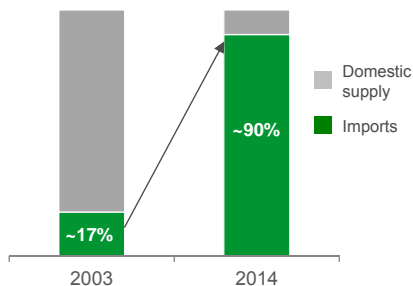


\*Bitumen Importers Australia; a 50:50 joint venture between Boral and Downer EDI

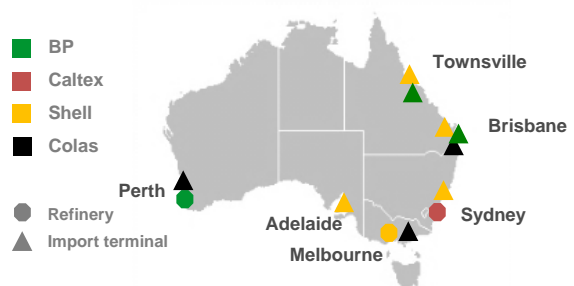


# Participating in bitumen importation early has allowed the business to transition swiftly to an import model

## Supply is shifting to imports...



## ... driving a conversion to terminal assets



## Traditional suppliers are shifting model...

State	Company	Location	Status	Future*
QLD	BP	Bulwer Island	Exiting bitumen refining	Import
NSW	Shell	Clyde	Bitumen stripping plant	Import
	Caltex	Kurnell	Closure announced	Import
VIC	Shell	Geelong	Bitumen producing	Producing
	Mobil	Altona	Closure announced	Exited
SA	Mobil	Port Stanvac	Closed in 2003	Exited
WA	BP	Kwinana	Bitumen producing	Producing

\* CM&C Management expectations

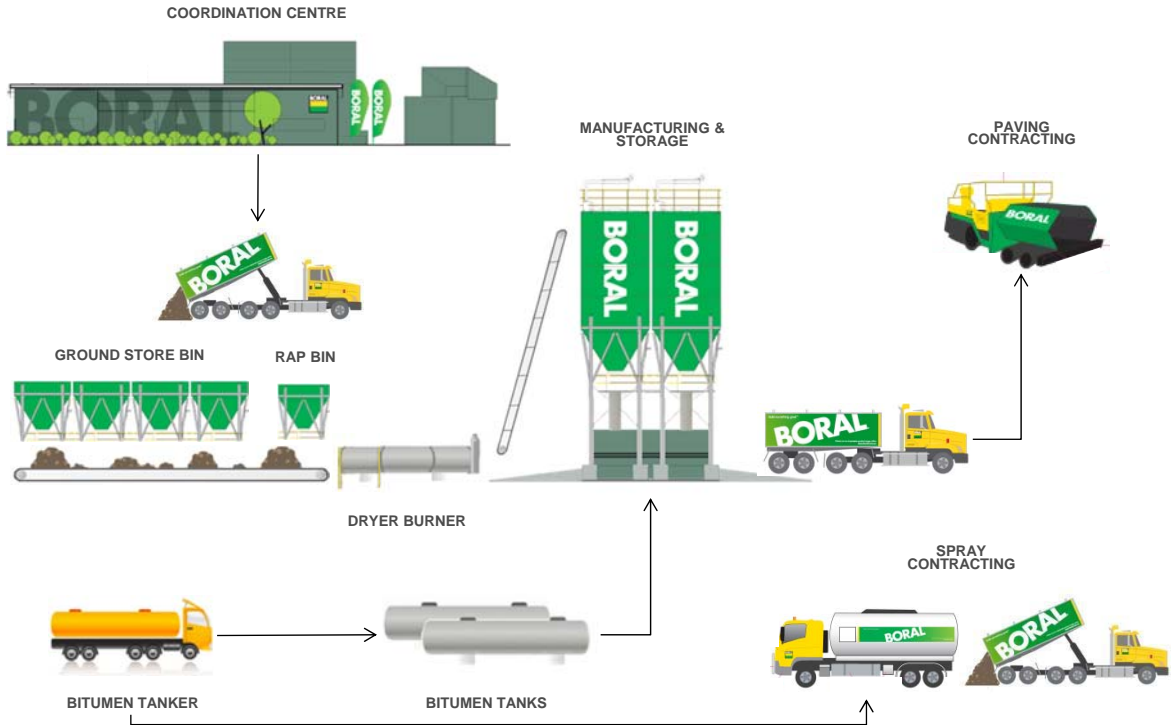
## ...as new players enter the market



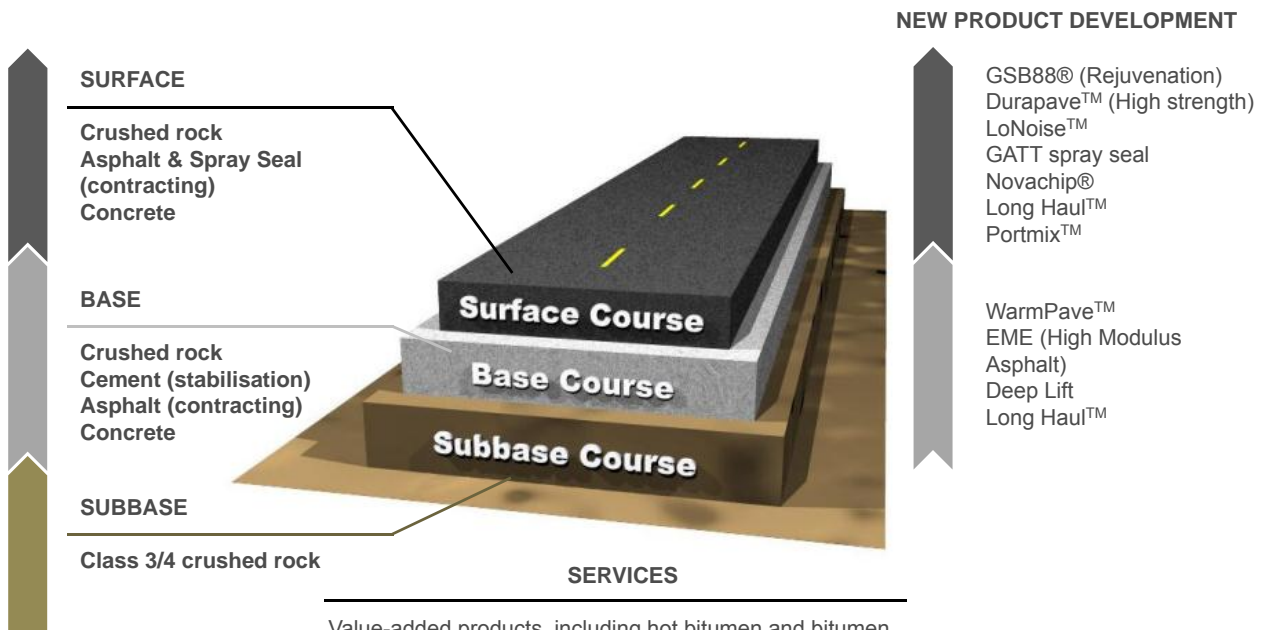
\*BIA is a 50:50 joint venture between Boral and Downer EDI



# The Asphalt business adds value to our aggregate position through manufacturing and contracting



# Boral supplies / lays most products from subbase to surface course materials and is committed to new product development



Value-added products, including hot bitumen and bitumen emulsions, cutback bitumens, primes and pre-coating fluids

Product design and technical development services

Long term maintenance contracts



## Paving is one component of what we do in the contracting space

### PENINSULA LINK

Supply and lay over 400,000 tonnes of asphalt to 27 kilometres of freeway including 11 on and off ramps, 3 freeway to freeway connections and 35 bridges.



### SYDNEY AIRPORT

Supply and lay 45,000 tonnes of asphalt covering 255,000m<sup>2</sup> for the main north/south runway in a time-critical environment.



## Spray Sealing is the other component – approximately 80% of Australia's roads are spray sealed



### BITUMEN SPRAYER

The bitumen sprayer delivers a specific type of bitumen and measured application rate based on the specification for the job.



### AGGREGATE TOP DRESSING

It is then 'dressed' with an aggregate topping which binds to the bitumen. The surface is then rolled to turn and flatten the aggregates and it is ready to be driven on.



# A continuous improvement culture targeting excellence in operations and contracting businesses

## Safety Excellence – Zero Harm



## Operational Excellence

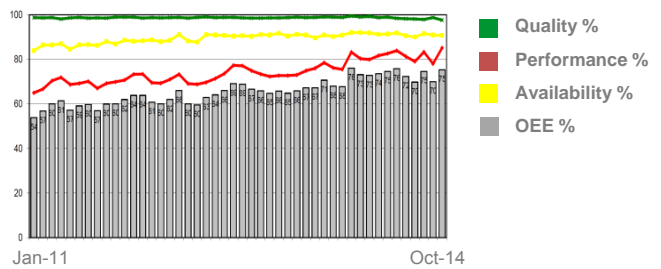


## Contracting Excellence



## Overall Equipment Effectiveness (OEE)

Boral Asphalt (all plants)



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# Major projects provide revenue growth opportunities and value to our customers, but need to be well managed

## Major Projects can be:

- Higher risk and appropriately higher margins
- Resource intensive
- High volume, high productivity
- Technically more complex
- Revenue growth opportunities
- Distraction to base business

## Value to our customers through:

- Strong contracting capability** with focus on project management skills and understanding the challenges faced by our customers
- Ability to bundle **various construction materials** through a **large footprint** of fixed and mobile assets
- Technical superiority** through innovative pavement and mix design alternatives
- Focus on delivering **zero harm safety outcomes** on projects and sharing lessons across projects

## To deliver on Major Projects, Boral has:

- Supporting organisational structure**
  - Established Project Management Office
  - National engineering resources
  - Regional major project resources
- Strict management and risk processes**
  - Contracting Operating Procedure
  - Bid and delivery governance processes
  - Established risk management process



# Boral provides tailored solutions for large scale, often remote, technically complex projects across Australia

## Boral is currently involved in a number of major projects

**1 Gateways Sub-Alliance**

- Road construction project in Perth
- Supplying ~460,000t asphalt & quarry materials

**2 Wheatstone LNG**

- Supplying concrete & quarry material
- 2 on-site concrete plants
- ~360,000m<sup>3</sup> concrete

**3 Ichthys LNG Project**

- Supplying quarry materials
- 950,000t sand & aggregates

**4 Curtis Island LNG**

- Boral is on all 3 LNG projects supplying concrete & sand
- 6 on-site concrete plants
- ~500,000m<sup>3</sup> concrete

**5 Legacy Way**

- Brisbane Tunnel project
- Supplying ~40,000m<sup>3</sup> concrete & ~100,000t asphalt

**6 Leighton/Boral/Amey JV**

- Maintenance contract of road network in QLD & NSW
- Concrete, quarries, cement, asphalt

**7 Barangaroo**

- Sydney CBD Development
- Supplying concrete through on-site plant
- ~300,000m<sup>3</sup> concrete

**8 Port Botany**

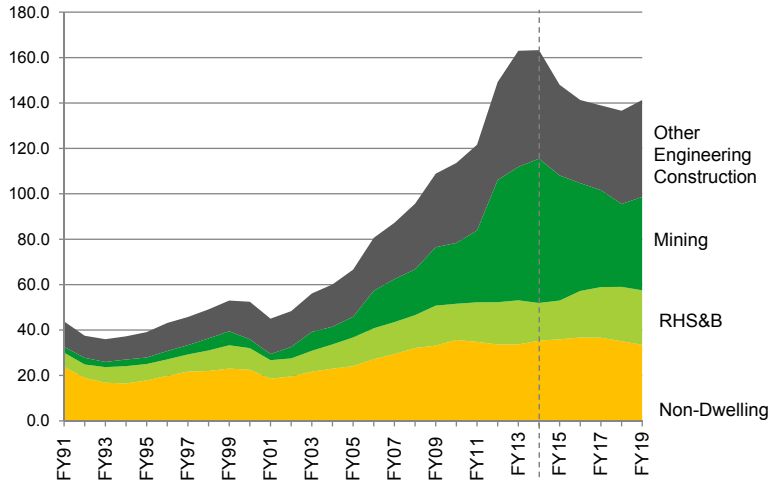
- Port development project
- Supplying concrete through 2 on-site plants
- ~120,000m<sup>3</sup> concrete



# The pipeline for major projects has peaked as the industry transitions from mining projects to infrastructure projects

## Australian "Major Project" Building Activity

Value of Work Done (VWD)  
(FY12 \$ billion)



- Major building activity has peaked with strong investment in mining
- The transition to infrastructure projects, including RHS&B and Other Engineering, such as rail and harbours, will offset some of the decline in mining projects
- Boral is well positioned to take advantage of the shift to these segments from FY2016

Source: BIS Shrapnel, Other Engineering Construction includes; Railways, Harbours, Water Storage, Sewerage, Electricity, telecommunications  
RHS&B – roads, highways, subdivisions and bridges



# Australia's top 10 infrastructure sector pipeline projects due to commence from 2014 to 2016 (by total project value / cost)

Project	State	Est. cost of project	Status	Owner / Contractor	2014	2017	2020
Westconnex	NSW	\$11.5bn	Committed	RMS			2023
East West Link – Stage 1	VIC	\$6.9bn	Committed	Lend Lease			2019
Cross River Tunnel	QLD	\$5.0bn	Under consideration	QLD Gov't			2021
Kooragang Terminal Expansion	NSW	\$5.0bn	Under Consideration	Port Waratah			2018
Pacific Hwy Woolgoolga to Ballina	NSW	\$5.0bn	Committed	NSW Gov't			2027
Northconnex	NSW	\$3.0bn	Committed	Lend Lease			2019
Cranbourne Rail Corridor	VIC	\$2.0bn	Under Consideration	VIC Gov't			2019
Toowoomba Bypass	QLD	\$1.8bn	Committed	QLD Gov't			2018
Perth Freight Link	WA	\$1.6bn	Under Consideration	WA Gov't			2021
Pacific Hwy Oxley	NSW	\$1.0bn	Committed	Lend Lease			2017



# Questions

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## USG Boral Sheetrock® has been launched



**Less weight. Greater strength.  
Huge impact.**

Listen to contractors discuss the positive impact that USG Boral Sheetrock® can have on their business.

**watch ▶**

Video available on USG Boral website: [www.usgboral.com](http://www.usgboral.com)

## JV operations fully integrated, delivering in line with expectations

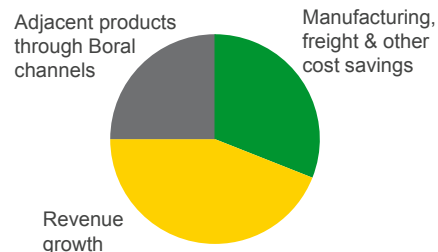
### Synergies

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

### Integration costs

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

### Targeted synergy breakdown



## US\$50m capital roll-out program ahead of initial plan and within budget

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### US\$50m capital roll-out program planned over Waves 1-4

#### Wave 1:

- Launch in initial markets
  - Australia, Korea, Indonesia, Thailand

#### Wave 2:

- Expand and fill market gaps
  - Australia, China, Vietnam, Indonesia, Export Markets
- Improve product quality

#### Waves 3 & 4:

- Build on success

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## Wave 1 roll-out of NextGen technology complete – products launched Sep-Oct 2014

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### Sheetrock® technology upgrades –

producing up to 15% lighter, higher strength and sag-defying 10mm wall and ceiling boards, and 13mm boards | 2 SKU strategies

- Australia | Pinkenba plant – launched Sep 2014
- Thailand | Saraburi plant – launched Sep 2014
- Korea | Dangjin plant – launched October 2014
- Indonesia | Cilegon and Gresik plants – launched Sep 2014 (1 SKU only)



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# Wave 2 roll-out of NextGen technology has commenced

## Sheetrock® Technology upgrades: planned March – September 2015

- **Australia: Port Melbourne plant**
- **Indonesia: Cilegon 1 & 2 plants**
- **Export markets: Philippines, Cambodia, Laos, Myanmar**
- **Vietnam: Ho Chi Minh plant**
- **China: Baoshan & Shandong plants**

# Integrated marketing programs supporting product launches

- **USG Boral corporate brand rolled out**
- **Sheetrock® product branding launched**
- **USG Boral website launched – in six languages**
- **Architectural design exhibitions eg. DesignX in Sydney**
- **Customer training programs**
- **Customer launch activities / events**
- **Capturing testimonials / feedback**





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## Wrap up

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## Disclaimer

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