BORAL GYPSUM ASIA LAUNCHED THROUGHOUT THE REGION

P2

GROWTH
US$14 million composites plant commissioned in USA
P5

CUSTOMER SERVICE
Jindabyne Dam concrete pour a huge success despite complex conditions
P7
## CONTENTS

### Message from the Chief Executive
- First Half FY 2012 Review

### Boral Global
- Welcoming Boral Gypsum Asia into the Group
- Introducing Frederic de Rougemont
- BGA acquires plasterboard factory in Shandong Province, China
- Boral commissions US$14 million composites plant in North Carolina
- Boral’s global Intranet becoming a key communication tool

### Sales and Marketing
- Jindabyne Dam spillway project
- Boral and Metricon continue to build together and now in South Australia
- Storyboard of success – Boral Asphalt and Boral Cement build on a common connection
- Home Beautiful promotion rallies Australia’s best home renovators
- Boral Sales and Marketing update
- Boral representative receives Amber’s highest honour
- Concrete Institute recognises Boral customer project
- Massive concrete pour for Boral in Western Australia

### Operational Improvement
- Roofing plant at Lake Wales receives first annual Boral Production System Storyboard Award
- PULL systems implementation continues apace
- Marulan Limestone step change to OEE performance
- Value Stream Mapping removes bottlenecks at Boral Stone Products
- LEAN comes to the back office

### Innovation
- Boral Plasterboard stock picking goes automated at Pinkenba
- Upgrading the Port Melbourne Plasterboard plant
- Boral’s concrete product design is improving hospitals
- Pinkenba plant a winner at Global Gypsum Conference
- Boral USA wins Sustainability Leadership Award

### People
- Boral recognised at industry Environmental, Health and Safety Awards in three states
- The Emerging Leader Program
- Boral’s Leadership Pathways
- Boral Living Green continues conservation tradition in Cairns
- Flood relief assistance in Thailand
- Boral’s iCare Program
- Boral’s Chairman receives Order of Australia

---

Front cover image: The Malaysian and BGA teams celebrate in traditional style in Kuala Lumpur.

Boral In The News is published by Boral Limited ABN 13 008 421 761

If you have an item of news that you would like to submit for publication please send your story and photographs to Corporate.Affairs@boral.com.au or Corporate Affairs Manager, Boral Limited, GPO Box 910, Sydney NSW 2001. This publication can be downloaded from the Boral website at www.boral.com.au, or printed copies can be ordered from Boral by telephone (02) 9220 6300 or international +61 2 9220 6300. © 2012 Boral Limited
MESSAGE FROM THE CHIEF EXECUTIVE
FIRST HALF FY 2012 REVIEW

At the end of February, I announced our half year results to the market and it was disappointing to report that the challenging economic conditions experienced in the second half of last year have continued into the first half of this financial year, particularly those related to residential housing in Australia.

Group first half revenue at $2.4 billion was equivalent to last year with the increase in large project-related activity, particularly in Victoria and Queensland, being offset by a considerable decline in housing-related sales.

Profit After Tax at $67 million before significant items was 28% below the comparable period last year and reflected a continuation of the significant decline in Australian residential housing which was experienced in the second half of FY 2011 and the absence of property sales which assisted the results in the prior year.

The Construction Materials division had a mixed first half to the year with the benefits of concrete, aggregate and asphalt pricing, bolstered by high margin project activity, being offset by significant reductions in the results from Western Australia and South Australia.

In anticipation of the national slowdown in residential housing, the division has been successful in securing lead supplier status in major LNG projects in Queensland and Western Australia and project ramp-ups are progressively planned for the final quarter of the year.

In the Building Products division, Australian Plasterboard revenue at $192 million was 8% below the comparable period and 4% above the second half of 2011. The results reflect continued strong conditions in Victoria and year to year declines in the residential building markets in Queensland, South Australia and Western Australia.

Revenue in Clay & Concrete at $229 million was 16% down on the prior year reflecting the business’ reliance on new home building and the impact of the slowdown in Western Australia, Queensland and South Australia.

The Group’s Timber revenue of $109 million was $34 million below the comparable period last year, and reflects a $15 million reduction in plywood and the ongoing softness in housing and construction.

The Cement division includes Boral’s Australian cement and lime businesses together with equity accounted interests in Sunstate and Flyash Australia. Cement revenue of $157 million was 3% above the same period in 2011 while Earnings Before Interest and Tax at $41 million was 18% below last year and reflected the shift of volume to lower margin inter-industry sales, the timing of annual shutdowns and the impact of the closure of the Galong lime kiln.

In the United States, first half revenue at $244 million was 15% above the same period last year, with generally modest improvements across all product areas except the construction materials businesses and included a first time contribution of $41 million from Cultured Stone, in which we acquired a 50% share in December 2010. This business is the leading supplier of stone products to the commercial and residential construction markets.

Strategic Update
In terms of the portfolio of businesses, considerable progress was made and our stated ambition to grow our interests in the higher growth, higher margin plasterboard market moved forward dramatically with the acquisition of LBGA in Asia.
In addition, the recognised gap in our Queensland construction materials operations was largely addressed through the concrete and quarry acquisitions of Wagners and Sunshine Coast Quarries.

Work in the United States to extend the product portfolio and introduce new range of light weight, environmentally efficient products also made excellent progress with the completion of production facilities for the new compound trim product and the new clay tile product being launched in the retooled Ione plant in California.

I would like to thank all of our employees for their continued support during this particularly difficult downturn in the market, the impact of which is being felt throughout the industry. The continued focus on our initiatives to simplify our systems and processes, together with our operational improvements, will ensure that we are ready to take advantage as soon as market conditions improve.

Mark Selway
Chief Executive
Boral Limited
WELCOMING BORAL GYPSUM ASIA INTO THE GROUP

With French and Australian shareholders, eleven Asian countries and Lafarge management systems throughout, anyone could be forgiven for thinking that the transition of LBGA into 100% Boral ownership would be a complex project.

By Bob Hindley, Vice President, Human Resources, Boral Gypsum Asia.

In fact, they would be wrong. While there were undoubtedly a few difficulties along the way, the LBGA, Boral and Lafarge teams working on the transition proved remarkably successful in achieving a smooth transfer of ownership. The purchase was completed in December 2011, a week ahead of schedule and the business has now been renamed as Boral Gypsum Asia (BGA).

Shane Henderson, Divisional Strategy and Planning Manager for Boral Building Products broke the transition task down into several workstreams and a leader from LBGA and one from Boral was appointed to each workstream. Senior management kept a close eye on the process.

An outstanding job was done by many employees across various disciplines such as the marketing team who ensured the re-branding went ahead on schedule, whilst the IT and business systems staff saw to it that the Boral Intranet was on everyone’s screen from Day 1.

The financial and legal integration was one of the largest tasks along with operational aspects and the management of sensitive issues around people and teams.

According to Frederic de Rougemont, Chief Executive Officer of Boral Gypsum Asia, many people across LBGA, Boral and Lafarge did a tremendous job leading up to the settlement which made the transition of management as smooth and seamless as possible.

With great enthusiasm from our employees in Asia, the official transfer of ownership was marked by “Day 1” celebrations across the BGA businesses. Some of the events included “Bollywood” dancing in Delhi, hurling oranges at the CEO in Malaysia and impressive Chinese drumming and Lion Dancing.
This is, of course, just the beginning and the task of fully integrating BGA into Boral will continue throughout 2012 and beyond. We are taking care not to disrupt an already successful business by making change just for the sake of it. Many of the BGA processes are functioning at an advanced level and Boral may adopt some of the BGA standards for its own use, in the true spirit of collaboration and learning from each other. BGA will be progressively introducing the core Boral building blocks, such as iCARE, LEAN and the PDP process.

In March a BGA Conference will be held in Kuala Lumpur for around 100 executives. This is an important milestone in the integration process and a great opportunity to fully involve the decision makers from right across the business.

In tandem with the integration work, another group, led by Frederic de Rougemont, is looking to the future. This team is examining the synergies and growth opportunities which will enable BGA to meet its ambitious targets, maintain its leadership position and more fully realise the value that Boral has so confidently placed in the Asian market and the employees of BGA.

INTRODUCING FREDERIC DE ROUGEMONT

Following Boral’s acquisition of the Lafarge interests in the LBGA plasterboard joint venture, Frederic de Rougemont has joined Boral as Chief Executive Officer, Boral Gypsum Asia (BGA).

Frederic has spent most of his career with Lafarge. Prior to joining Lafarge, he was a scientific researcher for the French National Research Centre, and spent time with IBM Research Labs in the USA as a post-doctorate researcher. He has a PhD in Physical Sciences.

He commenced with Lafarge as a cement plant process manager, moved on to the corporate human resources team, with specific responsibility for internationalisation. He spent four years in charge of R&D for the Lafarge Group during which time the team made important advances in concrete technology leading to significant innovation.

In 2002 he was promoted to manage the Cement Ready Mix and Aggregates business in South Africa, then to Cement in South Korea and in January 2009 he was appointed Chief Executive Officer of LBGA.

Frederic is 53 and married with three daughters. In his free time he likes to swim and walk. He reads fiction for pleasure and is passionate about classical music.
In October 2011 Boral celebrated the opening of the BGA Shandong Plasterboard Company, a 35 million square metre plant purchased from the XinKuang Mining Company, a Chinese state-owned enterprise.

*By Gavin Burton, Country Manager, China, BGA.*

Guests of honour at the opening were Boral’s Divisional Managing Director, Building Products, Ross Batstone, Frederic de Rougemont, Chief Executive Officer, Boral Gypsum Asia (BGA) and a number of local Government dignitaries. The factory is located approximately 700 kilometres north west of Shanghai in the city of Tai’an, which has a population of 5.5 million. It is a strategic acquisition for Boral’s plasterboard business in China, providing access to the 250 million square metre northern markets of Shandong, Beijing and Tianjin.

Built by the XinKuang Group in 2006 adjacent to its power station, the plant is technically advanced and uses steam from the power station as a thermal energy source for both its calcination and drying processes. Boral’s other plants typically use natural gas. Both natural gypsum and flue gas desulphurised gypsum (FGD) – a waste product from coal fired power stations – are sourced locally. The factory has the capacity to accommodate a second line without needing to expand the building, providing a cost effective option for future expansion.

Prior to this acquisition, BGA operated four plasterboard factories in China: Shanghai Pudong, Shanghai Baoshan, Chengdu and Chongqing. These plants service the two key markets on the east coast, Shanghai and surrounding provinces and Central West, predominantly Sichuan Province, around 1,500 kilometres inland from Shanghai.

Strong market demand in central west China has led to the expansion of the Chongqing facility by adding two new lines, the first of which is currently in commissioning phase. The Shandong Plant fits well with the current business strategy, providing low cost capacity in the key north China market. The business is now able to access approximately 60% of China’s 1.3 billion square metre plasterboard market.

The acquisition has taken over a year to negotiate with the XinKuang Group and local government due to the many rules surrounding the sale of Chinese state owned assets. The contract required BGA to hire the majority of former staff and the Engineering and Plant team spent two months modifying and upgrading the plant to meet Boral’s manufacturing and safety standards. Boral plans to install a metal roll forming plant and compounds facility in the future and has plans to consider a second line.

Above from top: Shandong Plasterboard Plant; Inspecting the upgraded facilities; cutting the ribbon at the ceremony in Shandong.
The new Boral Composites manufacturing facility, located on Boral Bricks' Salisbury, North Carolina site has been built in accordance with the US Green Building Council’s Leadership in Energy & Environmental Design (LEED) standards.

The investment has been supported with a plant leadership group carefully selected to commission the plant to optimal operation, sustained growth and continued innovation.

Plant Manager, Deon Van den Berg has been actively involved in the plant commissioning and implemented a “Zero Harm” safety culture across the plant in addition to “site specific” safety training, compulsory for all visitors to the site. LEAN manufacturing tools are assisting to eliminate waste and achieve operational ambitions.

This innovative facility will produce Boral’s TruExterior Trim, comprised mainly of recycled and rapidly renewable materials, and the product is manufactured with extremely low levels of energy consumption.

The sustainability of TruExterior Trim is substantiated by its current designation of Cradle to Cradle Certified Silver by McDonough Braungart Design Chemistry. To obtain this designation, the product needed to pass rigorous and comprehensive certification criteria that evaluate products for human health, environmental health and recyclability. Being the first and only exterior trim product to earn a Cradle to Cradle Certified mark, TruExterior Trim is an industry leader in sustainability and the launch team is committed to grow its sustainability credentials in order to attain the Gold level. TruExterior Trim is comprised of a minimum of 70% recycled content which today represents the highest amount of certified recycled content amongst the exterior trim market.

Prior to breaking ground on the new facility, a significant investment of time and resources was committed to market research the product’s potential including field tests and full scale products installation across several regions. The results of the research and voice of customer feedback confirmed the need and a sizable market for a product such as Boral TruExterior Trim.

TruExterior Trim offers exceptional performance, superior workability and long lasting appearance. Designed as an optimal solution for a variety of non-structural applications including fascia boards, soffits, frieze boards, rake boards, garage door casings, window surrounds, door trim, among many others.

“Boral TruExterior Trim fills a need in our industry for an exterior trim product that is easy to install, long lasting, low maintenance and priced competitively, while delivering truly sustainable features,” said Tom Zimmerman, Director of Sales and Marketing, Boral Composites.

“As a sustainable material, TruExterior Trim aligns well with Boral USA’s continued leadership in bringing innovative product and material solutions to market for the building industry,” he said.
BORAL’S GLOBAL INTRANET BECOMING A KEY COMMUNICATION TOOL

Part Two – Taking a look at a further three key business focus areas on the Boral Intranet.

By Barry Borham, National Manager E-Business, Boral Limited.

In the last issue of BITN I wrote about how the Boral Intranet is becoming a key communication tool within our organisation. It is enabling the spread of information, providing access to business tools and reporting systems and assisting us all in Building Something Great.

In this issue I’d like to flesh out a further three other key business areas: Sales & Marketing, Procurement & Risk and the new area of Innovation.

Sales & Marketing
Sponsor – Murray Read
Champion – John Stewart
Boral is committed to radically improving our Sales and Marketing performance. Sales and Marketing Excellence is part of the Boral Way, supporting the drive towards best practice, with a focus on two major areas:
• Collaboration: Identifying and closing opportunities to cross-sell the full range of Boral products as well as executing Key Customer growth plans.
• Seven Core Capabilities: forming the essentials that are necessary for superior performance in the sales and marketing discipline.

Procurement & Risk Management Group
Sponsor – Warren Davison
Champion – Matthias Fuchs
The twin themes pursued in this part of the Intranet are Procurement and Risk Management. Boral Procurement’s Intranet aims to provide the processes, tools, information and contacts for purchasing in the most cost effective way, that is the right goods or services at the right time for the right price.

Boral Risk Management has stewardship of the risk management framework including the group insurance program and associated insurance claims.

The Risk Management Intranet area provides direct access to risk management tools (including the Risk Profile template and performance management system), the Property Risk Management, Concern Tracking System (CTS), information on Boral’s insurance policies (including certificates of currency and claim procedures) and the Boral Insurance Declaration System.

Innovation
Sponsor – Mike Kane
In the pursuit of Building Something Great, Boral is dramatically increasing its focus on innovation with the goal of becoming one of the leading innovative companies in our industry. A new area of the Intranet is being developed to more effectively communicate this key area. Over the next five years, we intend to outpace and outperform our peers on the number and value of substantive products that are introduced to the market. As part of the Boral Way, the Boral Innovation Program has been established to ensure the Group is able to consistently deliver sustainable building and construction solutions. The goal is to transform Boral into a company that innovates across all parts of its businesses.

Boral’s Innovation Program intent is to:
• Generate new products and processes with substantial impact to the bottom line
• Consistently deliver innovative new products to keep an edge over the competition
• Be recognised in the building materials and products industry as effective and exceptional innovators
• Gain a competitive advantage by consistently delivering innovative new products to the marketplace.

Watch out for the new Innovation Intranet tile coming to the Boral Homepage soon.

The way ahead
Every day new content is being added to the Boral Global Intranet. In the last issue I mentioned a project that is currently underway to increase the speed and response of our network. This work is progressing well and will be completed in the first half of 2012. Links are also being made to ensure our newly acquired Asian businesses have direct access to the Boral Intranet. Contact one of the tile owners if you find any out of date content on the Intranet or have any other feedback as we use the Intranet to Build Something Great.
JINDABYNE DAM SPILLWAY PROJECT

It has been over 30 years since any significant amount of water has been released from the Jindabyne Dam in New South Wales, something which is due to change with the involvement of Boral.

By Shane Dermody, Country Operations Manager – Boral Construction Materials.

Since May 2011, Boral Concrete at Jindabyne, New South Wales has supplied around 6,500 cubic metres of concrete to MacMahon’s, the principal contractor for the Jindabyne Dam Spillway upgrade, employed by the Snowy Hydro Scheme.

Commenting on the project, a Snowy Hydro Limited spokesperson said, “Works are progressing well since the commencement of the new spillway in March 2011. Our contractors, MacMahon Contractors Pty Ltd reached a major milestone at the end of August with all the spillway apron concrete slabs successfully completed.”

The remaining works were completed in September including the spillway training walls and demobilisation of the tower crane, with the first flushing flows planned for October. The project advanced without any significant safety or environmental incidents, and was on time and on budget.

Before the concrete works, the spillway was an earth surface and for mainly environmental reasons this inhibited the release of any significant quantities of water into the Snowy River. The new concrete spillway will allow water from the Jindabyne Dam to be released into the Victorian catchment area.

Shane Dermody said, “The concrete team in the far south region has done a fantastic job supplying the dam project in difficult conditions throughout the Jindabyne winter. This follows the successful completion of the original dam project approximately four years ago which took 18,500 cubic metres of concrete”.

Below: Boral trucks at Jindabyne Dam slipway with gates and cone valves open.

BORAL AND METRICON CONTINUE TO BUILD TOGETHER AND NOW IN SOUTH AUSTRALIA

When longstanding customer Metricon decided to launch its business in South Australia, Boral was keen to be involved.

By Charlie Condo, Regional General Manager, Clay & Concrete Products, South Australia.

Metricon is one of Australia’s largest residential home builders. The company was founded in Melbourne in 1976 and uses Boral products throughout its national network.

In early 2010 Metricon announced its plan to launch its business in South Australia with ambition to build 200 homes per year. Glenn Simpkin, Divisional Marketing Manager, Boral Building Products and Charlie Condo, Regional Managing Director of Clay & Concrete Products visited Melbourne to introduce Boral South Australia to the Metricon team.

During that year, the team kept in regular contact with Metricon and worked with the other Boral South Australian-based sales and marketing managers to develop strategies and solutions for this potential new business.

In late 2010 Boral presented its credentials to Metricon and met with Richard Bryant, the General Manager of Metricon, South Australia to outline the wide range of products we could supply.

Boral has subsequently supplied products for Metricon’s South Australian Norwood Head Office and Studio M display centre.

Boral Plasterboard has taken orders for display homes at Blake’s Crossing with Boral Interior Linings installing the linings. Boral Timber will be supplying Metricon with Silkwood Flooring and decking through Riga Flooring.

As one of Metricon’s preferred suppliers across a complete range of building products we look forward to a continuation of the successful relationship we have in other states.
STORYBOARD OF SUCCESS – BORAL ASPHALT AND BORAL CEMENT BUILD ON A COMMON CONNECTION

A collaborative commitment to Building Something Great has paid dividends for the Group’s Cement and Asphalt businesses in Victoria.

By Brendan Holden, Regional Sales Manager VIC/TAS, Boral Cement.

Working together, Boral Cement and Boral Asphalt have facilitated a project with civil engineering contractor Cut & Fill Pty Ltd that has proved to be a win for all parties and a testament to Boral’s Values of Excellence, Integrity, Collaboration and Endurance.

In 2009, VicRoads and the Victorian Government announced funding approval for the Princes Freeway Project to link Corio to Waurn Ponds and interchange at Anglesea Road.

The freeway, also known as the Geelong Bypass, intends to reduce the high volume of traffic travelling through the Geelong City Centre, en-route to Torquay and Anglesea particularly over the school holiday periods, whilst meeting the Victorian Governments initiative to build safer roads for the state. The freeway project consists of three stages.

Stage 4B provides an interchange from the new freeway at Waurn Ponds to Anglesea Road to gain safe and easy access to the surf coast. The VicRoad design of this interchange involved the sale of a parcel of land occupied by Boral Cement.

The tender for construction of Stage 4B was awarded to Cut & Fill Pty Ltd, a successful and dynamic civil engineering company based in Melbourne and a long term customer of Boral Asphalt and Boral nationally.

Cut & Fill were keen to investigate the opportunity to access the site for up to one million cubic metres of clay fill material for use in the Stage 4B road construction.

Supply of transparent materials in close proximity to the site will significantly reduce costs to Cut & Fill whilst also saving Boral Cement the cost of shifting the over-burden from their new quarry site.

Boral Victoria Asphalt General Manager, Anthony Aloisio co-ordinated discussions between Cut & Fill Director, David Dowling and Boral Cement’s Regional Sales Manager, Brendan Holden.

The primary objective was to provide an improved offer to the customer while leveraging Boral’s scale to meet the objectives of all three parties: Boral Cement, Boral Asphalt and Cut & Fill.

The material supply to Cut & Fill involved a massive earthworks operation with large numbers of mobile equipment: scrapers and dozers transported to the quarry site. In co-ordination with the quarry operations team, arrangements were made for up to 500,000 cubic metres of clay fill to be transferred to the Stage 4B project over a period of 18 months.

Cut & Fill Project Manager, Ivan Fratric, spoke enthusiastically of working with Boral: “We are more of a neighbour these days than a customer. The site people at Waurn Ponds are fantastic to deal with and if it wasn’t for their knowledge and liaison we would not be in the position we are in now. We have managed to meet the project timeline because of this close relationship.”

The major earthworks are nearing completion and Boral Asphalt will commence the supply of asphalt and bitumen for the spray and seal contract in early 2012.

Further opportunities exist for local project work including the Princes Highway between Waurn Ponds and Winchelsea.
HOME BEAUTIFUL PROMOTION RALLIES AUSTRALIA’S BEST HOME RENOVATORS

An overwhelming number of interesting and innovative entries were received in this new industry promotion.

By Glenn Simpkin, Divisional Marketing Manager, Boral Building Products.

The Home Beautiful Renovation of the Year promotion, in association with Boral, has now come to a close with an overwhelming number of interesting and innovative entries received. The search for Australia’s best renovation launched in October 2011, inviting Home Beautiful readers to submit before and after photos of their recent home makeovers.

The judging panel had the difficult task of selecting winners for the two competition categories, offering cash prizes up to $10,000. The minor renovation category focused on works costing up to $100,000, including materials and labour. Projects on a grander scale – those costing between $100,000 and $400,000 – were entered in the major renovation category.

Competition judges include Boral Clay & Concrete Products National Marketing Manager, David Francis, Better Homes & Gardens TV resident architect Peter Colquhoun, interior designer and TV presenter, Shaynna Blaze and Home Beautiful acting editor, Mara Lee.

All projects were uploaded to website www.renovationoftheyear.com.au with readers able to view the full range of entries and renovation ideas with more than 17,000 people visiting the site during the promotional period. The winning entries will be featured in the March 2012 issue of Home Beautiful magazine reaching a readership of 358,000.

David Francis, Boral’s representative on the judging panel said, “We were genuinely impressed by the quality and variety of the renovation projects that have been entered. We have noted a wide choice of building materials and finishes used across makeovers in single rooms, including kitchens and bathrooms, as well as complete home updates and backyard transformations.”

“This is the first time that Boral has partnered with Home Beautiful on such a promotion. The level of interest demonstrates that residential renovations and home improvements remain high on the Australian agenda,” he added.

The Home Beautiful Renovation of the Year promotion will help Boral build product and brand awareness in a highly relevant and engaged consumer audience.

BORAL SALES AND MARKETING UPDATE

From the very outset of the Group’s Sales and Marketing Excellence program we recognised the benefit from all of our businesses working together to enable our customers to build something great.

By John Stewart, Group Sales and Marketing Excellence Manager.

Collaboration remains the key to harnessing the skills, capabilities and relationships that make Boral a trusted and respected organisation. With this in mind, I am delighted with our continued progress in leveraging and learning across divisions and across the globe.

The first phase of building our sales and marketing excellence program was putting in place the fundamental tools and processes to support our sales and marketing professionals. This renewed and reinvigorated approach to understanding and partnering with the market is now being actively employed and customers are already starting to acknowledge the additional value that Boral is able to bring to the table.

The next phase of our sales and marketing development is all about the customer. The right tools and processes are in place and our sales and marketing leaders are well equipped to deliver customer-recognised value.

To this end, we continue to benchmark our core sales and marketing capabilities and put in place improvement plans within each team. Our US businesses have fast-tracked their efforts and Boral now has a global Sales and Marketing Program in place.

Reflecting on the past year, it is clear the sales and marketing team have achieved a great deal and I am excited about the year ahead as we work with our customers to Build Something Great.
**BORAL REPRESENTATIVE RECEIVES AMBER’S HIGHEST HONOUR**

Boral sales representative awarded “Rep of the Year” by customer, Amber Tiles.

*By Brendan Simpson, Regional General Manager, Boral Clay & Concrete Products, NSW.*

Andrew Drinkwater, Managing Director, Amber Group Australia Ltd makes the presentation to Boral’s Steve Hemming.

At its annual staff and supplier awards evening in October 2011, Amber Tiles named Boral sales representative Steve Hemming, its “Representative of the Year”.

The event was attended by over 140 of Amber’s staff and trading partners with awards presented to the top 10 salespeople from the Amber network as well as two external awards, the prestigious “Supplier of the Year” and “Representative of the Year”.

Huge congratulations are in order to Steve Hemming for winning Amber’s “Representative of the Year” 2011 award. These awards are arrived at by all Amber stores judging and scoring each of their suppliers and sales representatives’ commitment, service and personal execution at store level.

Amber management expressed their appreciation for the support and commitment shown by Steve and his Boral colleagues.

---

**CONCRETE INSTITUTE RECOGNISES BORAL CUSTOMER PROJECT**

The biennial Concrete Institute of Australia Awards recognised two years of development and innovation in concrete technology and best practice in Australia.

*By John Simpson, Regional Sales Manager, Boral Construction Materials, WA.*

The Concrete Institute of Australia’s (CIA) National Awards and Biennial Awards Scheme were awarded in Perth in October 2011.

The highlight of the night was the announcement of the Kevin Cavanagh Medal recipient for 2011. This award is judged from all national category winners, excluding international projects, on the basis of outstanding contribution to the quality of concrete construction in Australia.

Boral’s Chief Engineer, Concrete, Tony Thomas, presented the award to the **Gateway Upgrade Project, Brisbane, which was constructed by the Leighton Abigroup Joint Venture**.

The project was selected for best-practice construction methods which addressed the client’s specification for a 300 year design life through high levels of material performance.

After the award ceremony, Tony Thomas stated, “This landmark project was constructed to an outstanding level of quality which Boral is proud to have supported and supplied.”

---

**2011 CIA-Concrete Institute Award winners**

**The Kevin Cavanagh Medal for Excellence in Concrete**

The Gateway Upgrade Project, Brisbane, Queensland, Leighton Abigroup Joint Venture

**Engineering Projects Award for Excellence**

The Gateway Upgrade Project, Brisbane, Queensland, Leighton Abigroup Joint Venture

Port Botany Expansion Project, Sydney, NSW

Hyder Consulting Pty. Ltd.

Merriwarrh Creek and Pyrites Creek Bridge Structures, Melton, Victoria

Western Hwy – Anthony’s Cutting Alliance, VicRoads/John Holland /AECOM
MASSIVE CONCRETE POUR FOR BORAL IN WESTERN AUSTRALIA

It was a big day for Boral Concrete in Western Australia when they delivered 475 loads of concrete in 11 hours which involved five Perth batching plants.

By Matthew Flynn, Sales Manager Concrete, Boral Construction Materials, WA.

When Diploma Construction in Western Australia needed to arrange an extensive, continuous concrete pour for the Queens Riverside project they came straight to Boral.

The two companies have a strong relationship and Boral’s expertise in supplying to high-demand sites in a short time frame was recognised as an essential factor in the project's success.

In a true team effort, Boral supplied the concrete, Kore Construction was the concrete placer, and ICPS the pumping operator all worked under the leadership of Diploma Construction.

Logistics was a key consideration with this type of project and careful planning was undertaken across a team of 70 concreters, labourers, pump operators and material suppliers. The pour commenced at 6am on a Saturday and a total of around 2,900 cubic metres of concrete was batched by Boral in just 11 hours.

The concrete was pumped into the raft slab at the site on the property which extended from Adelaide Terrace to Hay Street, Perth.

Boral used 60 concrete agitators for the delivery with trucks arriving every two minutes. The trucks were assembled in a holding area before moving to four pumps located around the site. In total 475 loads were delivered, from Concrete batching plants in Osborne Park, Bayswater, Maddington, Landsdale and Spearwood which operated at full capacity throughout the day.

Boral’s Occupational, Health, Safety and Environmental plan was carried out as a critical part of the customer service in this project. Through this process, Boral was able to highlight potential risks and issues and were able to advise best practise risk management before becoming a concern for the team.

The customer was delighted with the end result. The Stage One of the $450 million hotel and residential development for Frasers Property Australia on Adelaide Terrace is due for completion later in 2012.

Clockwise from top: Early stage of the concrete pour; Complete Raft Slab; Queens Riverside Project well underway; Concrete pour nearing completion.
ROOFING PLANT AT LAKE WALES RECEIVES FIRST ANNUAL BORAL PRODUCTION SYSTEM STORYBOARD AWARD

Work teams across Boral are being empowered by the Boral Production System to improve processes and make a significant impact on their businesses.

By Andy Rylance, Group Lean Manager.

The production team at Boral Roofing in Lake Wales, Florida was struggling with intermittent downtime in early 2011. The safety lock outs around the racker equipment prevented direct observation of the malfunctions which then left technicians guessing about the causes of downtime events. Overall Equipment Effectiveness (OEE) at the plant in February 2011 was 48%.

An employee came up with an innovative solution of using a $500 high speed video camera to identify the cause of the downtime on their tile circuit. The result was a dramatic improvement to their OEE performance from 48% to 80%.

The important aspect of this achievement is that it was employee driven and implemented. The Lake Wales team posted the results on Boral’s Intranet Storyboard and received the award for the best submission in September 2011.

By taking the time and effort to post their project details on the storyboard, other Boral plants in Denver, Colorado (Roofing), Napa, California (Stone) and in Australia have used the same technology to solve similar problems in their plants. Group wide other sites have built on the original idea by adding features to make the cameras more useful such as the addition of magnets to hold them in place in difficult to get to locations. In Napa the team added a web-based feature to connect the cameras.

By continuously building on each others’ ideas will make us all stronger in the LEAN implementations across Boral.

At Boral’s USA Senior Management Conference, Steve Saldate, the Plant Manager of Lake Wales, represented his team and received an award from Mark Selway, Boral’s Chief Executive for the Best Storyboard contribution throughout Boral’s global operations. Congratulations to Steve and all our colleagues at Lake Wales.
PULL SYSTEMS IMPLEMENTATION CONTINUES APACE

In the last issue of BITN we reported on the PULL systems coming to Boral. We now have three sites in Australia with PULL systems in place.

By Glenn Jacob, National Lean Development Manager, Boral Construction Materials.

PULL systems create value by reducing the cash we have tied up in excessive inventory and improving customer service by reducing lead times.

We now have this important LEAN methodology in place at the Wacol Hess plant and Pinkenba Plasterboard plant in Queensland and at Pooraka Masonry in South Australia.

Training has been completed at Maldon Cement, Scoresby Bricks and our first quarry at Deer Park, and this year we will be taking the training to the USA starting with the Union City brick plant.

When asked about the implementation, Andrew Pittle, Manufacturing Manager at Pinkenba Plasterboard said: “I am a fan of it, it’s brilliant. It has driven up our stock turns and halved our inventory holdings as the Kanbans replenish the inventory levels at the same pace as actual sales. It is also driving our continuous improvement program. The PULL system really shows you just how good you aren’t and where your pace of change has not been fast enough. We are learning the value of being a more responsive supplier.”

So what changes after PULL has been implemented? Businesses become better controlled, have lower waste and generate higher cash by producing only what is needed, when it is needed, in the quantity that is needed – just in time.

With more focused sales and operations planning inventories are better controlled and can be brought to the right size, which usually means reduced inventories. Smaller inventories are less costly to maintain and less wasteful.

As products are no longer pushed through the manufacturing system but instead are being pulled by customer demand, this prevents the company from making products that don’t sell. Production is driven by customer value and manufacturing focuses on high quality, on-time delivery. Costs are reduced through waste elimination and the continuous improvement of processes.

A PULL system gives faster stock turnover and therefore generating cash faster than when it is locked up in stationary inventories.

The managers at sites that have implemented the PULL system are reporting a more orderly workplace, less crowded stock holdings and a better work environment. Of course the system only runs smoothly if the rules are followed and as it also highlights any problems in the operations process, it shows that a good problem solving culture is essential.

PULL training takes a full week and the principles are learned and applied in a very practical way with a hands-on simulation of a factory. Support staff, sales and logistics people as well as managers, team leaders and operators all attend.

The first phase of planning, which is the implementation, is a ten step plan culminating in a desk top simulation of how the model will work on site. This planning and simulation process continues for several weeks in the lead up to the go-live date.

Tony Palmieri Systems, Compliance and Lean Facilitation Manager for the Pooraka plant says: “The initial PULL training was rolled out in September 2011 and went live in late November. In between the team worked to define new procedures, set up the product layouts and logistics and to train employees in the PULL system. We found we got a very positive response from the team who embraced it wholeheartedly. They are finding the hands-on and highly visual nature of the implementation very helpful in their jobs.”

“In some product categories we have seen stock turns increased by 60% and stock holdings reduced accordingly.”

Boral stands to benefit from the implementation of the PULL system as it brings further improvements to our business and employee engagement and also by highlighting operational inefficiencies that were previously masked by our high stock levels.
Surprisingly, the main piece of equipment on the site, the primary crusher, was built over 100 years ago. It was installed at the site in 1924, having been built 16 years earlier. This amazing machine crushes the limestone blasted out of the mine from the size of boulders to a consistent 200 millimetre size stone. Over 3 million tonnes are processed by the crusher every year.

A key measure of operational success at the Marulan site is the operating rate of the crusher. The implementation of the Boral Production System at the site introduced a new phase in the journey to maximise the Operational Equipment Effectiveness (OEE) of the primary crusher.

After introducing LEAN principles and establishing foundation activities the Marulan team ran a Value Stream Map to better understand their process. Value was identified from the point of extracting limestone from the mine and crushing it to a size of less than 50 millimetres, right through to the delivery to the customer.

A cross-functional site team highlighted a number of improvement activities in safety, quality, cost and delivery of final product. Four main areas of improvement were identified:

1. Measuring operational performance
   Marulan adopted Boral Construction Materials’ Quarry Reporting System to record the rate of material through the equipment, sources of downtime and stoppages of material flow. Kendall Nelson, Production Administration Assistant at Boral Cement, Marulan who was part of the team which established the system at Marulan believes it was a “game-changer”.

   “Before we began measuring, we weren’t exactly sure which of our problems was the most critical, what to improve or whether our attempts to fix open issues were even working. Using the reporting system to measure our performance was like turning on a light in a dark room,” Kendall added.

2. Enhancing daily meetings at the Visual Board
   The Visual Board is essential to productive morning meetings. This is where the team review performance across safety, quality, cost, delivery, development and management.

   Jamie Whittaker, Production Superintendent at Marulan, explained how it works: “Availability and any concerns around fixed or mobile plant equipment are tracked on the visual board and employees are assigned their tasks for the day to ensure clarity of objectives. Shift roster patterns are modified and overlapped to eliminate stoppages at shift changeovers. This increased machine and mobile plant equipment uptime and reduced the issues associated with start ups.”

3. Change the way the mine haul trucks fed the crusher
   Traditionally mine haul trucks have dumped their large loads directly into the primary crusher. The team trailed a new approach where the load was dropped nearby and a smaller front-end loader used to feed the crusher.

   “By using a smaller loader to feed the crusher more regularly with smaller amounts of rock we were able to get a smoother flow to reduce blockages. An added benefit was that the haul trucks weren’t held up in a queue at the crusher waiting to dump their load. It’s been a win-win,” explained Dean Beltrame, Marulan’s Engineering Manager.

4. Modifications to the crushing equipment
   The heavy duty work involved in unblocking chutes and cleaning conveyors is a safety risk and, despite the best efforts of employees, can result in injury. By changing the chutes to incorporate new guides and chains as well as replacing the feeder trays, the flow of material was much improved.

   Mark Smith, one of team working on LEAN and safety initiatives commented that these changes had made a huge difference to morale through the reduced time and effort involved and the reduced safety risk.

Blockages were all but eliminated in the feeder as well as in the chutes and conveyors; breakdowns were significantly reduced and the team were able to achieve a 14% increase in the amount of material through the feeder. Over the last six months, the OEE average has risen by an impressive 20% to over 82%.

Les Longhurst, Marulan’s Operations Manager, reflected on the journey: “This was not a quick and easy fix – it took patience and determination over many months and involved investing in people, systems and tools before we finally began to see the dividends. I am proud of the hard work, positive attitude and collaboration that many on the site contributed to achieve our goal. I am confident we’re in a much better position now to reap the benefits of safety and OEE outcomes through the Boral Production System here at Marulan.”
VALUE STREAM MAPPING REMOVES BOTTLENECKS AT BORAL STONE PRODUCTS

Some basic LEAN training is paying off for the newly acquired Cultured Stone business.

By David Mariner, President, Boral Stone Products.

After conducting basic LEAN training the first task for the team was to create a Value Stream Map of production lines within their Napa manufacturing facility.

As well as being a great way to introduce the team to LEAN, this exercise had immediate results with the creation of a 60 day action plan to attack waste identified throughout the Kaizen. A major bottleneck was highlighted which was holding back the rate of production and therefore throughput.

In the stone manufacturing process, moulds are moved down an assembly line where they are prepped, painted, filled with concrete, levelled (or screeded), and vibrated to fully fill each mould. They are then left to cure for around 24 hours, de-moulded and packaged for shipment. During the Value Stream Mapping, each process was timed, time studied and a simple Pareto Chart created which identified two key pieces of waste on the main production line. Firstly, the push rate at 16.5 seconds was set higher than the time required to accomplish any one given task. Secondly, one area of production (the filling and levelling of the moulds) was 2.5 seconds slower than all the rest.

The team focused their attention on this area and quickly made changes allowing the overall push rate to be lowered from 16.5 seconds per station to 12.5 seconds. This 4 second improvement equates to a throughput improvement of 25% overall and has allowed the plant to tighten up production planning and delay adding shifts while volume ramps up.

After completing the analysis on the main production line, a similar analysis was performed for all active production lines with the results being very similar. Push rates on all production lines within the plant were reduced resulting in an increase in capacity of 18%.

These improvements were all made without capital expense, the only resource needed was a focus on the details and a willingness to ask questions. Lessons learnt in the Napa plant, were transferred to the other stone manufacturing plant in South Carolina with similar positive results. The financial success of these improvements resulted in an immediate win for the plants and a great kick-start to their LEAN journeys.
LEAN COMES TO THE BACK OFFICE

In October 2011 Boral Australia ran our first major back office LEAN event at Shared Business Service (SBS) located at Greystanes House in Sydney.

By Andy Rylance, Group Lean Manager.

The team selected the Procure to Pay process as the best place to trial LEAN in a back office situation. We knew the business, the team and suppliers had been feeling some pain in this area.

In Financial Services the Accounts Payable team processes and pays the majority of invoices issued to Boral by suppliers. Therefore Accounts Payable is the “invoice to pay” component of the overall Procure to Pay process.

The purpose of the team was defined to identify and create a plan to eliminate waste in the SBS functional area of invoice to pay, with a focus on inputs from Boral Construction Materials (BCM) NSW. The team spent four days together before presenting their findings to senior management.

There was cross functional representation from Procurement, Accounts Payable, BCM systems, the BCM NSW purchasing hub and Group Finance. It was pleasing to see One Boral in action with the team all committed to working constructively together to improve the purchase to pay process.

A ten step Kaizen process was followed. Kaizen roughly translates as making a change for the better and is often referred to as Continuous Improvement. It is a key principle of LEAN.

The ten steps is a structured and logical process where the team can start to analyse the current state data and KPIs, and compare those facts against customer requirements.

The team made good use of visual management by plotting on wall charts to make the process and KPIs visible.

Through the ten step Kaizen process, the team identified that the amount of rework in Accounts Payable was around 35% of their total workload.

Veronica Collins, Group Financial Services Manager, was new to Boral so it was a great opportunity for her to see the problems documented, debated and understood so clearly.

“I now have greater visibility over the accounts payable process. This event really highlighted the many processes we have and the complexity associated with having many inputs and systems. It was a bit scary when we realised only 37% of invoices that come to us first time have all the information needed to be scanned straight into Oracle in a best practice environment. That’s 63% that are not right in some way. My team says that they knew this already, but the problem is that I didn’t. Management need to be exposed to the problems to be able to support change,” Veronica said.

Part of the process included a 5S clean up of the area. The team redesigned their office space to improve flow and reduce waste of motion. The ideas were first designed in cardboard and the changes have since been piloted and proven successful. The office is now more ergonomic, allows certain functions to be performed standing up to improve mobility in the team and the KPIs have shown an improvement in productivity.

The team then looked at what they could do to improve the current process without the addition of new systems. An action plan was created and then converted into a standard Boral project management matrix which is now in place and working well.

There has been good early success with invoice backlogs reduced and the team are now in control of their own process, holding daily meetings to review output and track concerns.

The key action identified is to send invoices that do not meet Boral’s minimum standards back to the suppliers. Once the pilot is embedded and working effectively it will be rolled out to the remaining BCM states and progressively to the other business units in 2012.
Boral Plasterboard Pinkenba commissions its new automated plasterboard picking machine, nicknamed the “Autopicker”.

_Boralex Bower, Distribution Manager QLD/NT, Boral Plasterboard._

Boral Plasterboard Pinkenba has commissioned its new automated plasterboard picking machine, the “Autopicker”.

Pinkenba management and staff were pleased to accept the handover and were very keen to see it “Go Live” and start picking plasterboard. Team Leader, Danni Butterworth explained, “After testing the system, we were ready to place orders into the autopicker, it’s fantastic that Boral have invested in this technology. It makes us more likely to be the preferred supplier to our customers”.

The capital project started over 12 months ago with installation commencing in July 2011 and final commissioning in November 2011.

The entire system was manufactured in Germany and shipped to Pinkenba for installation.

This is the second machine to be installed in Australia with the first at Boral’s Port Melbourne site in Victoria nearly three years ago. The benefits achieved from the Autopicker include cost savings, reduced manual handling and improved customer service, all critical requirements for customers in Queensland.

The project was one of Boral’s first to use the new capital management guidelines in both reporting and tracking. The capital process was well supported by Boral senior management and distribution staff.

The Pinkenba project came in on budget and ahead of time and there were no reportable OH&S issues. Visual tracking of the performance of the autopicker is a key element of the project. This includes visual displays of OEE (Overall Equipment Effectiveness) and TPM (Total Productive Maintenance).

Boral Plasterboard have offered manual makeup of residential house-lots and commercial crane lifts for a number of years, and this new technology now:

- Replaces this manual process and reduces the risk of handling injuries
- Interfaces with Plasterboards business systems to eliminate waste in the data entry process
- Picks with 99.9% accuracy
- Improves customer service by meeting varying market demand
- Prevents product damage, and
- Allows consolidation in South East Queensland to improve costs.

The next steps are to track the OEE performance of the Autopicker and complete the formalities of a fully integrated maintenance program.
The Port Melbourne plasterboard plant upgrade is entering one of the busiest phases of its construction schedule.

By Alan Evans, Divisional Operations Manager, Boral Building Products.

In June 2010 Boral announced it would invest around $80 million to upgrade its Port Melbourne plasterboard plant in Victoria. The current facility has continuously produced plaster based products since the mid 1960’s, and plasterboard production commenced there around 1970. Freeway infrastructure improvements in and around Melbourne over recent years have reinforced that the site is a premium location from which to produce and distribute plasterboard.

The project incorporates the following elements:

- A new energy efficient drier incorporated into a refurbished board line which will lift annual capacity by over 40% to around 30 million square metres.
- A new gypsum receiving system to take gypsum directly from ships into the site to eliminate truck movements and reduce costs
- Upgraded plaster production facilities incorporating new recycling plant to process on-site waste
- New, enlarged and automated jointing compounds facilities and
- These facilities put in place to facilitate improved product distribution to our customers.

To minimise disruptions to operations, the upgrade works at Port Melbourne are being completed as discrete elements.

In December 2011, the new gypsum receiving system was brought into operation and unloaded its first gypsum shipment. The system comprises an on-wharf hopper to receive gypsum discharged directly from the ship, conveyors then transport the gypsum to Boral’s Port Melbourne site and a fully enclosed storage shed has been introduced to receive it.

This gypsum receiving system will not only allow for considerable savings in operating costs but will contribute to a cleaner environment by removing up to 9,000 truck movements each year from the Westgate Bridge.
The new Board Line 12 deck dryer under construction.

The new gypsum receiving system hopper at Wharf 26.

A transition tower. Part of the new gypsum transfer system.

The new 40,000 tonnes gypsum store.

The gypsum store under construction.
BORAL’S CONCRETE PRODUCT DESIGN IS IMPROVING HOSPITALS

Innovation in concrete product design has enabled a customer to improve function and aesthetics at a new hospital.

By John Simpson, Regional Sales Manager, Boral Construction Materials, WA.

Boral has had great success working with the Brookfield Multiplex design team to provide product solutions to improve the function and aesthetics of the Oncology ward at the new Fiona Stanley Hospital in Murdoch, Western Australia.

Traditionally constructed oncology wards require one to three metre thick concrete walls due to the radiation devices used. This usually results in oncology departments with very thick walls and roofs, an adverse architectural effect and fewer location options within building designs.

Boral Concrete’s technical team developed a dense, “heavy weight” concrete mix formulated to shield radiation in accordance with the technical specification but maintaining thinner walls. This innovation enabled the designers to achieve the architectural qualities needed for a contemporary medical treatment environment.

In the lead up to the pour, Boral Transport operated six road trains for a week and travelled thousands of kilometres to deliver the dense aggregate required for this specialised concrete.

Due to the weight of the material, Boral Concrete deployed 20 concrete agitators to continuously deliver 3 cubic metre loads. This enabled the 450 cubic metre pour to be completed in twelve hours – well within the 24 hour planning window.

Boral business units working closely together delivered the product safely and on time enabling Brookfield Multiplex to keep the project on schedule.

Below: Work continues on the Fiona Stanley Hospital in Western Australia.

PINKENBA PLANT A WINNER AT GLOBAL GYPSUM CONFERENCE

The Global Gypsum Conference took place in the desert south of Las Vegas.

By Alan Evans, Divisional Operations Manager, Boral Building Products.

Boral’s Pinkenba Plasterboard plant has been awarded “Plant of the Year” in the Global Gypsum Awards. The Awards are presented as part of the annual Global Gypsum Conference which was held last year in Las Vegas.

Nominations are made by the conference delegates and typically new plants are most likely to be nominated.

The judging panel, comprising the editors of Global Gypsum Magazine decided the Pinkenba plant was a worthy winner due to Boral’s stringent efforts to reduce the plants’ environmental impact, particularly in the area of water usage. The judges felt this was “world-leading performance”.

In 2009 the Pinkenba plant was also named a finalist in the Queensland Government’s environmental awards.

On the occasion of the 11th Global Gypsum Conference

This is to certify that
Boral’s Pinkenba Plant
has been named
Global Gypsum plant of the year
this day, 17 October 2011

Dr Robert McCaffrey
Editorial director
Paul Brown
Commercial director
Boral USA wins sustainability leadership award

At the recent KB Home Strategic Supplier Conference in Las Vegas, Boral was recognised for the work it has been doing to promote sustainable products and manufacturing.

By John Renowden, Vice President Technology, Boral Industries.

Boral’s submission for the award highlighted the many areas in which we are creating sustainable solutions for the building and construction industry.

Boral Stone Products
A minimum of 50% pre-consumer waste stream material is incorporated into all Cultured Stone, ProStone and Versetta Stone products. Boral’s products were the first stone products in the industry certified both as National Association of Home Builders Green Approved products and for GREENGUARD Children & School™.

Boral Roofing
The first and only manufacturer in the world to receive the Cradle to Cradle® Gold Certification for clay roofing products with a full line of products with recycled contents of up to 59%. This includes the Cool Roof clay and concrete products which meet Energy Star, California Title 24 and LEED requirements plus the revolutionary “Smog Eating Tile” with BoralPure™ technology.

Boral Bricks
The nation’s only LEED Gold Certified brick manufacturing facility together with Cradle to Cradle® Silver Certified manufacturing facilities. Products feature all natural material content with no formaldehyde, VOC’s, CFC’s or other harmful substances. Boral Bricks is an industry leader in the use of alternative, renewable fuels such as landfill gas (methane), wood waste, and post-industrial waste materials. Boral manufactures pavers with colour choices that meet LEED requirements for solar reflectivity as well as permeable solutions for water management recognised as a National Pollution Discharge Elimination System.

Boral TruExterior Trim
The first and only exterior trim product to achieve Cradle to Cradle® product certification using revolutionary manufacturing technology and verified by Scientific Certification Systems as having the highest recycled content of all exterior trim, exceeding 70% pre-consumer recycled content.

This achievement will help to promote the One Boral philosophy and could lead to exciting sales prospects in the future with our customer, KB Home.

Left to right: Jeff Kaminski, Executive Vice President and Chief Financial Officer KB Home; Eric Miller, Vice President Sales, Boral Roofing; John Renowden, Vice President Technology, Boral Industries; Al Borm, President, Boral Roofing and Dan Bridleman, Senior Vice President Sustainability, Technology and Strategic Sourcing KB Home.
BORAL RECOGNISED AT INDUSTRY ENVIRONMENTAL, HEALTH AND SAFETY AWARDS IN THREE STATES

Boral has received a number of awards throughout Australia for environmental performance in the Construction Materials industry.

By Brian Tasker, General Manager, Boral Property Group.

Leading industry body, Cement Concrete & Aggregates Australia (CCAA) has honoured Boral at state awards events in NSW, Queensland and Western Australia.

In NSW the night was represented by members from the three industry sectors – cement, pre-mixed concrete and extractive industries.

In Queensland, the awards highlighted exceptional performance in the areas of leadership, innovation and advocacy, and are an important vehicle in demonstrating the industries best practice approaches to environment and health and safety issues and benchmarking our management of environmental issues.

In Western Australia CCAA awarded Boral’s Osborne Park Batch Plant the Best Environmental Performance for Concrete Metro Plant, jointly with Holcim’s East Perth plant.

The Osborne Park Batch Plant is one of Boral’s flagship metropolitan batch plants from a safety, environmental and operational perspective.

Best practice elements include water and waste management, air quality, admixture storage and improved housekeeping and safety standards through the introduction of LEAN manufacturing principles.

This first time win for Boral is a valuable opportunity to share environmental gains across the industry as well as recognising continual improvement in environmental performance.
In Queensland, CCAA selected Boral Construction Materials for the Overall Award for Environmental Innovation.

Boral was recognised for its comprehensive and proactive environment and stakeholder management approach. At the local level, this has translated into the formation of nine community liaison groups involved in 19 community engagement projects at key quarry operations across Queensland.

Boral was also highly commended in the Environmental Innovation award category for the development of the Narangba Koala Fodder Plantation on Boral’s Narangba quarry buffer land.

It also won the Health and Safety Innovation (Concrete) Award for improved safe removal of washout pit gates.

CCAA State Director, Aaron Johnstone, said the Awards highlighted the excellent work being done right across the heavy construction materials industry to improve environmental performance and health and safety.

---

**THE EMERGING LEADER PROGRAM**

The Boral Emerging Leader Program has been a feature of Boral’s Leadership Pathway programs in Australia since 2004.

*By Kathy Mackay, Learning Services Manager, Boral Limited.*

Designed to identify and develop Boral’s future leaders, the Emerging Leader Program aims to grow and retain high potential middle managers. Those targeted for this development are generally recent university graduates, Boral Frontline Leadership Program graduates, or managers who are new to their roles and have been identified as high performers. Participants are sponsored by their immediate manager and actively developed by their manager throughout the three year program.

The Emerging Leader journey commences with a two day program held in Sydney. The agenda gives participants the opportunity to learn more about Boral, be exposed to leadership principles, consider development paths and engage in team, self reflection and networking activities.

The 2011 program was held in November and 17 Emerging Leaders from across Boral Australia and Boral Gypsum Asia attended. Participants heard from senior business leaders who spoke of Boral’s key initiatives. Boral’s Chief Executive, Mark Selway spoke on the direction of Boral and the importance of laying the foundation with our key Boral Way initiatives, reinforcing the core business and investing for growth and becoming sector best performers.

Participant feedback has proven that hearing about the company direction from the Chief Executive, the importance of the Boral Values and assisting with the changes across Boral, has really inspired them to support and drive the changes across the Group, as it will also help with career development.

The 2011 Emerging Leader Alumni group will continue to re-connect during the next three years through networking events, with at least one other group program to be held within the next 12 months.
BORAL’S LEADERSHIP PATHWAYS

The Boral Leadership Development Program (LDP), a feature of the Leadership Pathway programs, has been redesigned and aligned with Australia’s leading MBA program provider, the Australian Graduate School of Management (AGSM).

By Wayne Reade, Group Organisational Development Manager.

The Program is designed to develop senior leaders across Boral who, through the Personal Development Process, have been identified as having high potential. In 2011, 28 senior leaders participated in the program which took place over six months. It is structured around the Boral Way initiatives and the Boral Leader and aims to help participants understand and drive our goal of Building Something Great at Boral.

Industry leaders from the AGSM present topics for development which enable participants to recognise what they knew about themselves as leaders.

Boral’s Chief Executive, Mark Selway is the sponsor of the program and all Operational Executives attend and support the development of the individuals.

The Program’s objective is to allow people to really understand how they are leading at Boral, challenge them in understanding the Boral business models that help facilitate change across the business and align with becoming sector best performers in our core business operations.

As part of the redesign of the program we undertook a new Action Learning Project, which saw all participants interview over 100 people across Boral to learn how others are leading the change across Boral. This resulted in many members of the LDP coaching and supporting other key leaders across Boral around the Boral Way initiatives and Boral Leader behaviours.

The participants came from all parts of the business operations and included four employees from Boral in the USA.

Feedback from the program has been very positive and the team appreciated the opportunity to present the Action Learning Project findings to the Operational Executives. This has had a real impact on actions related to various initiatives across the Group.

The next program will commence in partnership with the AGSM in mid 2012.
FLOOD RELIEF ASSISTANCE IN THAILAND

The recent floods in Thailand have seen employees helping each other with Boral’s support.

By Nigel McKinnon, Finance Director, Boral Concrete and Quarries, Thailand.

As Bangkok braced itself for significant flooding in October 2011 many buildings began sandbagging their underground carparks and those that could afford it began stockpiling food, water and gas.

Boral was ready to assist when the floods came and as many of our employees in Central Bangkok were affected it became a case of employees reaching out and helping each other, with the Company’s support.

Care packages were distributed to our employees and families in the affected areas. This work was undertaken on a Saturday by teams of willing workers.

Boral also arranged short term loans for employees in distress as well as providing employees with the opportunity to obtain bags of CRF from one of our BKK plants if they could come to pick them up themselves to sandbag their homes.

Co-ordination and evacuation sites were designated at plants expected to be above the water level, for those employees and their families with nowhere else to go.

As the flooding occurred in areas not normally prone to flooding, many people were completely unprepared and didn’t know what to do.

Fortunately all Boral employees were accounted for and the affected areas of Thailand are returning to normal.

Below: Boral employees prepared and distributed care packages over the weekend to families in need in the flood affected areas.

BORAL LIVING GREEN CONTINUES CONSERVATION TRADITION IN CAIRNS

In what has become an annual event, Boral employees worked to preserve natural heritage in far north Queensland.

By Elke Stapf, Stakeholder Manager, Boral Property Group.

Boral employees worked alongside Conservation Volunteers Australia (CVA) recently at another successful planting day in Myola (Kuranda), Cairns. The day has become an annual event where Boral and CVA work to preserve Australia’s natural heritage in conjunction with the Barron River Revegetation Project.

Employee volunteers Greg Keeling and Neil Ainsworth from Concrete Mareeba and Noel Thorburn from Tichum Quarry, were part of the Boral Staff planting day where employees were able to join CVA volunteers to help revegetate areas in their neighbourhood and learn about their local flora and fauna in its natural habitat.

Over the ten days of the volunteer project and the Boral staff day around 2000 new trees were planted in the area.

Boral’s partnership with CVA is its longest standing community partnership and Boral is CVA longest corporate partner.

Below: Boral employees prepared and distributed care packages over the weekend to families in need in the flood affected areas.
BORAL’S iCARE PROGRAM

iCARE is a behaviourally based program relevant to everyone who is involved at a Boral workplace. It is designed to increase personal involvement and commitment to improving health and safety.

By Ross Dill, Group OH&S Manager.

Developed in-house by Boral, iCare has been benchmarked and compares favourably with best practice in a range of Australian and international companies.

It’s about behaving differently in the workplace so that we can reduce the number of incidents that result in injuries or near misses, and achieve our goal of Zero Harm workplaces.

The program has a number of elements that apply to all people at Boral workplaces:

1. Don’t start a job without assessing the risks associated with the job
2. Do engage in conversations and observations to positively reinforce safe behaviours, provide feedback, or when unsafe situations are identified
3. Do fully utilise the Standard Operating Procedures in the new 1Boral Safety Management System
4. Do use SiteSafe to record, manage and correct incidents, and
5. Do actively participate in meetings, discussions and talks regarding how to do work safely.

In addition to these elements, Managers and Supervisors need to:

1. Be a Role Model – intervene immediately if something unsafe is observed, never walk past an unsafe situation, behave consistently and predictably, match what you do with what you say
2. Prioritise Health and Safety – always put safety first, put safety ahead of production, ensure appropriate and adequate time, money and resources for managing safety
3. Proactively seek health and safety information in the workplace – seek information to confirm safety management processes are accurate, relevant and timely, follow up on action plans, ask questions and listen closely to responses, actively promote the implementation of Boral polices and initiatives, and
4. Build and maintain trust – give direct and honest feedback, match your behaviour with your words, have the capability and capacity to deliver on your words, demonstrate respect and integrity in all situations.

Awareness sessions have been conducted and training and resource material developed to assist implementation of the program. This material is available via the human resources tile on the Boral Intranet site.

iCARE is a program to assist individuals, groups and the business to achieve the goal of Zero Harm workplaces.

BORAL’S CHAIRMAN RECEIVES ORDER OF AUSTRALIA

Boral’s Chairman Dr Bob Every was recognised as an Officer in the General Division of the Order of Australia (AO) in the 2012 Australia Day honours list.

Bob was honoured for his “distinguished service to business, particularly through leadership roles in the Australian steel industry, as an advocate for corporate social responsibility, and to the community as contributor to educational, charitable and cultural organisations”.

Bob joined the Board of Boral Limited in 2007 and served as Deputy Chairman from 2009-2010 and was appointed Chairman of Directors in 2010. He is also the Chairman of Wesfarmers Limited and has held senior executive positions with BHP Limited before becoming Managing Director and Chief Executive Officer of OneSteel Limited.

He is the Chairman of the cancer charity Redkite and has been active in establishing scholarships and funding the construction of a new building for the School of Materials Science and Engineering at the University of New South Wales.

Mark Selway, Boral’s Chief Executive said, “This is a wonderful recognition of Bob’s contribution to Australian society and very well-deserved. Boral is fortunate to have someone of Bob’s calibre chairing the Board of Directors.”

Dr Bob Every AO, Chairman of Boral Limited.