

# Boral



It's *not business as usual* at Boral





Boral has undertaken a trial within its concrete transport fleet designed to cut fuel costs and abate greenhouse emissions. Five of the company's concrete agitators have been turned into "hippie trucks", using compressed natural gas technology (CNG), rather than diesel. Preliminary results reveal that fuel costs for the trucks involved have been cut by almost 60 per cent, while greenhouse gas emissions have dropped by more than seven per cent.

For more information see [www.boral.com.au/buildsustainable](http://www.boral.com.au/buildsustainable)

## Boral at a Glance

Boral is an integrated resource-based manufacturing company with strong upstream reserves and downstream market positions.

Boral's overriding objective is to 'achieve superior returns in a sustainable way' in a financial, social and environmental sense.

### Where we operate

We operate in Australia, the USA and in Asia. We have 717 operating sites and a further 148 distribution sites and offices across 12 countries.

### Our resources

Boral has long-term and well positioned hard rock, sand and gravel reserves as well as valuable limestone, shale, clay and gypsum reserves. Boral's access to timber resources are primarily through long-term supply agreements with Forests NSW.

### Our products

We produce and distribute a broad range of construction materials, including quarry products, cement, fly ash, concrete and asphalt; and building products including clay bricks and pavers, clay and concrete roof tiles, concrete masonry products, plasterboard, windows and timber.

### Our markets

We are generally number one or number two in the markets in which we operate. We have strong downstream market positions servicing building and construction materials segments, including new residential construction markets, non-residential markets and major infrastructure projects such as roads, highways, subdivisions and bridges.

### Our customers

Our customers include: developers, builders, architects, construction companies, government and councils and DIY consumers.

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### About this report

Welcome to Boral's fifth Sustainability Report for the year ending 30 June 2008. This report outlines our sustainability strategy, approach, goals and provides information on our performance.

Each year we have sought to improve our report to better address information on the issues most relevant to Boral and our stakeholders. We have responded to the feedback from our readers and made the following changes to this year's report:

- Boral's material issues and respective targets are outlined in Sustainability Priorities (p s4 – s5). These sustainability priorities are consistent with the sustainability issues covered by our internally developed Boral Sustainability Diagnostic Tool (BSDT).
- The Managing Sustainability section includes our management approach to Human Resources, Health and Safety and Environment which was previously included in the respective sections of the report (p s6 – s11).
- A brief overview of Boral is provided in Boral at a Glance.
- A table summarising Boral's key sustainability performance data is included (p s43).

The non-financial content of this report has been independently assured by Net Balance in accordance with the AA1000 Assurance Standard (p s42).

We welcome feedback on our sustainability progress and reporting either through the "Contact Us" link on our website [www.boral.com.au](http://www.boral.com.au) or by contacting Boral Corporate Affairs at [CorporateAffairs@boral.com.au](mailto:CorporateAffairs@boral.com.au) or (02) 9220 6300

## It's *not business as usual* at Boral

In 2008, several extraordinary factors have coincided to create a particularly challenging business environment. These challenges include a spectacular downturn in US housing activity; 40 year low levels in NSW housing activity; dramatic increases in energy and other input costs; record high levels of concrete demand in Australia; and, the approaching introduction of an emissions trading scheme in Australia.

These challenges have called for a clear set of business responses, with overlapping implications for our financial and sustainability plans. For example, our focus on alternative fuel use is driven by both cost benefits and emission reduction imperatives; our need to reduce fixed costs during market downturns directly impacts employees and in turn local employment; and, supplying record levels of concrete demand in Australia requires increased quantities of quarry materials which can have local community and environmental impacts.

Despite operating in a challenging business environment that is *not business as usual*, we have delivered solid performance outcomes.

- Lost time injury frequency rate down 11% to **2.5**
- Employee turnover up from 21% to **23%**
- Mains water consumption down 4.6% to **2.82 billion litres**
- Greenhouse gas emissions up 1% to **3.79 million tonnes** of CO<sub>2-e</sub>
- By-products and waste material re-used or recycled up 3.6% to **5.56 million tonnes**



“This past year has presented a number of challenges, it has not been *business as usual*. Despite this, we have progressed our sustainability programs and delivered a solid performance against target.”

## Message from the Managing Director

### Managing the business in a sustainable way

Working in a sustainable way or towards sustainable development requires balance. It's about balancing the social, environmental and economic needs of today with the needs of tomorrow. It's also about balancing the needs of our stakeholders. Not all of our stakeholders share the same point of view, but for us it's about understanding those views and ultimately working towards an outcome that we believe has the best chance of meeting today's needs without compromising the ability to meet the needs of tomorrow.

### It's not business as usual

This past year has presented a number of challenges, it has not been *business as usual*. Despite this, we have progressed our sustainability programs and delivered a solid performance against target. The most significant challenge has been the substantial deterioration in **housing activity in the USA** which has seen activity decline by 45% over the past two years. This has required us to mothball plants and significantly reduce the number of employees in our US operations. Over an 18-month period some 1,400 employees in our US brick business and MonierLifetile joint venture business have been affected.

As in the USA, **market conditions in Australia** also presented challenges during the year. On the one hand, the protracted housing downturn required us to continue temporary plant shutdowns in bricks and roof tiles, and following year end, we suspended production at two of our New South Wales timber mills. On the other hand, record levels of concrete demand around the country, driven by strong infrastructure and major project work, have seen sustained labour shortages in some regions and a relatively high employee turnover of 23%. The strong demand for construction materials has also required us to maximise capacity and expedite consents for resource extraction.

In Queensland, we have converted around 130 million tonnes of un-consented resources to additional consented resources over the past two years. These newly consented **quarry resources** are now available for extraction over the next decade or two, which is critical to satisfy growing development needs. Particularly in Queensland, Boral is now seen as the industry leader in terms of both our quarry resource positions as well as the implementation of effective stakeholder engagement strategies to secure and strengthen those resource positions.

But it's not always smooth sailing. In Victoria, we have been working for several years to extend the approved reserves at our 50-year-old Montrose Quarry. Our original application for extension was made in 1999 and, following an extensive process of stakeholder engagement, we revised our submission, increasing the proposed buffer zones and reducing the workable reserves by around 50% to address potential environmental concerns. We continue to believe that we can find a balance between the needs of the environment, the community and government on this project and those of our customers and shareholders. However, after considerable investment in a rigorous Environment Effects Statement (EES) and with an expectation that the community and government would review the application and fully assess the EES, the application was rejected by Yarra Ranges Shire Council with virtually no debate. Several months later, in June 2008, the State Government made a decision not to call in the application for an independent review. We are disappointed with this outcome. It highlights, however, the challenges faced by resource companies striving to secure and protect state-significant resource positions to cost-effectively supply future construction demand and at the same time trying to address community and environmental needs.

### Health and safety

Although **safety** can often be at risk of deteriorating when profits are under pressure, pleasingly we delivered an 11% improvement in lost time injury frequency rate (LTIFR) to 2.5 and an 11% reduction in hours lost. Plasterboard delivered an outstanding result of zero lost time injuries and hours lost.

Unfortunately, our overall safety performance was overshadowed by the tragic death of an employee in a heavy vehicle accident in South Australia. We were also disappointed that contractor LTIFR remained steady at 5.7 for the year, but our resolve is strong to bring contractor safety performance in line with employee performance and to eliminate all accidents, especially serious accidents that can result in fatalities.

### Climate change

In addition to managing the impacts of cyclical markets and balancing economic, community, environmental and employee needs across our 717 operating sites, the past year has required considerable focus on managing the physical and regulatory risks of climate change.

On the north coast of New South Wales and in Queensland extreme wet weather conditions slowed operations and construction activity during summer months. The region around our engineered flooring plant in Murwillumbah experienced floods, but we had anticipated the physical risk of increased flood activity in designing our new plant and as a result the plant was spared. In other regions around Australia, drought conditions persisted and we continued to focus on reducing our reliance on mains **water consumption**. Through enhanced on-site water capture and re-use, the implementation of recycling processes and generally more efficient use of water, we reduced our mains water consumption by 4.6% on a comparative basis to 2.8 billion litres.

### Managing emissions and emissions trading

The move to a carbon emissions trading scheme (ETS) in Australia has been gathering significant pace. Whilst Boral supports the move towards a lower CO<sub>2-e</sub> global economy, and as such, the adoption of relevant policies by the Australian Government, we have been very busy lobbying the Government both directly and through industry associations, around specific design aspects of an ETS.

Any scheme will impact the way we price our products, how we invest our capital, how we compete with domestic and with offshore competitors, and ultimately how we abate our emissions. For Boral, the most critical issue is to ensure that the cement industry is acknowledged as an emissions-intensive trade-exposed industry and that its competitiveness is preserved following a move by Australia to introduce an ETS for the industry ahead of Australia's key trading partners adopting similar carbon trading regimes.

The Australian cement industry is relatively environmentally efficient, with total emissions intensity per tonne of cement, including blending, currently 0.77 tonne of CO<sub>2-e</sub> per tonne of cement. This compares to 1.10 tonne of CO<sub>2-e</sub> per tonne of cement for cement imported from China. It is critical that there are mechanisms in place to ensure that domestically produced materials do not have to bear much greater "costs of carbon" than imported materials, so that Australia's industry is not forced offshore, taking its emissions with it.

In its Green Paper on an Australian Carbon Pollution Reduction Scheme, the Federal Government proposes to provide assistance to the most heavily intensive trade-exposed activities through a free allocation of 90% of their required permits. The Federal Government has also proposed to limit the total amount of free permits to a level of 30% of the national cap. We are concerned about the possible reduction in the level of free permits allocated to the trade-exposed, emissions-intensive industries over time and the impact this will have on the competitiveness of Australia's cement manufacturing. This impact will of course be exacerbated by the inevitable increase in the cost of permits over time. We recognise the challenge that the Government has in designing an effective scheme that encourages the required emissions reductions but does not create unintended economic impacts and "carbon leakage" offshore.

There are many views on how a scheme could best balance often competing environmental and economic demands. The Business Council of Australia in its paper: *Modelling Success: Designing an ETS that works*, has called for the provision of full compensation to trade-exposed emissions-intensive industries for emissions above a threshold of emission costs of 3-5% of value add (profits plus labour) until comparable carbon constraints are introduced for

competing economies. This option ensures Australian business shares the economic burden but does not unfairly disadvantage business or the economy as we introduce an ETS ahead of trading partners.

In addition to lobbying Government to protect Australia's cement industry, we have also been actively involved in discussions with Government to make sure that we have an efficient, cost-effective and meaningful National Greenhouse Emissions Reporting System.

Internally, we continue to develop our climate change strategies. Boral's Energy & Climate Change Technical Working Group continued to coordinate and monitor activities across the Company, reporting regularly to the Management Committee and Boral's Board. This year we recorded 3.79 million tonnes of greenhouse gas emissions from Boral-owned operations, which was a 1% increase on the prior year on a comparative basis. Whilst emissions from our US business and in Clay & Concrete Products in Australia decreased due to lower production volumes, emissions from construction materials operations in Australia increased due to market demand growth.

Our current goal is to at least hold absolute emissions steady and to offset any increase in emissions associated with market demand growth by reducing the emissions per tonne of production. Whilst it is early days, our forward projections estimate that Boral's emissions could increase from current levels of 3.8 million tonnes to around 4.6 million tonnes per annum by 2020, assuming that our business grows in line with expected market demand growth. We have, however, identified around 35 major prospective abatement projects across Boral that could be viable, depending on the cost of carbon and available technologies. These longer-term aspirational plans focus on renewable energy, carbon capture and

storage, and possibly a timber plantation strategy. Together these abatement projects could significantly reduce our 2020 carbon emission level compared to "business as usual". Whilst we await the Government's White Paper, we are continuing to work on the "low hanging fruit" across the divisions, including energy efficiency gains and increased use of alternative fuels and materials.

### Managing waste

Substitution of virgin material with **waste** or by-product materials that need less processing is one way we are reducing the emissions intensity of our products. It is also helpful because we are reducing the amount of waste material going to landfill and reducing our use of virgin quarry reserves. Over the past year we re-used or recycled some 5.6 million tonnes of our own or other people's waste or by-products, which is a 4% increase on last year. Opportunities for further use of recycled or waste materials in Boral products continue to be explored in a number of innovation initiatives currently underway.

I hope that this 2008 Sustainability Report helps our stakeholders to better understand the challenges that we face and how we are responding to those challenges. We welcome your feedback on specific issues and general performance.



**Rod Pearse** CEO and Managing Director

The Boral Sustainability Diagnostic Tool (BSDT) was developed in 2000/01 and subsequently refined in collaboration with an independent sustainability expert and with reference to the Global Environmental Management Initiative (GEMI), the Global Reporting Initiative (GRI) and the Social Venture Network.

## Sustainability Priorities

The Boral Sustainability Diagnostic Tool (BSDT) assists Boral and its operating businesses with the adoption of business practices consistent with the principles of sustainable development. In 2007, a number of refinements were incorporated, reflecting recent developments that have occurred in the overall understanding and application of sustainability principles and how these apply to Boral. The BSDT comprises 20 sustainability elements. The first seven elements which focus on "Sustainability Management" are covered on page s7. The next 13 elements, which are outlined in the table below, are considered to represent Boral's sustainability performance. A performance assessment against each element is undertaken across Boral's businesses every two years, with performance graded Level 1 (compliance/reactive), Level 2 (proactive), Level 3 (industry-specific best practice), or Level 4 (world's best practice) for each element. We aim to reach and sustain a standard of industry-specific best practice (Level 3). The latest BSDT assessments were completed in October 2007 with an overall score of 2.95 being achieved.

	Our goals/targets	Our performance in FY2008	Current BSDT score	
Human Resources	<b>Health, safety and wellbeing</b>	25% improvement in LTIFR and % hours lost for employees and LTIFR for contractors over the average results for prior three years Zero fatalities	Employee LTIFR of 2.5, down 11% on FY07 (down 26% on past three year average) and % hours lost of 0.08 improved by 11% on FY07 (down 23% on past three year average) One fatality	2.9
	<b>Employee and labour relations</b>	To have the best people in our industries To maximise workforce satisfaction, productivity and retention	91% of employees are engaged or highly engaged, up 1.5% Obtained 2008 EOWA Employer of Choice for Women status Staff turnover 23% up from 21%	3.0
	<b>Communications, awareness and training</b>	To ensure our people have the appropriate training, knowledge and skills to deliver on our sustainability objectives	2,494 employees participated in training programs offered through Boral's global learning teams	3.0
Environment	<b>Energy conservation and climate change</b>	Reduce emissions per unit and offset Boral's increases in absolute emissions as a result of market demand growth	CO <sub>2-e</sub> emissions up 1% <sup>1</sup> on last year to 3.79 million tonnes	2.8
	<b>Water conservation, extraction and protection</b>	Reduce mains water consumption	Mains water used down 4.6% <sup>1</sup> on last year to 2,820 million litres	2.9

	<b>Waste and resource management, recycling and re-use</b>	Minimise waste from our operations and increase waste re-used and recycled	Re-used or recycled between 43% and 100% of Boral's operations' production waste Estimated 5.6 million tonnes of waste and by-products recycled or re-used up 4% on FY07	3.0
	<b>Land protection, remediation and rehabilitation</b>	Where possible, rehabilitation is part of ongoing resource extraction operations  Remediate contaminated sites to standards internationally acceptable for the site purpose	Ongoing maturing of quarry end use activities, eg Deer Park quarry landfill operation, now a waste business with a landfill gas offtake Majority of contaminated sites completed by 2003	3.0
	<b>Environment and ecosystem protection</b>	Protect and, where possible, enhance biodiversity values at and around our facilities	15,050 trees/stems planted and 63,700 m <sup>2</sup> weeded and regenerated through Living Green Projects	2.9
Social Responsibility	<b>Community relations and engagement</b>	Maintain the support and goodwill of communities surrounding Boral's activities through engaging and consulting on relevant issues  Make a meaningful contribution to the social and economic wellbeing of our communities while providing value to our operations through support of business objectives	Formal community consultation at key operational sites \$591,500 invested in eight key community programs \$443,000 to Juvenile Diabetes Research Foundation through employee fundraising efforts in Australia and the USA 608 volunteer days across 14 conservation projects	2.9
	<b>Business ethics and corporate governance</b>	Boral companies and employees must observe both the letter and spirit of the law and adhere to high standards of business conduct and strive for best practice	1,550 staff undertook online Trade Practices Act training in Australia and 902 staff attended face to face training 1,739 employees in the US completed Ethics and Compliance online training 97 employees dismissed for serious breach of policy	2.9
	<b>External relations and communications</b>	Understand stakeholders' views on Boral's sustainability priorities and performance and take stakeholder views into account  Provide information back to our stakeholders on sustainability matters	Participated in the Carbon Disclosure Project (CDP6) Government submissions and dialogue on emissions trading and GHG inventory reporting Feedback from key stakeholder groups on our 2007 Sustainability Report used to improve this report	3.0
Marketplace and Supply Chain	<b>Strategic sourcing and supply chain</b>	Manage Boral's supply chain in a sustainable way including consideration of environmental, health and safety, and social standards	Supply Chain Sustainability Survey for all strategically critical suppliers implemented Midland Brick awarded 2008 HIA GreenSmart award for Resource Efficiency (for brick recycling from customers' sites)	2.8
	<b>Sales and marketing</b>	Provide customers with better value and service than our competitors  Consult and collaborate with customers in the development of sustainable products	Participated in the development of product life cycle analysis Perception study of 682 consumers shows a 28% increase in the number of people who perceive Boral to be "environmentally responsible"	2.7

Target 3.0

<sup>1</sup> For Boral's fully owned businesses in Australia, the USA and Asia on a comparative basis.



Underpinning Boral's objective of "superior performance in a sustainable way" is a robust corporate governance framework and management system.

## Managing Sustainability

Boral's Board of Directors is accountable to shareholders for appropriately overseeing all aspects of Boral's business, including sustainability matters. The Company's corporate governance practices and frameworks provide the means by which the Board monitors performance on behalf of shareholders.

Boral's Values, policies and operating frameworks provide guidance to its businesses and line managers in managing their operations in a sustainable way.

### Corporate governance

Details of Boral's governance framework and practices are disclosed in the **Corporate Governance** section of the **Annual Review** (p 32 – 37) and on our website. Responsibilities of Boral's Board which relate to sustainability are:

- oversight of the Company, including its conduct and accountability systems;
- reviewing the performance of the chief executive officer and senior management;
- reviewing and verifying systems of risk management and internal compliance and control, codes of conduct and legal compliance;

- reviewing sustainability performance and overseeing occupational health and safety and environmental management performance;
- meeting legal requirements and ensuring that the Company acts responsibly and ethically and prudently manages business risks and assets; and
- remuneration policies and practices for Boral and the remuneration arrangements for senior executives.

Executive General Managers, heads of functional departments and the Managing Director regularly report to the Board on progress and performance as it relates to health and safety, climate change and broader aspects of environmental and community management, human resources and risk management.

### Management responsibility

Boral's Management Committee, which comprises Boral's Managing Director, divisional Executive General Managers and functional General Managers, is responsible for delivering Boral's sustainability objectives.

Day-to-day management of sustainability matters is integrated into line management. Specialists in health and safety, environmental services,

corporate affairs and human resources provide advisory support and corporate functions. Sustainability matters are also integrated into individual managers' objectives, which are linked to variable remuneration outcomes.

Since January 2007, an internal Energy and Climate Change Technical Working Group (ECCTWG) has been in place to make recommendations and advise the Management Committee on technical issues relating to climate change matters. The ECCTWG reports back to the Management Committee on at least a bi-monthly basis. Work undertaken by the ECCTWG is discussed on page s20.

### Our Values

Boral's Values describe how we do things at Boral and influence our day-to-day business activities. Our Values are: Leadership, Respect, Focus, Performance and Persistence. Our corporate Values are referred to in our Strategic Intent to reinforce their ongoing importance in Boral.

We know that our Values are being adhered to by observing people's behaviour. Our Values are incorporated into annual performance reviews to assess behaviour or workplace style and effectiveness. Examples of expected

### Boral's Values

#### Leadership

Creating and contributing to an environment in which our people can excel through a management style that is participative, encouraging, demanding and supportive.

#### Respect

Ensuring the impact and integrity of our operations and actions on employees, customers, the communities and environment in which we operate, meet both the spirit and letter of the law and community expectations.

#### Focus

Making critical choices on priorities, making timely, insightful fact-based decisions, and being determined to pick the right things and do them well.

#### Performance

Getting on with the job, setting challenging goals and standards, measuring results, providing honest feedback on individual contribution and rewarding achievement.

#### Persistence

Striving to be the best at what we do, being relentless in our pursuit of improvement and of increasing targets, never being satisfied with the status quo.



behaviour are provided for managers to ensure a common understanding of Boral's Values across the organisation.

### Our policies

The Boral Management Guidelines contain our formal **Code of Corporate Conduct** and 52 policies and guidelines setting out legal and ethical standards for employees. Our Code of Corporate Conduct articulates the standards of behaviour that are expected of Boral companies and employees in the performance of their duties. The Boral Management Guidelines were extensively reviewed in 2007 as part of a triennial review process.

### Boral Sustainability Diagnostic Tool (BSDT)

The background and purpose of the BSDT, as well as the latest scores for the 13 performance elements of the BSDT, are outlined on pages s4 – s5.

The BSDT assessment process serves to reinforce acceptable standards, train managers in "best practice" requirements and identify areas of weakness. The BSDT is used to monitor progress and set improvement targets.

The latest 2007 assessment process was undertaken with an external sustainability expert. A total of 57 BSDT assessments were completed across our operations in Australia, the USA and Asia.

During 2008, the criteria outlined for each BSDT performance level (scores of 1 to 4) will be independently verified by Net Balance to ensure it is consistent with best practice. It is proposed that the next BSDT assessments in 2009 will also be independently verified.

The approach of Boral's businesses to managing sustainability is assessed based on the first seven elements of the BSDT. These seven elements are:

- Scope of commitment;
- Management systems;
- Accountability and performance management;
- Budgeting and financial management;
- Risk management – new business and/or new development, plant, equipment;
- Compliance review and reporting; and
- Continuous improvement.

Our target is to reach and maintain a standard of industry-specific best practice (BSDT score of 3).

The BSDT scores and some of the requirements to achieve an industry best practice score of 3 for each of the first seven elements are included in the accompanying table.

### Our management approach to our people

Most of our Human Resources (HR) activities are managed within Boral's divisional management structures, including: performance management and development plans; employee surveys; employee relations; organisational effectiveness reviews; divisional HR planning; recruitment and induction management; and maintenance of employee records.

Boral's line managers play a significant role in the HR processes on a daily basis. Boral has 55 specialist HR staff working within Boral's divisions, most of which are actively involved in business management processes to ensure appropriate support is provided to line managers to achieve business plans and objectives.

To achieve an industry specific best practice score of 3.0, Boral's businesses taken together should be able to demonstrate that the following goals have been achieved:

BSDT element	Our goals	Latest BSDT score
Scope of commitment	<ul style="list-style-type: none"> <li>• Measurable sustainability targets are incorporated for all aspects of the business into business plans</li> <li>• Drivers for sustainability are identified through analysis of products and services</li> </ul>	3.2
Management systems	<ul style="list-style-type: none"> <li>• Stakeholder input is used in the assessment of effectiveness of management systems</li> <li>• All management systems undergo regular independent review</li> </ul>	2.9
Accountability and performance management	<ul style="list-style-type: none"> <li>• Managers' performance assessments and rewards systems are linked with sustainability objectives</li> </ul>	3.0
Budgeting and financial management	<ul style="list-style-type: none"> <li>• Business plans, budgets and reports include substantial detail on sustainability performance</li> </ul>	3.1
Risk management	<ul style="list-style-type: none"> <li>• Sustainability risks are considered in decision making</li> </ul>	3.0
Compliance review and reporting (CRR)	<ul style="list-style-type: none"> <li>• Sustainability performance is regularly reported externally</li> <li>• CRR is integrated with performance management and business planning systems</li> </ul>	3.1
Continuous improvement	<ul style="list-style-type: none"> <li>• Plans and processes are reviewed regularly to incorporate new technologies and best practice</li> </ul>	3.1

Target 3.0

# Managing Sustainability

A small corporate HR team provides an advisory and support service to the divisions as well as managing centralised HR activities such as: superannuation; remuneration reviews and incentive schemes; learning and organisational development; health and safety direction; and workers compensation.

The corporate function also plays a governance and assurance role for HR processes and behaviours and is responsible for: Boral-wide policies; succession planning; coordinated programs such as MBA and graduate recruitment; indigenous employment; management of expatriates; and HR planning for the Boral Group.

HR strategy is developed at a divisional level and communicated through to the Board via divisional strategic plans on an annual basis.

Incorporated into the Boral Management Guidelines is a series of HR policies and guidelines including policies on Diversity, Employee Complaints, Harassment, Induction, Leave and Performance Management.

## Our management approach to health and safety

In line with our Value of Respect, Boral is committed to providing safe and healthy working conditions for all people involved in our business including contractors, visitors and the general public. We place the same level of importance on managing safety in partly owned businesses, such as joint venture operations which are not managed directly by Boral, as we do on fully owned operations.

We require all contractors to comply with Boral's health and safety requirements and they are also subject to Boral's internal audit program.

Across Boral's businesses, there is an emphasis on all managers demonstrating commitment and leadership – on being role models by doing what is right and not what is expedient. This encourages our employees to take personal responsibility for health and safety issues and to share information.

### Responsibilities

Over 90 full-time equivalent health and safety professionals work in our divisions. In addition, Boral has a corporate health and safety function that provides advice and support to divisions. The corporate function assists in safety management planning and Boral-wide or cross-divisional initiatives and reporting systems.

### Management system

Boral's Health and Safety Management System is designed in accordance with the scope and diversity of Boral business function. We have over 15,928 employees and some 5,700 contractors working across 717 operating, administration and distribution sites globally, some accommodating as many as 700 people and others with as few as two employees. Many of our contractors and some employees also work beyond Boral's own sites – our truck drivers, roof tilers, plasterers, concrete placers and asphalt crews work on our customers' residential, commercial and infrastructure projects.

Boral's Health and Safety Management System articulates the minimum requirements to ensure consistent practice across Boral's businesses

whilst enabling each division and business unit to develop Health and Safety Management Systems that address their individual requirements.

Our Health and Safety Management System embodies the requirements contained within Australian Standards 4801:2001 and 4804:2001.

Boral has a formal **Health and Safety Policy**, which applies across all of Boral businesses. The policy states our fundamental commitment to providing safe and healthy working conditions for all people involved in our operations, including employees, contractors, visitors and the general public, and how we work towards meeting that commitment. The policy is displayed at all Boral worksites and posted on our intranet and website.

**Boral's Best Practice Elements (BPEs)** are a key component of the Health and Safety Management System. BPEs are designed to enable each business to develop health and safety processes that address individual requirements while ensuring industry best practice in critical safety areas across the organisation. Boral's BPEs (shown in Figure 1), together with divisional health and safety management systems, cover all aspects of health and safety management which are currently required by legislation and Company policies, and cater for those likely to become of concern in the future. Boral's BPEs were last revised and updated in 2005/06.

**Boral's High Consequence Protocols** set out rules and procedures to manage specific hazards that are associated with serious injuries and fatalities. Boral's high risk hazards include mobile equipment; equipment safeguarding; isolation of plant

**Boral's Health and Safety Management System**, which is built on a foundation of solid corporate policies, standards and procedures, provides for the diversity and geographic spread of Boral's operations, and ensures accountability at the site level.



and equipment; and working at heights. These protocols are integrated into Boral's Health and Safety Management Systems.

*Accountability and performance management*

Boral's BPEs define required levels of accountability and responsibility for safety performance. Individual management accountabilities are linked to strategic plans with performance measured and linked to managers' variable remuneration.

A component of Boral's Managing Director's and Executive General Managers' variable remuneration is also linked to safety performance.

*Compliance review and reporting*

The corporate health and safety team undertakes formal reviews of divisional performance, reporting back to the Management Committee and the Board on a regular basis.

In addition to business-level reporting, the following internal reporting takes place:

- Divisional management teams present their health and safety plans to the Board annually.
- On a monthly basis, the Management Committee reviews employee and contractor safety performance including serious and potentially serious incidents.
- Safety results and updates are reviewed monthly by the Board of Directors.

Executive General Managers and business managers meet with the Board as soon as practicable to discuss and review all Boral-related accidents involving fatalities.

Boral's health and safety audit program includes corporate reviews against Boral's BPEs as well as a range of independent third party audits and assessments. A range of assessments are completed throughout Boral's businesses each year, including the following types of audits and assessments:

- assessments of electrical safety management;
- management systems audits;
- physical hazards audits;
- audits of contractor safety management; and
- audits against safety programs.

*Continuous improvement*

Boral's BPEs require continuous improvement in health and safety performance. Essential components of continuous improvement in safety outcomes are: engagement of Boral's people, communication and training.

Engagement is aided by behavioural safety programs which focus on changing employee/contractor behaviours and include such activities as "safety conversations". Hazard identification and corrective actions are closely monitored and communicated to ensure targeted corrective actions are taking place within targeted time periods.

Communication and consultation with our employees on health and safety is achieved through safety committees at larger sites and via managers consulting directly with their people at smaller sites. Boral has some 60 formal health and safety committees, with approximately 90% of Boral's workforce represented on these joint management-employee committees. Safety committees take on a number of roles including hazard identification, monitoring corrective actions, reviewing safe working practices, and overseeing health, safety and ergonomic considerations before purchase of materials and equipment.

Divisional safety alerts are broadcast to communicate serious accidents, near misses and corrective actions.

In some cases where cross-divisional learning opportunities exist, particularly in relation to serious and potentially serious accidents, safety alerts are communicated throughout Boral. Responsibilities are assigned against corrective actions to ensure tracking and monitoring through to completion.

Boral has a health and safety leadership training program and site-specific safety training programs for employees and contractors which include consultation, risk management, safe work practices, emergency procedures and first aid.

Boral's divisions maintain staff training registers, which are monitored to ensure ongoing training needs are met.

**Our management approach to environment**

*Responsibilities*

Most environmental responsibilities are managed within Boral businesses with over 25 full-time equivalent environmental professionals working across Boral's divisions.

Boral also has a corporate Environmental Services department which consists of five full-time environmental professional staff. This department provides advisory support services to all divisions globally and undertakes a governance role, including auditing the businesses, reporting back to divisional management, the Managing Director and the Board.

*Management system*

Boral's approach to environmental management is to develop business level environmental management systems based on corporate standards. Boral's Environmental Management System (EMS) is based on the International Standard ISO14001 "Environmental Management System – Specification with guidance for use".

Figure 1  
**Boral's health and safety Best Practice Elements (BPEs)**

**Planning**

- Planning and performance indicators

**Implementation**

- Leadership and commitment
- Acquisitions, modifications and divestments
- Risk management
- People and training
- Contractors and suppliers
- Employee involvement
- Communication
- Health and safety assurance and work environment
- Systems and procedures of work
- Health management
- Emergency preparedness and response
- Corrective and preventative action

**Measurement, evaluation and management review**

- Auditing and performance review

**Boral's Environmental Management System**



## Managing Sustainability

Boral has a formal **Environmental Policy**, which applies across all of Boral's businesses. Our Policy states that we are committed to pursuing industry-specific best practice in environmental performance. More specifically, we are committed to:

- reducing GHG emissions from our processes and facilities;
- protecting and, where possible, enhancing biodiversity values at and around our facilities;
- remediating our contaminated sites;
- complying with environmental legislation; and
- continual improvement of our performance with regard to energy, water, waste, pollution and the use of virgin materials.

Boral's **Environmental Management Procedures** include tools to be used by Boral businesses to develop and implement their own EMS, as set out in the Boral Environmental Policy and include EMS System Procedures and Environmental General Procedures.

The EMS System Procedures are designed to interpret ISO14001 for Boral users, while the Environmental General Procedures are designed to set out Boral's particular operational requirements, to assist Boral's businesses to develop and maintain their own EMS.

Boral Roofing at Wyee and our cement facility at Waurn Ponds maintain formal ISO14001 certification. Boral's largest Division, Australian Construction Materials, has also developed an ACM specific EMS which is currently being rolled out across the regional businesses.

Audit and assurance programs are an important part of Boral's EMS. Details of Boral's environmental audit and assurance programs undertaken during 2007/08 are outlined on page s18.

*Budgeting and financial management*  
Environmental strategic plans are prepared annually by each of Boral's operating divisions and reviewed and approved by the Managing Director and Boral's General Manager, Environmental Services.

These plans have a one- and five-year outlook, focus on priority areas covered in Boral's Environmental Policy as well as those areas of importance specific to individual businesses, and include targets and action plans.

*Compliance review and reporting*  
The corporate environmental services team undertakes formal reviews of divisional environmental performance, reporting back to the Management Committee and the Board on a regular basis.

Improved collection and management of environmental data, particularly energy/ GHG emissions, water and waste, has been a focus across Boral's businesses in recent years. Independent verification of environmental data, which has also been a focus, takes place as part of Boral's annual sustainability reporting as well as a number of government water, energy and emissions schemes.

*Continuous improvement*  
Environmental training and communication are integral to continued improvement in environmental management and performance. Details of Boral's environmental training programs during FY2008 are covered on page s18.

Internal communication on environmental best practice is achieved through a number of channels:

- Boral hosts an annual internal two-day environmental conference for some 45 employees to share environmental best practice learnings across the Company.
- Boral's annual Awards for Excellence include an Environment and Community award which recognises best practice across the organisation.
- Success stories and environmental updates are communicated through an internal quarterly environmental newsletter as well as Boral in the News and Boral's intranet.

### External sustainability measures

Boral was awarded a "Commendation for excellent report structure" in the 2007 **Association of Chartered Certified Accountants' (ACCA)** awards for sustainability reporting.

At the 7th **Australian Sustainability Awards** in November 2007, Boral received the Special Award for Corporate Governance. Boral was recognised for having good governance that leads to sound, sustainable business practices.

Boral took a leave of absence in the Corporate Responsibility Index (CRI) in 2007 after achieving Gold star rankings in 2005 and 2006. Boral has participated in the annual voluntary, non-prescriptive framework for corporate responsibility in Australia and New Zealand since it commenced in 2003 and will continue in 2008. The CRI is a project of St James Ethics Centre and validated by Ernst & Young.



7TH AUSTRALIAN  
SUSTAINABILITY AWARDS



FTSE4Good



## Developing our leaders in a developing country

Over the past four years, Boral's Indonesian construction materials business, Jayamix, has worked persistently to improve its business culture. Focusing on management systems and training, a culture now exists where people are aware of their safety and environmental responsibilities and work in cross-functional teams to produce the required results. Jayamix has moved forward in systematically developing and training its leaders including in environmental management.

The business expects to receive full accreditation to the ISO9000 quality standard in 2008 as a result of its improved management systems. The success of this journey has also been demonstrated in FY2008 by the outstanding safety results achieved:

- One LTI compared with six in the prior year and eight in FY2006.
- LTIFR of 0.31 compared with Boral's overall result of 2.5.
- Percentage hours lost down from 0.04 to 0.02, compared with 0.08 for Boral overall.

Despite these strong results, which have been better than expected, Jayamix acknowledges it still has a long way to go in its safety and sustainability journey.



Boral has been included in the **FTSE4Good Index** since March 2005, demonstrating that we continue to satisfy the FTSE4Good independent selection criteria. The FTSE4Good is an equity index series, created by the global index company FTSE Group, which has been designed to measure performance of companies that meet globally recognised corporate responsibility standards, and to facilitate investment in those companies. Companies included in the index must meet stringent and evolving social, environmental and ethical criteria.

In 2007, Boral was named as Best in Class by **Storebrand Investments SRI** for environmental and social performance in the global construction materials industry.

Since 2006, Boral has participated in the **Carbon Disclosure Project (CDP)** and has been included as one of 15 members of CDP's Climate Disclosure Leadership Index (Aus-NZ), comprising the best responses among ASX 100 and NZX 50 companies. CDP is the most comprehensive survey regarding the potential impacts presented by climate change and is sponsored by international institutional investors with a combined \$57 trillion of assets under management.

## Ethical standards and compliance

Boral's **Code of Conduct** states that Boral companies and employees must observe both the letter and spirit of the law and adhere to high standards of business conduct and strive for best practice.

We take adherence to legal and ethical standards seriously, with 97 Boral employees dismissed during 2007/08 for serious breach of policy.

Boral's employees have access to a whistleblowing service known as FairCall to report possible fraud, illegal acts or misconduct. Calls made via the FairCall hotline are received by an independent service provider, KPMG, which then provides this information to appropriate Boral senior management. Outcomes are reported back to Boral's Audit Committee. FairCall has been in place since 2001 and during 2007/08 10 calls making new allegations to the FairCall hotline were logged resulting in investigations.

Boral supports the Australian Government's commitment to the global fight against corruption and to raising public awareness about the foreign bribery offence under Australian Criminal Law.

In addition to our Code of Conduct and FairCall whistleblowing services, we have formal policies in place that relate to offering or accepting bribes, kickbacks or gifts. They include our

Gifts, Entertainment and Financial Inducements policy, Business Expenses policy, and Government Relations policy. These policies apply to all of Boral's operations globally. Induction programs for new managers and ongoing annual performance reviews are used for training and discussion around these matters.

In addition, internal risk management processes include consideration of "high risk" countries<sup>1</sup>. In summary, Boral's policies and/or compliance systems:

- prohibit Boral's businesses, and agents acting on our behalf, from giving and receiving bribes;
- commit to obeying all relevant laws;
- restrict and ensure controls around political donations;
- restrict and ensure controls around facilitation payments; and
- restrict the giving and receiving of gifts.

Boral's joint venture business, Lafarge Boral Gypsum Asia, which operates in countries including those earlier identified as "high risk" countries, is a 50/50 joint venture with Lafarge SA. Lafarge is a large French multinational company which comprehensively discloses information on its policies and practices, including those in relation to its Code of Business Conduct and bribery and corruption. Refer to [www.lafarge.com](http://www.lafarge.com) for more information.

Boral derives around 3% of revenues from "high risk" countries.

<sup>1</sup>"High risk" countries identified by the FTSE4Good Index include the following countries in which Boral operates: Indonesia and Thailand (and through joint ventures in China, the Philippines, India, Vietnam, Mexico and Trinidad).



We recognise that our people are our most valuable assets. We aim to 'have the best people in our industries', to provide a safe and healthy working environment and to ensure our people have the appropriate training, knowledge and skills to deliver on our objectives.

# Our People

To "have the best people in our industries", it is essential that we attract, develop, engage and retain the best people at all levels. Our HR strategies are geared towards meeting our internal needs and addressing external challenges. The external challenges that we face include continued low unemployment and skills shortages in Australia, and an ageing workforce, resulting in a high employee turnover and in some businesses difficulty finding suitably experienced candidates. On the other hand, our USA operations have been impacted by a significant deterioration in market conditions, resulting in a loss of around one-third of the workforce over the past two years, including joint venture employees.

We are committed to providing a healthy and safe work environment as evidenced by our ambitious continual improvement in safety targets. This year we are pleased to have exceeded our overall LTIFR target for employees, and also delivered an exceptional zero LTIFR in our Plasterboard division, which is testament to strong leadership in safety and systematic processes in place.

## Our workforce

As at 30 June 2008, Boral had 15,928 full-time equivalent employees, compared with 16,194 last year. A decrease in employee numbers in building products businesses in the USA, due to the significant market downturn, was partly offset by higher employee numbers as a result of the acquisition of construction materials businesses in Oklahoma in August 2007.

Around 36% of Boral's employees work in our offshore operations.

In addition to our permanent Boral workforce, there are around 3,400 people working in joint venture operations in Australia, the USA and Asia, and we engage around 5,700 full-time equivalent contractors in a range of activities including transport operations, contract maintenance, roof tiling, plasterboard installations, concrete placement and various professional services such as finance and information technology.

## Employee turnover

Staff turnover in Australia during 2007/08 was 23%, which is in line with the prior year. The sustained high turnover reflects the continued tight labour market, particularly in Western

Australia, where the resource boom is resulting in a very competitive skilled labour market. Staff turnover in the USA was 29%, up from 24% in the prior year, reflecting the protracted US housing downturn. In Asia, turnover was 20%.

During 2007/08, our turnover rate was highest for employees under the age of 30, with 35% of this age group ceasing their employment with Boral. Despite only 19% of current employees being under the age of 30, Boral's businesses are focusing on developing retention strategies for younger employees.

Absenteeism for Boral's Australian operations in 2007/08 was 2.3%, which is broadly consistent with last year.

The average length of service of employees in Australia decreased to 7.8 years, from 8.4 years last year. In the USA, average length of service increased to 10.2, while in Asia, average length of service increased from 4.3 to 4.6 years. The proportion of all Boral employees with 11 or more years of service was down marginally this year to 26%, from 29% last year.

Figure 2  
Employees by region

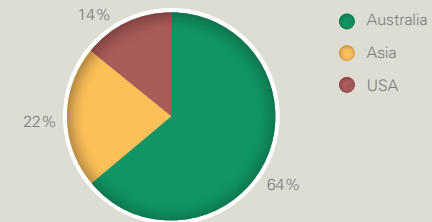


Figure 3  
Employees by division

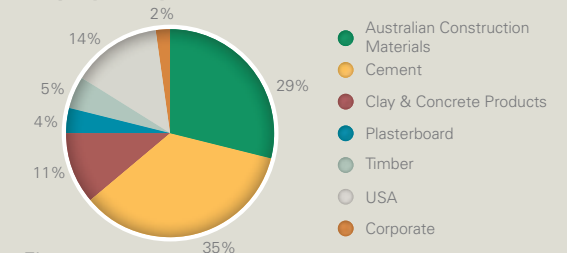
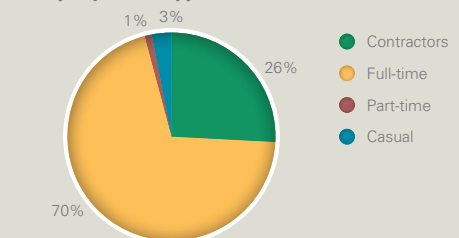


Figure 4  
Employment type



## Diversity

Boral has a formal Diversity Policy which states our commitment to operating in a manner that exhibits respect for differences among employees, as well as customers and communities. Diversity is the variety of skills, abilities, experiences and cultural backgrounds that enable people to achieve superior business and personal results. We understand that diversity brings many benefits and are increasingly encouraging greater diversity within our workplaces.

Women represent 13% of Boral's employees at 30 June 2008, which is consistent with our industry sector, and compares with 12% in the prior year.

Women occupy 67% of clerical positions and 31% of sales positions. In contrast, men account for 97% of Boral's trade and plant/transport roles. Women occupy 9% of Boral's management positions, which is consistent with last year.

In 2008, Boral was recognised as an Employer of Choice for Women by the Federal Government's Equal Opportunity for Women in the Workplace Agency (EOWA). The Employer of Choice for Women status recognises Boral's initiatives to create equity for women, and among other things, that its recruitment and promotion processes are merit-based and transparent.

Some of Boral's initiatives, which contributed to this recognition as an Employer of Choice for Women, include: Boral's parental policy, "Springboard for Women" training program and other Boral training programs; Boral's Health and Wellness Program (BWell); our family friendly programs such as Boral's Outward Bound Family Re-Discovery program; the Boral Employee Assistance

Program (BEAP); our community partnership activities; as well as our Indigenous employment and community relations programs.

Boral has had an Indigenous Employment Strategy since 2003 as part of its commitment to the employment of Aboriginal and Torres Strait Islander people. In partnership with the Federal Government's Corporate Leader Program, and managed by the Boral Indigenous Employment Manager, this strategy has seen a continual increase in the number of Indigenous people applying for and being successful in obtaining jobs with Boral. Currently, Boral has a Structured Training and Employment Program (STEP) in place with the Federal Government (DEEWR) with the aim of employing 50 new Indigenous employees in current vacancies before 2009. Boral has also agreed to support the NSW Government's Aboriginal Job Compacts which is an initiative aiming to improve employment outcomes for Indigenous people in Dubbo, Tweed Heads, South Western Sydney, Eastern Sydney and Western Sydney. As part of this strategy Boral is committed to better connect with local Aboriginal communities, schools and TAFE Colleges to assist in improving community awareness of local employment opportunities. Through these programs 25 Indigenous people have been recruited into the Company in 2007/08 and another 13 are working indirectly as Boral contractors.

Boral also works extensively on the retention of Indigenous staff through Aboriginal Cross Cultural Training, establishment of a mentoring program for Indigenous staff and better community relations with their local Indigenous communities. This year, Boral sponsored Indigenous trainees in plasterboard installation at Worimi Land Council in

conjunction with Hunter TAFE and is currently in the process of sponsoring a group of Aboriginal student leaders from Western Sydney high schools on an Outward Bound Leadership Program.

## Personal development and training

An important part of Boral's people strategy is to ensure our people have the right skills and capabilities to perform their jobs and develop their careers. We use a range of methods to train and develop our people, spanning from on-the-job training through to leadership development programs.

In general, on-the-job training and competency-based training for operational and front-line employees as well as contractors is managed within Boral's divisions. Boral's learning and direction and support for the development of Boral's managers and future leaders is provided by Boral's Organisational Development team.

During 2007/08, 2,494 employees participated in a comprehensive range of training programs offered through Boral's global learning teams. 228 employees in Australia, Asia and the USA participated in Boral's formal leadership development programs. (See Figure 9.)

Boral also developed a formal Asia People Development Plan in 2007, to attract, develop and retain local people, identify future leaders and enhance management talent.

In 2007/08 we focused on the development of leadership programs that can be tailored to suit individual country requirements and the establishment of "train the trainer" processes.

Figure 5  
Employees by occupation

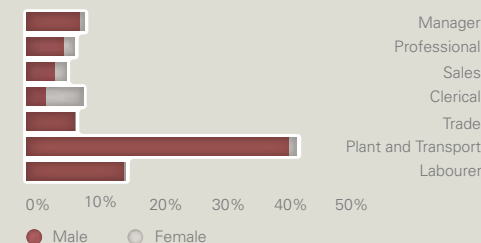


Figure 6  
Turnover in Australia by age

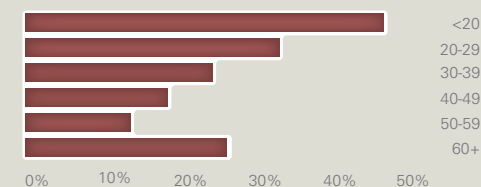


Figure 7  
Age profile of Boral's employees

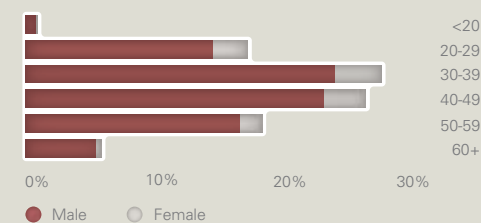
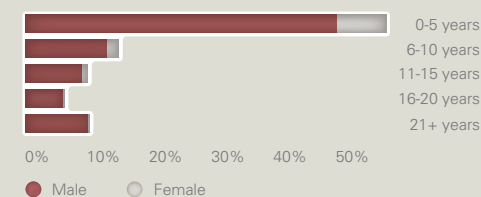


Figure 8  
Length of service of Boral's employees



## Our People

All of Boral's businesses conduct safety training, which is complemented by Boral's centrally administered leadership program, Leading Health and Safety. This program focuses on safety culture and leadership. A total of 330 Boral employees participated in this program in 2007/08.

Boral's Australian Construction Materials division operates a registered training organisation (RTO). Boral's RTO uses the national training system, including competency standards and qualifications, to establish rigorous performance benchmarks for operators, supervisors and managers.

During 2007/08, 350 statements of attainment and 123 certificates at levels II, III, IV and V under the Australian Quality Training Framework (AQTF) were issued through Boral's RTO. A large number of employees undertake structured training on modules under the AQTF relevant to their work but do not go on to complete a full certificate program. In addition to promoting entry level employment and up-skilling in non-salaried roles, Boral has an extensive number of registered traineeships in place, including 171 in Australian Construction Materials.

### Employee engagement

Boral conducts independent employee satisfaction surveys on an annual basis. The results of these surveys allow us to identify and address areas that require attention in working towards our goal of maximising workforce satisfaction, productivity and retention.

In 2007/08, employee surveys were conducted in several of the business groups in Australia. A total of 2,550 employees responded, representing a 76% response rate. The survey results indicate that our employees in Australia continue to be highly engaged and satisfied with working at Boral. Consistent with last year, 91% of Australian employees are engaged with 43% of employees highly engaged.

While there have been improvements in perception around safety, key issues which affect employee engagement that require ongoing attention include: fair pay, work-life balance, training and coaching, resourcing, inclusive leadership style, communicating and involving employees in decisions. These issues are indicative of the needs of our increasing numbers of Generation X and Y employees. Feedback sessions take place with our employees at a local level to discuss the results and likely actions in key areas.

In Asia, we engage employees directly through a number of communication channels that promote two-way exchange of information and employee views. For example, in Indonesia over 33 "Morning Talks" or tool box meetings take place per week to deal with issues of concern to business and employees.

### Employee relations

The past few years have seen us develop an understanding of the practical application of the Work Choices industrial system in Australia. We are, however, preparing ourselves for another fundamental change to industrial legislation – "Forward with Fairness", as part of the current Labor Government's industrial relations reforms. While the ongoing flux in legislation brings with it constant challenge to educate and adapt, our underlying employee relations strategy has remained constant and firmly based on engaging directly with our employees.

All of Boral's Australian non-salaried employees work under registered industrial instruments. In broad terms, approximately:

- 80% are regulated by Union Collective Workplace Agreements;
- 3% are regulated by a Notional Agreement Preserving a State Award;
- 10% are regulated by Employee Collective Workplace Agreements; and
- 7% are regulated by Australian Workplace Agreements or Individual Transitional Employment Agreements.

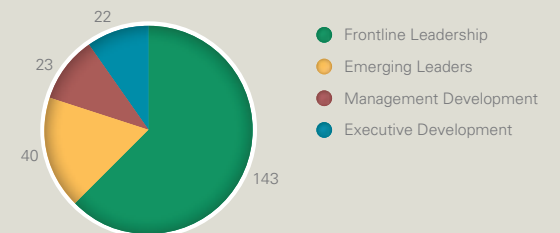
We estimate from our records of union payroll deductions that in Australia 32% of our non-salaried employees are financial members of a trade union and in the USA 18% of Boral's employees are members of a trade union.



In 2008, Boral was recognised as an Employer of Choice for Women by the Federal Government's Equal Opportunity for Women in the Workplace Agency (EOWA).

Some of Boral's initiatives which contributed to this recognition include Boral's parental policy and the "Springboard for Women" training program, pictured above.

Figure 9  
Number of staff participants in Boral's leadership development programs in 2007/08





## Communicating and celebrating sustainability outcomes

Planned and systematic approaches to communications have been developed within Boral's divisions to raise awareness and ensure employees and contractors have access to sustainability information.

Boral's sustainability priorities and achievements are communicated frequently via several channels including Boral in the News, which is distributed quarterly to employees, and available for external stakeholders via Boral's website. Boral's intranet, known as Boral OnSite, together with divisional newsletters provide employees with more detailed and divisional-specific information.

Boral's internal Environment Matters quarterly newsletter is distributed to employees and businesses informing them on a range of issues including those relating to climate change, water, waste, biodiversity and the latest environmental cases or new legislation. Its primary focus is to share learnings and knowledge across divisions.

In addition to communicating achievements and sharing information across divisions on an ongoing basis, the annual Boral Awards for Excellence recognise and celebrate the best achievements in the Company, across several categories including, Safety, Environment and Community and People. With over 100 submissions received each year for the past 11 years, the Awards are highly regarded within Boral. For a listing of the 2008 finalists and winners refer to [www.boral.com.au/sustainability](http://www.boral.com.au/sustainability).



## Managing and rewarding our people

Of Boral's Australian workforce, about 59% work under an enterprise or industrial agreement, which generally involves hourly rates of remuneration and in some cases a productivity bonus; 37% are in salaried staff positions with an annual bonus linked to individual performance; and 5% are in "total cost" salaried positions which involves an annual short-term incentive tied to individual performance objectives and financial performance of the business.

Boral's remuneration practices are designed to be market-competitive and to use variable at risk remuneration to reward good performance. Details of Boral's remuneration policy and structure for "total cost" salaried positions, is included in the Remuneration Report found on pages 42 to 49 of the 2008 Annual Review.

Performance reviews are carried out annually for salaried and management staff (38% of all Australian employees in 2008) as part of our annual remuneration reviews. Performance reviews consist of a formal two-step performance management process, incorporating identification of individual development needs, as well as assessing performance against pre-agreed individual objectives.

Boral conducts a formal **succession planning** process focused on managerial positions on an annual basis. This enables us to identify talent and future leaders and develop our leaders through aligning individual development plans with participation in Boral's Leadership Development programs and providing opportunities for internal promotion.

### Work/life balance

Employees are encouraged to focus on an appropriate work/life balance. Flexible working arrangements are increasingly being adopted by Boral's businesses. Often these arrangements have been created due to maternity leave, return to work, breastfeeding, work location, semi-retirement and special circumstances around a sick employee or family member.

Boral's Australian parental leave policy includes eight weeks paid maternity leave and one week of paid paternity leave. During 2007/08, 94 female employees commenced or continued paid maternity leave and 277 male employees took paid paternity leave.

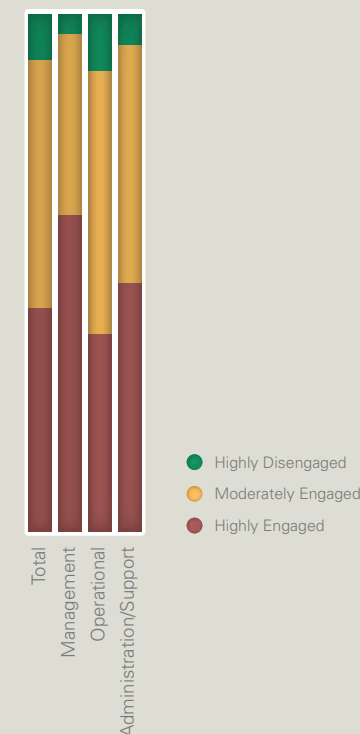
We recognise that it is increasingly challenging to find time outside of work for family and to give something back to the community. Boral's community partnership programs are therefore designed to allow employees to combine community-giving activities with their work schedules and with their family life.

Through our community partnership programs, employees have access to family zoo passes for complimentary entry to Taronga and Western Plains Zoos and discounted tickets for partner events. Through its partnership with Outward Bound Australia, Boral funded seven Family Re-Discovery scholarships in 2007/08 to employees with a high-school aged son or daughter. Since 2003, 69 employees and their son or daughter have participated in the nine-day program in the Australian wilderness.

In the USA, Boral provided six Educational Scholarships of US\$4,000 per year for four years towards the college tuition fees for children of employees.

Boral's employees also have access to the BWell program (which offers regular medical assessments for employees and health awareness educational material for employees and family members) and BEAP (a counselling service for employees and their families). Further information on these programs is included on page s17.

Figure 10  
Results from Boral's employee satisfaction surveys



# Health and Safety

The health and safety of all people involved in our operations is a key priority. Our aim is to eliminate or minimise the circumstances under which people can be injured. Boral's approach to health and safety is built on a solid foundation of corporate policies, standards and procedures.

Details of Boral's approach to managing health and safety is provided on pages s8 to s9.

## Safety performance

Boral's Lost Time Injury Frequency Rate (LTIFR) for employees was 2.5, down 11% compared with 2006/07 and percentage hours lost improved by 11% to 0.08% during the same period. Our target is to reduce LTIFR and percentage hours lost by 25% on the previous three year average. LTIFR of 2.5 was 26% better than the previous three year average of 3.37. Percentage hours lost of 0.08 was a 22% improvement on the previous three year average of 0.103.

Despite our improved performance and our efforts to make safety the number one priority across the Company, tragically we experienced one fatality which occurred in our Australian operations. Jakob Semmler, an employee driver, was delivering a tanker load of fly ash to a customer site in suburban Adelaide when the truck he was driving rolled over on a bend and the cabin hit a concrete power pole, causing fatal injuries. We deeply regret this tragic accident.

Contractor safety performance remained consistent with last year with LTIFR of 5.7 and percentage hours lost of 0.09%. Whilst much work has been done to improve both contractor and electrical safety, they remain areas of special focus.

During 2007/08 Boral was prosecuted for two safety incidents which occurred in NSW. The first incident relates to a contract truck driver injured when a load of timber board fell from his truck, breaking both his legs and injuring his back. Boral pleaded guilty and was fined \$115,000 plus costs. The incident occurred in 2005/06. The second prosecution related to a fatality which occurred in 2004/05. A subcontractor to a joint venture company was killed when concrete panels fell on him from the floor above, when he was working on a residential construction site in Sydney. The joint venture company pleaded guilty and was fined \$215,000.

## Workers compensation

As shown in Figure 15, in 2007/08 Boral's workers compensation claim numbers decreased by 3% to 1,918, while claim costs decreased by 27% to \$4.9 million.

Claim numbers remained high relative to 2005/06 and prior years despite strong gains in LTIFR and percentage hours lost. Claim costs, however, were lower than last year across all divisions with the exception of Australian Construction Materials.

The average cost per claim declined across all divisions and overall by 25%. This is attributable to sound injury management practices with a strong emphasis on return to work strategies resulting in improved return to work outcomes.

Boral is currently in its second year of self insurance in South Australia, with early signs indicating strong management of claims and claim costs. However, recent legislative reforms in South Australia are

set to impact self insurers as benefits to employees on workers compensation will increase significantly compared to current levels. The full impact will not be realised for some 18 months with a staged introduction of changes to occur over the coming 12 months.

## Risk management and injury types

Boral's businesses are required to effectively integrate health and safety risks into management of all work activities and processes. This requires a systematic process for hazard identification, risk assessment and development of control measures. Risks associated with identified hazards are assessed, taking into consideration both the probability of a hazard causing an actual incident and the potential severity of the consequences of such an incident. Control measures are then required to be implemented to effectively manage identified and assessed risks.

Boral uses statistical injury analysis to formulate action plans to address specific risks. As shown in Figures 13 and 14, the majority of injuries in Boral's Australian workplaces in 2007/08 resulted from "muscular stress", "hitting an object with a part of the body", "being hit by a moving object" or "falls from on the same level", and around 50% of the injuries sustained were to the hand/fingers, back/neck or arm/elbow/wrist. Consequently, corrective actions including training and process redesign have been taken to reduce these types of injuries.

Figure 11  
Lost Time Injury Frequency Rate\* (LTIFR)  
\* Per million hours worked

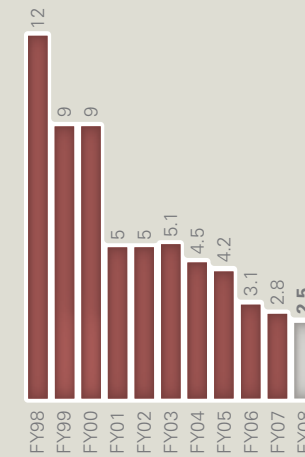
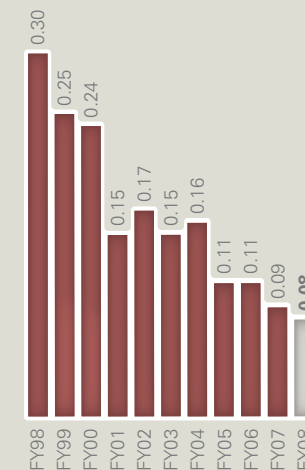


Figure 12  
Percentage hours lost



## Boral's first division to achieve zero lost time injuries and zero hours lost

Over the past seven years, Plasterboard has come a long way in its safety journey. It has moved from an ad-hoc approach to safety to one where there are systems and processes in place and there is ownership for safety at all levels and in all areas of the business. This desire and commitment to improve has translated into outstanding results, which the division is working hard to sustain. For example, the lost time injury frequency rate has reduced from over 12 in 2000/01 to zero in 2007/08 with percentage hours lost down from 0.4 to zero over the same period.

Plasterboard managers have consistently exceeded "Safety Conversation" targets while employees have identified and controlled over 3,200 hazards in the last three years.

An "all green" scorecard has been achieved in the 2007 Corporate Governance Review against the Boral Best Practice Elements and second party audits verify system compliance.

The Boral Interior Lining HSE Management System has won various state and industry awards including the 2006 Self Insurers in SA Award in Injury Prevention and employee survey results reinforce that Plasterboard's safety strategy is on track.

With strong leadership, teamwork and the continued efforts of everyone in the business, Plasterboard has achieved its goal of zero workplace incidents, injuries and illnesses.

## Employee health and wellbeing

Boral requires its employees to be fit for work, with the required level of fitness depending on the nature of the work. Pre-employment medicals are conducted for most employees to ensure they are physically able to meet the demands of the job. In some higher-risk roles, regular employment medicals are also conducted.

It is Boral's policy to maintain a drug and alcohol-free work environment. Drug testing of employees and contractors takes place where it is a part of enterprise or workplace agreements. While Boral provides reasonable assistance to individuals to appropriately manage drug and alcohol problems, it may terminate an employee or bar a contractor from returning to a Company site following a positive test result.

Beyond Boral's requirement to be "fit for the job", Boral is committed to supporting the health and wellbeing of its employees. Boral's employee wellbeing program, BWell, is currently available to employees in Australia and in the USA. In Australia, BWell provides three core services: annual or biennial health assessments, wellbeing awareness seminars, and educational information on health issues for employees and their families.

BWell's health assessments are widely accessed. In Australia, 2,121 employees obtained health assessments in 2007/08 and 8,507 BWell health assessments have been carried out since the program commenced in 2003/04. In addition, 546 BWell seminars were conducted during the year in working hours, across 103 sites. In the USA, approximately 800 employees participated in BWell health assessments in 2007.

Through the BWell program we aim to improve the health status and awareness of our employees through improvements in their lifestyle and diet. The average number of risk factors amongst Boral's employees who have had health assessments has reduced from 2.9 to 2.6 and the proportion of employees at the high end of the health risk spectrum with five or more undesirable risks has reduced by 7% since 2003/04. Many examples of improved health and wellbeing have been reported by employees as a result of increased health awareness and positive lifestyle changes.

Boral also offers employees and family members in Australia a confidential, free counselling program called BEAP (Boral Employee Assistance Program). BEAP provides short-term assistance and/or

specialist advice on a range of personal and work issues that may affect their wellbeing. During 2007/08, a total of 346 employees and family members accessed the service for a new issue.

## Managing security issues

The security issues facing Boral's employees and JV staff working in countries of political and social unrest are closely monitored. Boral engages global security advisers and our travel and security policies are reviewed and adjusted in response to the changing global situations. Boral regularly considers emerging global health and security issues that may affect Boral's operations and employees abroad.

Our 50%-owned plasterboard joint venture business in Asia, Lafarge Boral Gypsum Asia (LBGA) has developed, documented and implemented "Crisis Management Guidelines". A full simulation exercise has been conducted across the region, along with multiple staff education seminars to ensure our staff are prepared for the potential effects of medical or security emergencies.

Figure 13  
Mechanism of injury

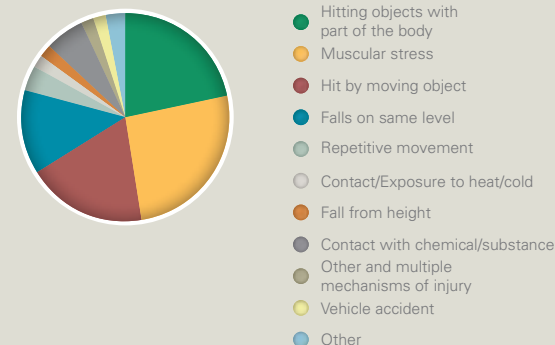


Figure 14  
Body part injured

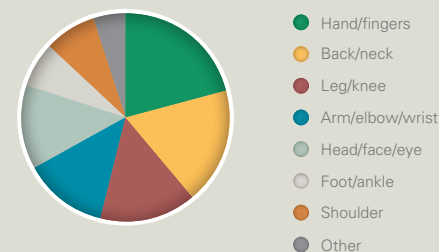


Figure 15  
Number of workers compensation claims

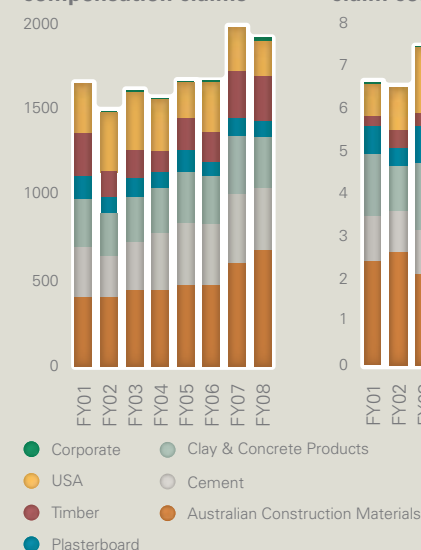
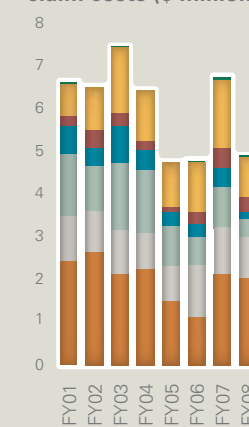


Figure 16  
Workers compensation claim costs (\$ million)





One of our major environmental challenges this year was responding to the plethora of proposed and regulated state and federal carbon and energy efficiency programs and reviews, particularly around the design of an Australian Carbon Pollution Reduction Scheme.

# Our Environment

Boral's approach to managing the environment is detailed on pages s9 to s10.

### Environmental performance

An important part of Boral's environmental strategy is to ensure that our people have the right knowledge and capabilities to perform their job and protect the environment. During 2007/08, Boral's staff and contractors continued to receive the latest **environmental training** via 33 business-specific environmental awareness training sessions (to 435 employees), 7 sessions on sustainable development (to 32 managers), and 11 environmental management sessions (to 60 employees). In addition, 11 sessions were held on the rapidly developing area of energy and climate change with business management teams. Business-specific environmental training takes place across the organisation.

Boral held its fourth internal sustainability conference in March 2008, involving over 45 staff from across Boral's businesses who have responsibility for environmental management. The two-day conference highlighted best practice sustainability management and shared learnings across the organisation.

**Audit and assurance** programs are an important part of Boral's EMS. In 2007/08, Environmental Services undertook 42 compliance and/or systems corporate audits, and 14 acquisition and divestment audits. Business-specific auditing takes place across the Company. For example, Australian Construction Materials completed 326 internal environmental short-form audits and in the USA environmental management system audits were conducted at 20 locations. This is part of the three-year re-audit program in the USA for some 70 operating sites. To date, 32 locations have been audited and 708 issues identified of which 61% have been completed.

In our Thailand and Indonesian businesses, best practice standards, auditing protocols and hazard/action registers to monitor closing out of actions is being maintained.

To achieve an industry-specific best practice score of 3.0, Boral's businesses taken together should be able to demonstrate that the following goals have been achieved:

BSDT element	Our goals	BSDT score
Energy conservation and climate change	<ul style="list-style-type: none"> <li>Involved in voluntary, industry sector energy efficiency or greenhouse programs including target setting;</li> <li>looking at alternate technologies to lower emissions;</li> <li>have systems in place to measure emissions; and</li> <li>can demonstrate positive performance trends when being compared with peers.</li> </ul>	2.8
Water conservation, extraction and protection	<ul style="list-style-type: none"> <li>Have consumption and cost savings tracking integrated into business reporting systems;</li> <li>undertake water risk assessments for all sites;</li> <li>incorporate reduction targets for key sites;</li> <li>achieve performance improvements; and</li> <li>demonstrate positive performance trends when being compared with peers.</li> </ul>	2.9
Waste and resource management, recycling and re-use	<ul style="list-style-type: none"> <li>Monitor waste streams across key operational areas and report on these relative to operational efficiency;</li> <li>conduct risk analyses to determine risks and opportunities associated with waste management and resource allocation;</li> <li>incorporate waste reduction targets for key sites;</li> <li>introduce approaches to improve the sustainability performance of products throughout their lifecycle; and</li> <li>demonstrate meaningful improvements in key areas.</li> </ul>	3.0
Land protection, remediation and rehabilitation	<ul style="list-style-type: none"> <li>Have management systems in place to prevent land contamination including well-trained people;</li> <li>evaluate land contamination risks and have systems in place to identify land contamination hazards and risks and to manage contaminated land liability holistically; and</li> <li>have a good understanding of rehabilitation conditions with completion plans for site closures.</li> </ul>	3.0
Environment and ecosystem protection	<ul style="list-style-type: none"> <li>Have undertaken comprehensive biodiversity investigations and have implemented protection plans for all relevant sites.</li> </ul>	2.9

During 2007/08, Boral incurred nine Penalty Infringement Notices (PINs) in Australia (resulting in \$12,201 fines) for **environmental contraventions**. These were issued for minor or technical non-compliances including contraventions of development approvals around dust, mud/sediment on road and odour, and three fines for discharging of concrete slurry into stormwater drains and a failure of a recycled water pump, resulting in an overflow. Over the last two years, the total monetary fines issued to Boral companies has nearly halved. There were no fines or prosecutions in the USA or Asia for environmental contraventions in 2007/08.

### Energy use and GHG emissions

Boral's operations consume a significant amount of energy and some businesses are particularly energy intensive. In 2007/08, greenhouse gas (GHG) emissions from Boral's fully owned businesses in Australia, the USA and Asia totalled 3.79 million tonnes of CO<sub>2-e</sub>. This compares with 3.75 million tonnes of CO<sub>2-e</sub> emitted in 2006/07<sup>1</sup> as shown in Figure 17. On a comparative basis with 2006/07, absolute GHG emissions in 2007/08 increased by 1%. Despite improved efficiencies at Berrima, Waurn Ponds, Badgerys Creek and in our hardwood business in particular, increased emissions due to higher production volumes in Australian Construction Materials and Cement in Australia more than offset lower volume-related emissions in the USA. In addition to the 3.79 million tonnes of CO<sub>2-e</sub> emission from Boral's fully owned businesses in 2007/08, approximately 0.20 million tonnes of CO<sub>2-e</sub> were emitted from Boral's equity share of joint venture businesses in Australia and Asia.

The distribution of Boral's energy use and related GHG production across Boral's businesses is summarised in Figure 19. Around 65% of Boral emissions come from our Cement division, half of which is due to calcination, the chemical process of forming clinker from limestone at high temperatures. Emissions associated with cement are obviously a key issue for Boral but beyond calcination of limestone, some 2.4 million tonnes of emissions per annum result from Boral's electricity, gas, coal and diesel consumption.

In each of our divisions we are striving to reduce emissions per unit and to offset Boral's increases in absolute emissions as a result of market demand growth. In 2007/08, GHG emissions per tonne of cementitious material sold improved by 3% on the prior year and as shown in Figure 18, emissions per tonne of cement have reduced by 13% compared with 1990 levels. Divisional performance (on pages s30 to s41) provides more detailed energy and emissions efficiency data specific to Boral's businesses.

Boral is exposed to regulatory and physical risks related to climate change, both as a building and construction materials company and as a major energy user, particularly in our cement and brick operations.

For Boral, the most critical issue is to ensure that the cement industry is acknowledged as an emissions-intensive trade-exposed (EITE) industry and that there are suitable equity mechanisms in place to ensure that domestically produced materials do not have to bear much greater "costs

of carbon" than imported materials, so that Australia's industry is not forced offshore, taking its emissions with it. The Federal Government's Green Paper on the Australian Carbon Pollution Reduction Scheme proposes to provide assistance to EITE industries through a free allocation of 90% of the industry average required permits. The Federal Government has also proposed to limit the total amount of free permits to a level of 30% of the national cap, which will reduce over time. The major risk is around the possible reduction in the level of free permits allocated to EITE industries over time and the impact this will have on future cement manufacturing.

The other risk is the ability for Boral to be able to pass through costs of emissions associated with landfill waste already in the ground. The peculiarity of the landfill business is that waste which is already in landfill continues to emit GHGs for decades, resulting in an inequity for new landfill operations that do not bear the same legacy.

Boral is continuing to have ongoing discussions both directly and through industry associations with the Department of Climate Change regarding the design of an emissions trading scheme.

Figure 17  
Boral's GHG emissions ('000 tonnes of CO<sub>2-e</sub>)

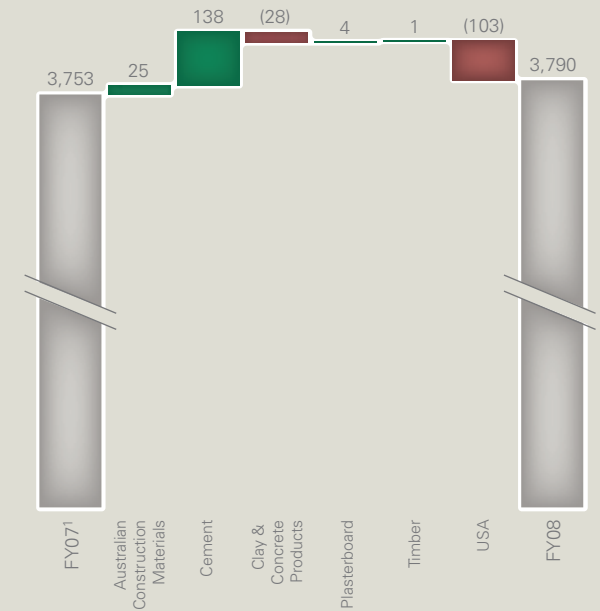
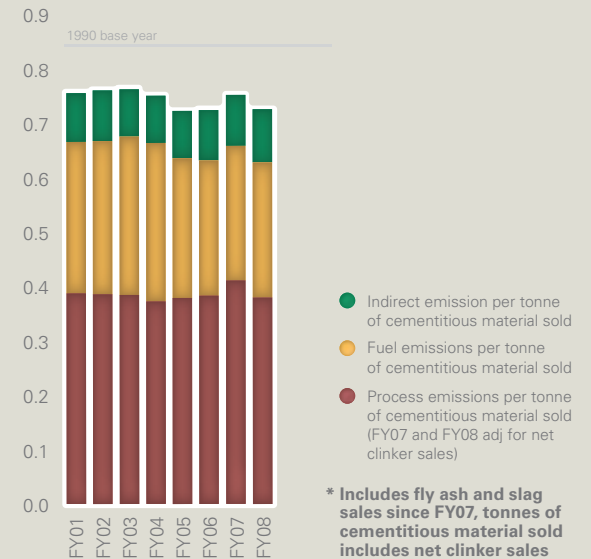


Figure 18  
GHG emissions in cement\* (tonne CO<sub>2-e</sub>/tonne of cementitious material sold)



<sup>1</sup> In Boral's 2007 Sustainability Report, Boral's 2006/07 GHG emissions were reported as 3.70 million tonnes. This restated figure reflects the removal of Scope 3 electricity emissions, updated emission factors, enhanced data collection and review processes.

## Our Environment

Boral has been actively managing risks associated with climate change for more than ten years through the participation in a range of voluntary energy efficiency and emission reduction schemes, including:

- Greenhouse Challenge Plus (member since 1997).
- NSW SEDA Energy Smart Business Program.
- DRET's Energy Efficiency Opportunities (EEO) Program (covering 18 sites representing 80% of Boral's emissions in Australia).
- NSW Greenhouse Gas Reduction Scheme (NSW GGAS).
- EPA Victoria Greenhouse Program (Environment and Resource Efficiency Plans).
- NSW Department of Energy, Utilities and Sustainability's (DEUS) Energy Saving Action Plans.
- Californian Climate Action Registry (covering US Tiles).

Participation in these schemes generally requires Boral's businesses to establish improvement targets and develop action plans, which are audited as part of the program.

Boral is one of only seven elective benchmark participants in the NSW GGAS scheme that receives Large User Abatement Certificates (LUACs) for reducing GHG. Boral has created more than 468,000 LUACs since 2005, saving more than 5 million GJ of energy and more than 232,563 tonnes of CO<sub>2-e</sub> in 2007. Under the NSW GGAS Scheme in 2007, Boral created around 41,000 NGACs for reducing electricity consumption at Berrima and generating

renewable electricity at our landfill operations (Boral Waste Solutions) in Victoria, avoiding the production of 41,000 tonnes of CO<sub>2-e</sub>.

Boral Waste Solutions commissioned its second "Biogas to Energy" module at Deer Park in February 2008. This facility uses landfill gas to produce renewable electricity which is exported into the national grid. Commissioning of the second 1.1 MW generating module brings total electricity export capacity to 2.2 MW which is sufficient to provide the electricity needs of around 2,000 homes.

In January 2007, Boral formed a cross-divisional and cross-functional Energy and Climate Change Technical Working Group (ECCTWG). Reporting to Boral's Management Committee, the ECCTWG, has undertaken scenario planning to understand potential financial impacts under an emissions trading scheme, increasing our understanding of possible impacts and opportunities under various scenarios.

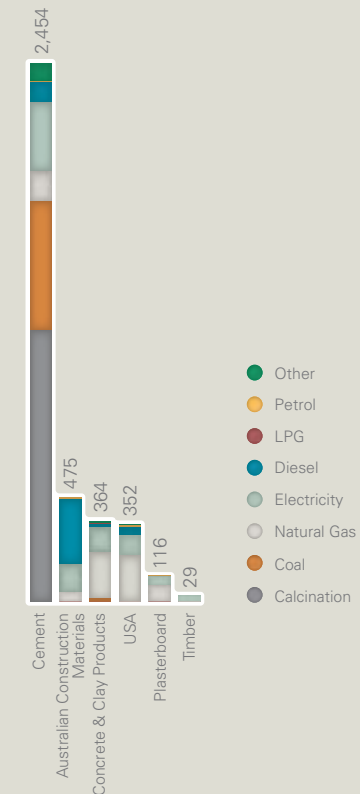
We have looked back at our 1990 and 2000 historical data, and we have forecasted future emissions out to 2012 and 2020. At the same time, the divisions have continued to review systems to collect data, ensuring that Boral has a solid and robust carbon inventory. This will allow us to establish appropriate abatement targets for the future. We consider it prudent to wait to set external targets until such time as the Australian and US governments set national targets and trajectories.

We are also identifying an opportunities set for abatement of our GHG emissions. These opportunities include: energy efficiency programs and alternative fuels which have environmental and cost benefits; revenue and cost saving opportunities through more sustainable products and technologies including generation and use of landfill gas; and a potential timber plantation strategy that would provide a carbon offset and saleable product in the future. From this opportunity set we have been developing an abatement cost curve to prioritise our abatement opportunities.

For an effective longer-term solution, we need to see the development of new technologies around carbon capture and storage (CCS). Geological CCS has a number of location-specific constraints that may make it unworkable at cement manufacturing works and while it is early days, there may be more hope in algal "sequestration", which is an area of focus for the global cement industry. Boral is not directly involved in the development of this type of technology, however, through the Cement Industry Federation, Boral is actively involved in global benchmarking and sharing of knowledge at an international level.

For additional information on Boral's approach to managing climate change, refer to the Message from the Managing Director and for Boral's response to the Carbon Disclosure Project (CDP6) [www.cdproject.net](http://www.cdproject.net). Also see the Cement Industry Federation's website: [www.cement.org.au](http://www.cement.org.au).

Figure 19  
Boral's energy use and related GHG emissions ('000 tonnes of CO<sub>2-e</sub>)



## Blue Circle is reducing greenhouse gas emissions

Blue Circle Southern Cement has avoided the production of more than 485,000 tonnes of CO<sub>2-e</sub> over the past two years.

At Berrima and Maldon, the addition of mineral and supplementary cementitious materials to replace emissions intensive clinker in the manufacturing of cement, has already delivered a reduction of more than 75,000 tonnes of CO<sub>2-e</sub> in 2007/08 and is expected to reduce emissions by more than 90,000 tonnes of CO<sub>2-e</sub> in 2008/09.

Through the NSW Greenhouse Gas Abatement Scheme, Boral has elected to be a benchmark participant as a Large User and was the first company under the scheme to create large user abatement certificates. Our cement kiln upgrade at Berrima has avoided the production of more than 410,000 tonnes of CO<sub>2-e</sub> over the last two years (equivalent to taking some 100,000 cars off the road).

At Waurn Ponds, Blue Circle is substituting ~40% fossil fuels with reprocessed waste oil, tallow residue, reprocessed carbon electrodes as well as around 600,000 used car tyres per annum (approximately 25% of Victoria's annual tyre dump). The Waurn Ponds plant is a pioneer in alternative fuel use in Australia. In Europe, where alternative fuels are more common, average substitution rates are 28% whilst alternate fuels elsewhere in Australia average only 5%.



## Other emissions

Data on pollutant emissions for 51 of Boral's Australian facilities is reported to the National Pollutant Inventory (NPI) annually, as required under the NPI National Environmental Protection Measure. This data is available at [www.npi.gov.au](http://www.npi.gov.au).

In the USA, 16 Boral sites report their releases and transfers of hazardous and toxic chemicals on the annual Toxic Release Inventory as required under The Emergency Planning and Community Right-to-Know Act (EPCRA) 1986 and the Pollution Prevention Act (1990). This data is available at [www.epa.gov/tri](http://www.epa.gov/tri).

## Water management

Boral recognises the need to manage our valuable water resources in an environmentally sustainable manner. Throughout our operations we rely on water for our manufacturing and maintenance processes, to suppress dust, for cleaning and for sanitation.

We use water from a range of sources, including mains/town water, ground/bore water, surface water (including rainwater) and on-site recycled water (as shown in the **Sustainability Data Table** on page S43). Mains/town water usage is material to Boral.

A total of 2.82 billion litres of mains water was used by Boral's fully owned businesses in Australia, the USA and Asia in 2007/08. This compares with 2.96 billion litres<sup>1</sup> of mains water used in 2006/07, a 4.6% reduction year on year, as shown in Figure 20. Water efficiency gains were delivered across many businesses through specific projects, although the decline was also attributed to the increased use of rainwater and a decline in production volumes in the USA. In addition to the 2.82 billion litres of mains water used by Boral's fully owned businesses, approximately 63 million litres of mains water was consumed by Boral's equity share of joint venture businesses in Australia.

A breakdown of mains water usage by division is shown in Figure 21 and details on divisional water usage and improvements is provided in the divisional performance pages (pages s30 to s41).

Since 2007, numerous Boral sites in Australia participated in formal water conservation programs in partnership with governments and/or water authorities. For example, in NSW, Boral Plasterboard, Camellia, is classified as a high water user (>50 megalitres per year) by DECC and was required to submit a Water Savings Action Plan during the year, while Plasterboard Port Melbourne developed a similar

plan under the Victorian Government's Pathways to Sustainability program. Fifteen of Boral's South East Queensland businesses were required to produce Water Efficiency Management Plans in response to the region's dire water situation. In Western Australia, Midland Brick has been a voluntary participant in the Water Corporation's Water Achievers program for a number of years and was one of the first businesses to submit and have approved its Water Efficiency Management Plan under new legislation in that state this year. Midland has reduced its water consumption annually by 20% per tonne of standard brick equivalent (SBE) produced in the last two years and is targeting a further 10% annual reduction per tonne of SBE by 2012.

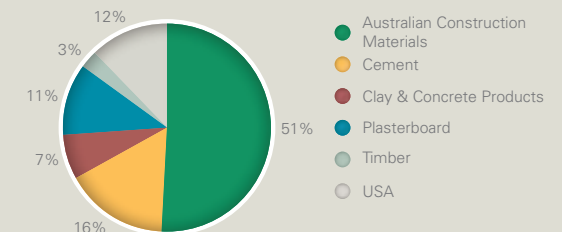
## Waste, recycling and re-use

Boral Waste Solutions' landfill site at Deer Park in Victoria, is the second largest landfill site in Australia. Deer Park received more than 400,000 tonnes of commercial and municipal waste in 2007/08. Of this, around 5% was recycled or recovered, the majority of this being green waste which was composted to produce manufactured topsoil.

Figure 20  
Boral's mains water consumption (million litres)



Figure 21  
Boral's mains water consumption by division in 2007/08



<sup>1</sup> In Boral's 2007 Sustainability Report, Boral's 2006/07 mains water usage was reported as 2.93 billion litres. This restated figure reflects enhanced data collection and review processes.

## Our Environment

Re-use and recycling of materials are part of Boral's focus to responsibly manage our resources, including reducing our reliance on virgin materials. Re-use refers to the incorporation of waste material back into the same product and recycling involves waste material being used in a different product. Both conserve primary resources, reduce the environmental impact and cost of disposal and, depending on the circumstances, can reduce the energy required to manufacture the product on a production unit basis.

An estimated total of 5.56 million tonnes of waste and by-products was re-used or recycled in 2007/08, up 3.6% year-on-year. We measure waste from our production processes based on a combination of quantitative waste data where available, mass balance calculations or estimations through sampling. We also measure the proportion of this waste that is re-used or recycled and, in general, Boral's businesses re-use or recycle between 43% and 100% of the production waste that they generate.

Our own returned waste materials re-used to produce the same product include concrete washout slurry, recycled asphalt profiling (RAP), plasterboard waste from production and building sites, brick bats and bricks from customers' sites, and green and cured masonry product. External waste products or secondary resources that we use in the manufacture of our products include: cementitious waste materials and by-products in cement, crushed demolition concrete in new concrete ("Envirocrete")

and granulated used tyres in LoNoise™ Asphalt. Information on Boral's sustainable products can be found at page s25.

During the year, Midland Brick, through its Midland Magpies recycling program, returned ~14,000 tonnes of surplus building materials from off-site to be recycled back into brick products – the equivalent of 5.4 million bricks, which is enough to build around 280 average-size double brick houses.

Boral's businesses only deal with very minor amounts of hazardous waste and this is managed in accordance with government regulations. Similarly, we only use relatively small amounts of packaging, as the vast majority of our products are delivered in bulk.

Two types of Boral's businesses are based primarily on the utilisation of other people's waste – Boral Recycling in Australia and our fly ash operations in the USA and Australia – BMTI and Blue Circle Ash through Fly Ash Australia (50% Boral-owned) respectively. The fly ash businesses process coal-fired power station waste to provide fly ash as a supplementary cementitious material in cement and in concrete, and bottom ash as drainage, filter and fill materials (eg "EnviroAgg®").

The Boral Recycling business processes construction and demolition waste in combination with concrete washout, RAP and natural rock, and markets a variety of products including road bases, pipe-bedding, backfill and aggregates. In addition, Enviropave™ is a bound, recycled road base consisting of RAP, recycled crushed concrete and a slow setting binder (ground granulated blast furnace slag and hydrated lime).

More information about the amount of waste produced and recycled by the divisions is provided in the divisional performance pages (pages s30 to s41) and included in the **Sustainability Data Table** (page s43).

### Land management and biodiversity

Responsible land management starts with environmental due diligence before acquisition of new land assets or businesses, and continues through to divesting sites only when they are "fit for purpose". Complying with environmental and planning regulatory requirements, minimising Boral's "environmental footprint", progressively rehabilitating our extraction sites and maximising the sustainability and financial end use of our extraction sites are key aspects of our land management activities.

Where practicable, Boral rehabilitates its extractive operations on an ongoing basis. Rehabilitation works reduce visual impacts, enhance biodiversity and minimise erosion through planting of native trees and revegetation. Examples of Boral's rehabilitation work in 2007/08 include the planting of over 1,000 trees at Wollert Quarry in Victoria; extensive grass seeding and rehabilitation of overburden at Bacchus Marsh Quarry also in Victoria; and the planting of 14,000 endemic trees, shrubs and bushes at the Orange Grove Quarry in Western Australia.

Figure 22  
Internal and external waste  
and by-product re-used/recycled ('000 tonnes)





## Water savings add up

Across Boral's 717 operating sites there are numerous innovative water saving initiatives that have been identified and developed by employees and are delivering real benefits.

In Boral's hardwood timber business a large amount of water can be used in the drying/curing process because of the need to create a high humidity environment that minimises the risk of stressing, splitting and warping of the timber as it is drying. At Boral's Murwillumbah plant, however, water usage has reduced by 3.6 million litres per annum through an innovative approach that has improved a complicated industry-wide wet bulb kiln control system. Boral Timber's innovative approach, which is based on the use of a high temperature wet bulb station to maintain the necessary water levels in the drying process, only uses 5% of the water used in traditional control systems.

Boral Roofing's Wyee plant has also achieved water savings. Some 1.8 million litres of mains water a year has been saved by installing a windmill to pump rain water back from an existing dam to the plant. The site already had systems in place to catch rainwater over a large catchment area including the Wyee clay pit, however, this water was being pumped to a dam and released without opportunity for use in the production process.

A source of electricity was required for the water in the dam to be pumped back for use in the production process. Boral chose a windmill as a renewable energy source providing the most environmentally sustainable outcome.



In addition to the already developed or proposed nature reserves at various Boral locations, Boral quarries continue to develop **rehabilitation** plans in greater alignment with current thinking around biodiversity, such as re-establishment of natural ecosystems relevant to the local area, rather than just addressing visual impact.

Boral's efforts in **biodiversity** enhancement and land management generally involve long-term commitments. Commitments to protecting the Western Swamp Tortoise in the Swan Valley in Western Australia, the Striped Legless Lizard and Plains Rice-flower on the Basalt Plains west of Melbourne, and the Grey-Headed Flying Fox in NSW are ongoing.

All required biodiversity assessments under the federal Environment Protection Biodiversity and Conservation Act are always undertaken, as well as those required under the equivalent state level legislation, and resulting management plans implemented, such as for the Striped Legless Lizard at our Deer Park Quarry in Victoria.

The same approach applies for heritage values, in particular around aboriginal heritage. In carrying out heritage assessments, Boral appoints appropriate heritage experts and follows government guidelines.

Some Boral locations are subject to Native Title claims and these are dealt with according to local statutory requirements. Boral is committed to working cooperatively with traditional land owners and where necessary Boral's businesses draw on the expertise of Boral's Indigenous Employment Coordinator to assist with indigenous cultural issues. There is currently ongoing dialogue with claimants with respect to three quarry sites, one each in Queensland, New South Wales and Western Australia.

Our work on our **contaminated sites** globally is substantially completed, however, from time to time divestment of properties may trigger some supplementary work depending on eventual disposition of the site.

Through the *Boral Living Green* initiative in partnership with Conservation Volunteers Australia, we have continued to support several projects to enhance the habitat of threatened species including the following:

- Maintaining the habitat of the Western Swamp Tortoise (a nationally threatened species currently classed as "critically endangered") at Ellen Brook Nature Reserve, in Western Australia.
- Installing rehabilitation ponds, trenches and fencing for the Seabird Recovery facility at Torrens Island, South Australia, to help to preserve important bird species.
- Reafforestation of Box-Ironbark habitat corridors at O'Keefe Rail Trail in Bendigo, Victoria, to rehabilitate a significantly declined ecosystem with many nationally threatened species of fauna and flora including the Grey Crowned Babbler, Swift Parrot, Regent Honeyeater, Tuan and Squirrel Glider.



**Boral embraces the principle of sustainable development, ie. development which meets the needs of the present without compromising the ability of future generations to meet their own needs. We believe this principle is fundamental to Boral's continued success and growth.**

Boral is committed to pursuing industry specific best practice in environmental performance. As an international resources-based company, we acknowledge that our shareholders, employees and the community at large expect responsible environmental practice by Boral's businesses.

Specifically Boral is committed to:

- Conducting our operations to minimise environmental risk and, wherever practicable, eliminate adverse environmental impacts
- Continual improvement of our environmental performance including regular review and the setting of rigorous environmental objectives and quantified targets – particularly with regards to:
  - efficient use of energy (including appropriate use of alternative fuels)
  - conservation of water
  - minimisation and recycling of wastes
  - prevention of pollution
  - effective use of virgin and recovered resources and supplemental materials
- Open, constructive engagement with communities surrounding our operations
- Reducing the greenhouse gas emissions from our processes, operations and facilities
- Protecting and, where possible, enhancing biodiversity values at and around our facilities
- Complying with environmental legislation, regulations, standards and codes of practice relevant to the particular business as the absolute minimum requirement in each of the communities in which we operate
- Conducting business with suppliers and contractors who have a commitment to the values and objectives contained in this environmental policy
- Consulting and collaborating with customers and suppliers in the development of sustainable products
- Remediating our contaminated sites to standards internationally acceptable for the site purpose.

To support these commitments, Boral will progressively implement and maintain environmental management systems for its businesses based on the international standard ISO-14001 or its equivalent.

Through communication and training, our employees and contractors will be encouraged and assisted to enhance Boral's environmental awareness and performance.

R.T. PEARSE  
CEO & Managing Director

Date of Issue: June 2007



Working across our supply chain we aim to ensure that we act with integrity and that our actions meet both the spirit and letter of the law and community expectations. While price, quality and service are a major focus, negotiations with suppliers, customers and consumers include opportunities for improved safety, environmental and broader sustainability outcomes.

# Marketplace and Supply Chain

## Our suppliers

Boral's procurement processes are well defined and reinforced through to the businesses with divisional strategic sourcing plans completed annually. These plans specifically address capability improvement initiatives identified through the utilisation of Boral's Procurement Capability Assessment Tool. Sustainability is entrenched in the supplier selection criteria and the procurement process now includes the issuing of a Supply Chain Sustainability Survey to strategically critical suppliers. The sustainability survey addresses governance and ethics, policies, risk management, systems, reporting and key areas including safety, labour standards, stakeholder engagement and environment as key supplier selection criteria (as applicable) in Boral's procurement processes.

Boral's application of its procurement process specifically aims to work with suppliers to continuously improve Boral's sustainability through the supply chain. This sustainable supply chain management includes actively improving suppliers' products and reducing supply chain waste.

Working with our suppliers of heavy transport vehicles has enabled complex sustainability improvements, including the introduction of compressed natural gas (CNG) engines to concrete agitator vehicles, as well as a range of simpler modifications improving driver safety. Improved steps for entry and exit, additional mirrors reducing the risk from blind spots, in-cabin instrumentation for checking oil and water, reducing the risk of injury from lifting bonnets, are all examples of Boral improvements made to standard vehicles. Boral's leadership role in encouraging suppliers to integrate these changes with their normal production processes provides the heavy vehicle manufacturing industry with production capability and opportunities to offer safer, more sustainable vehicles to other industry participants.

Boral has also continued to work with suppliers to reduce supply chain waste. Over 14 million paper sacks are used for Boral's cement and plasterboard finished products per year. Boral's modified paper sacks reduce paper consumption by over 1,500 tonnes per annum through a change to sack construction (from a 3 ply to 2 ply paper wall). This reduces the waste which must be removed from construction sites.

At a site level, working with suppliers also introduces innovative sustainable outcomes. Boral Windows has worked with its suppliers of aluminium section and glass to reduce, re-use and recycle packaging products. Paper separations in glass supply have been reduced by 60%, timber packaging cleats are now starting to be returned and re-used by the supplier and shrink wrap plastics are now being sorted from general site waste, then baled and recycled.

## Our customers

From trade practices compliance to product labelling, we aim to ensure that our marketing and sales activities meet both the spirit and letter of the law. Marketing and sales people are provided with information on trade practices and other requirements related to acceptable standards for marketplace behaviour, with all managers and sales required to complete an online, regularly updated Trade Practices Compliance training program and a biennial refresher course. During 2007/08, a total of 1,550 Boral employees completed on-line compliance training in Australia, while 902 employees attended trade practices training seminars.

To achieve an industry specific best practice score of 3.0, Boral's businesses taken together should be able to demonstrate that the following goals have been achieved:

BSDT element	Our goals	BSDT score
Strategic sourcing and supply chain	<ul style="list-style-type: none"> <li>Procurement and/or supply chain plans incorporate sustainability objectives and performance metrics, applied across all activities which have identified sustainability procurement risks.</li> <li>HS&amp;E/sustainability standards for strategic sourcing activities are in place and are supported by effective decision-making structures and resources.</li> </ul>	2.8
Sales and marketing	<ul style="list-style-type: none"> <li>Sales and marketing plans incorporate clearly identified sustainability objectives and performance metrics.</li> <li>Inform and seek responses from key stakeholders about our products and their sustainability characteristics. Use this feedback in product development improvements.</li> <li>Product stewardship concepts are incorporated into delivery and support systems of key products/services.</li> </ul>	2.7

Target 3.0

In the USA, Boral's legal department conducted five face-to-face training sessions to some 290 managers and sales staff which concentrated on our product liability and contract reviews.

All of Boral's businesses have systems in place for dealing with customer complaints, in the event that dissatisfaction arises. When it comes to managing product performance and health and safety risks through the lifecycle of our products, Boral's businesses have processes in place including appropriate product labelling, training and a well developed system of Material Safety Data Sheets for users of our products.

During the year, Boral continued to develop appropriate and consistent methodologies for undertaking product lifecycle assessments both internally and through various industry groups including the Building Products Innovation Council (BPIC).

Since 2005, Boral has been a National Leader of the Housing Industry of Australia (HIA) GreenSmart initiative. Boral continues to sponsor the Boral GreenSmart Awards, which recognise excellence in environmentally sustainable housing construction. GreenSmart is a practical approach to building which focuses on educating builders, designers, product manufacturers and consumers about the benefits of environmentally responsible housing. Boral is also a Foundation Partner with the Urban Development Institute of Australia (UDIA) in its EnviroDevelopment project in Queensland. EnviroDevelopment is a scientifically-based branding system designed to make it easier for purchasers to recognise and select more environmentally sustainable homes and lifestyles.

We work closely with our customers to understand their needs and the challenges they face so that we can deliver the best solutions. We use a number of forums for obtaining feedback including workshops and meetings as well as regular customer surveys and other market research.

During the year, 677 builders and 682 consumers participated in perception studies to help us better understand how Boral is viewed in the marketplace and whether we are meeting our objectives. The 2007/08 survey results indicate that 41% of consumers perceive Boral to be "environmentally responsible" (50% "couldn't say"). This was a 28% increase on surveys undertaken 14 months earlier.

Within Boral's divisions customer satisfaction surveys are undertaken and the feedback is used to improve service. For example, in Boral Plasterboard the team has continued to deliver a strong level of service and product quality with recent customer surveys showing a very high 86.9% customer satisfaction index.

In 2007/08, Boral provided large customers with a self service electronic facility through Boral's website. With the increasing migration to electronic data management, we maintain extensive and robust security systems and procedures, and give continued priority to customer data protection and privacy. Boral's Privacy Policy is available on Boral's website.

## Examples of Boral products and their sustainable features.



### Boral Hancock Plywood

- Through Chain of Custody and Australian Forestry Standard (AFS) certification, Boral's plywood products have systems in place to track timber from its origin in a certified sustainable forest through to point of manufacture.
- Boral's plywood is produced from 100% renewable plantation resource timber and 100% of the timber is used (waste products used in landscaping and fuel source for brick kilns).



### Boral Envirocrete™

- Envirocrete™ uses a proportion of recycled materials including aggregate and cementitious waste (reclaimed concrete, fly ash and slag) and may use recycled water where available, diverting waste from landfill and preserving virgin material.
- The product contributes to sustainability ratings systems, including UDIA and Green Building Council of Australia's Green Star environmental rating scheme.



### Boral Plasterboard Quiet Living™

- Boral's Quiet Living™ systems are designed to enable modern homes to meet changes in lifestyle and living habits over the past decade that contribute to potential noise problems for those seeking quiet including:
  - home cinema and digital home entertainment; and
  - higher density living.



### Boral Concrete Masonry Bricks and Blocks

- Boral FireLight™ bricks contain ~75% by-product (ash from power stations) and ~5% recycled concrete.
- FireLight™ has a very low embodied energy (Boral has reduced energy needed to cure concrete blocks) and may be used for cavity wall construction or reverse block veneer providing thermal mass inside the house.
- Up to 20% of the coarse aggregates used in FireLight™ is recycled or crushed concrete.



### Boral Asphalt and Road Bases

- Boral's recycled road bases are produced from recycled materials including crushed concrete and recycled aggregate products, diverting waste from landfill.
- LoNoise™ Asphalt incorporates granulated used (recycled) tyres into production to reduce noise pollution on heavily trafficked roads in urban and suburban areas.

For more examples of Boral's products and their sustainable features refer to [www.boral.com.au/buildsustainable](http://www.boral.com.au/buildsustainable).



We have a genuine regard for the interests of our stakeholders, including our shareholders, employees, customers, suppliers, neighbours, members of the communities, government and other stakeholders. Developing and maintaining a strong relationship with these stakeholders is crucial to our business success and maintaining our licence to operate.

# Our Stakeholders

Stakeholder engagement is integrated into our business systems and processes. Figure 23 outlines the key methods used to engage with our stakeholders.

The Boral Sustainability Diagnostic Tool has two elements focusing on monitoring and measuring Boral's performance in regard to stakeholder engagement: *Community Relations and Engagement* and *External Relations and Communications*.

To achieve our objective of "industry specific best practice" we aim to work directly with the community, taking community views into consideration. We also aim to be active members of the community, engaged in policy shaping and community partnerships.

### Engaging with our stakeholders through our Sustainability Report

During 2007/08 we sought feedback on Boral's 2007 Sustainability Report through two formal discussion groups with employee, shareholder, customer, supplier, government and community representatives. The feedback was used in determining the content of this report.

We have also considered the Global Reporting Initiative (GRI) Guideline ([www.globalreporting.org](http://www.globalreporting.org)) in determining the content of this report, including

aligning non-financial indicator definitions with the GRI where appropriate.

The non-financial content of this report has been assured by Net Balance in accordance with AA1000 Assurance Standard, which places importance on stakeholder engagement (p s42).

### Government and regulators

Boral has regular dialogue with public officials both directly and through membership of industry associations.

Boral has a Government Relations policy which outlines how we work with government and our intent to contribute to debates on policies, laws and regulations that affect our operations and financial performance.

Boral is actively engaged in commenting on government consultation processes relating to sustainability. During 2007/08, public advocacy efforts largely revolved around emissions trading, with submissions made, or being made, to:

- The Greenhouse and Energy Reporting Taskforce of the Department of Climate Change on its Regulations Policy Paper for a National Greenhouse and Energy Reporting System, in February 2008.
- Professor Garnaut's Emissions Trading Scheme Discussion Paper in April 2008.

Figure 23

Key stakeholder groups	Key methods of engagement during 2007/08
Shareholders	<ul style="list-style-type: none"> <li>• The Annual General Meeting, annual and interim results announcements, formal meetings with institutional investors and site visits/presentations.</li> <li>• Information made available includes: Boral's Annual, Sustainability and half-yearly reports, media releases, Boral in the News and Boral's website.</li> <li>• Carbon Disclosure Project (CDP6), which seeks information from companies on climate change risks and opportunities on behalf of institutional investors. Independent surveys to assist the investment community benchmark Boral's performance.</li> </ul>
Employees	<ul style="list-style-type: none"> <li>• Annual independent employee surveys undertaken across Australian and US operations to identify key issues affecting employee engagement.</li> <li>• Boral's Annual, Sustainability and half-yearly reports, Boral in the News, Boral's intranet, divisional newsletters, tool box meetings, safety committees and "safety conversations".</li> <li>• Regular performance reviews for salaried staff.</li> </ul>
Customers	<ul style="list-style-type: none"> <li>• Customer surveys and focus groups.</li> <li>• Annual and Sustainability Reports.</li> <li>• One-on-one meetings, site visits.</li> <li>• Product information, material safety data sheets, brochureware, website.</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>• Regular feedback and performance reviews with critical suppliers covering: operational activities, safety, environment and continuous improvement.</li> <li>• Safety and site inductions.</li> </ul>
Local communities and neighbours	<ul style="list-style-type: none"> <li>• Community consultation and engagement groups.</li> <li>• Open days, site tours, one-on-one meetings, public meetings, newsletters and targeted communications, and Boral's website.</li> <li>• From time-to-time independent community perception interviews are undertaken particularly where local concerns have been identified and there is a need to better understand those concerns.</li> </ul>
Government and regulators	<ul style="list-style-type: none"> <li>• Meetings with government and regulatory officials.</li> <li>• Conferences and selected events to understand public policy developments.</li> <li>• Submissions to government consultation processes.</li> <li>• Engagement via industry associations.</li> </ul>

- The Department of Climate Change on its Carbon Pollution Reduction Scheme Green Paper in September 2008.

Supporting these submissions, Boral's senior executives were involved in direct dialogue with politicians and government officials including those from the Department of Climate Change. Boral was also a Pilot Group member for the National Greenhouse and Energy Reporting System during the year.

At a business level, Boral directly engages with local councils and regulators such as state EPAs and planning authorities.

Boral is apolitical and does not make donations to political parties or individuals. However, Boral is a member of the NSW Millennium Forum and NSW Australian Labor Party's Business Dialogue and attends business events to access bipartisan political debate. The Australian Electoral Commission's reportable funding from Boral in 2007/08 was \$41,883.

### Industry influence

Boral actively participates in major business and industry associations and initiatives which to varying extents focus on sustainable development. These associations include: Cement Industry Federation; Cement, Concrete and Aggregates Australia; Housing Industry Association; Think Brick Australia; Association of Wall and Ceiling Industries; Gypsum Board Manufacturers Association; 10,000 Friends of Greater Sydney; The Urban Development Institute of Australia; and the Business Council of Australia (BCA). Boral's CEO, Rod Pearse, is a BCA Board member and Chair of the BCA's Sustainable Growth Taskforce.

Boral is currently working with the Business Product Innovation Council (BPIC) and various industry associations

to develop a robust lifecycle analysis and inventory methodology to ensure a scientific and consistent approach in comparing building materials across their lifecycle.

### Community and neighbours

Community liaison groups exist at key Boral operations and a number of smaller operations to facilitate the exchange of open and transparent communication.

The most common issues of local concern raised through community consultation processes are about local noise and vibration impacts, dust or emissions, traffic conditions or biodiversity issues. In operations that raise considerable concern or contention, we may engage specialist consultants to investigate these concerns and/or provide expert advice. When appropriate, we also establish dust, noise and vibration monitoring devices on our neighbours' properties to help ensure that we are operating within acceptable levels.

Recent and current issues of concern to local communities surrounding our operations or proposed developments are outlined in Figure 24.

We actively consult with communities when considering major new investments and in land management issues. Stakeholder reference groups are formed for major developments to facilitate risk assessments to identify and rank perceived risks. In land management issues, we often work in partnership with local community members, special interest groups and/or government bodies. For example, we have recently advertised for expressions of interest from members of the local Marulan South community to establish the Community Consultative Committee for Boral's newly proposed Marulan South Quarry in NSW.

Figure 24

### Recent and current community issues

Key issue	Boral's position
Safe use of alternative fuels Berrima, NSW (Cement)	Berrima was granted approval in FY07 to burn alternative fuels, partially replacing coal as a fuel for the cement kiln, reducing its GHG emissions. Concerns have been raised locally about possible increases in dioxins, resulting in extensive community engagement. Recently, Boral has engaged independent advisers to interview members of the local community and other stakeholders to better understand these concerns and determine how they may be able to be addressed. The use of non-standard fuels in cement kilns is common in our industry both in Australia and overseas, and has shown to be an effective way to reduce GHG emissions over many years.
Public health and environmental concerns Montrose quarry, Vic (ACM)	For several years, Boral has been seeking to extend approved reserves at the Montrose quarry whilst members of the local community have been opposed to any proposed extension because of environmental impacts and potential health concerns due to dust emissions. Despite comprehensive stakeholder engagement, Boral's revised application was rejected by Yarra Ranges Shire Council with virtually no debate. The State Government made a decision not to call in the application for an independent review. Boral had sought to address environmental concerns and meet the needs of the community and government by increasing the proposed buffer zones and reducing workable reserves by around 50% when compared with our original application. Boral undertook a rigorous Environment Effects Statement (EES) which was not reviewed or fully assessed by the Council or State Government.
Mixed land use Crib Point, Vic (ACM)	Boral has proposed to build a bitumen storage and distribution facility at Crib Point on cleared vacant land which was already earmarked for bulk liquid handling and is a former refinery site. The local community has raised concerns in regard to the proximity of the site to residential properties. Boral's proposal meets all the regulatory requirements and the project exceeds the standards required by EPA regulations. The impact on local roads and the local environment will be minimal. The proposal is currently being assessed by the advisory committee of the Victorian Government, with the Planning Minister expected to make a decision on the proposal thereafter.
Regional employment Walcha, NSW (Timber – hardwood)	Boral suspended manufacturing at its Walcha facility in August 2008 as a result of escalating wood supply costs and continued weak housing market in NSW. Boral's primary concern was for the welfare of the affected employees. Of the 23 affected employees at Walcha, the majority found new jobs within weeks of the announcement, including at other Boral timber sites, while others have decided to retire. The temporary closure of the mill and lost employment has been an issue of concern for the local community. Following discussions with the local Mayor and other community representatives, we are continuing to work with stakeholders to explore options to support the regional timber industry.

# Community Investment

Boral has a strategic community partnership model supported by key selection criteria that help determine the most effective partnerships for the Company. The core platform of Boral's partnership program is to make a valued and sustainable contribution to the communities in which we operate with partnership selection based on a Products, People, and Places strategy. We involve our People to encourage a better work/life balance and to use our expertise to benefit the wider community. We use our Products to build communities and for conservation initiatives and we focus on our Places, the communities in which we operate, to address environmental and social issues.

Boral's businesses have the flexibility to support local community activities where appropriate, whilst being required to adhere to limits of authorities and use Boral's Partnership Framework and Criteria to assess the appropriateness of local partnership opportunities.

Boral has seven key strategic partnerships that we use to engage our employees and make a difference in our local communities. These community partnership programs and their key outcomes are listed below. In 2007/08, a total of \$591,500 of cash and materials support was invested in these community programs together with a further \$443,000 of cash donated to the Juvenile Diabetes Research Foundation through employee fundraising efforts in Australia and the USA. Also included in this amount is Boral's sponsorship of "The Building As Muse" photographic exhibition, which documents the partnership of photographer Max Dupain and architect Harry Seidler. The collection was exhibited in Paris in 2008 and will be on public exhibition in Sydney in 2009.

Through our community support programs we aim to make a meaningful contribution to the social and economic well-being of our communities and also provides value to our operations by supporting business objectives and improvements in community relations. Boral's community contributions involve financial support, materials in kind support and employee volunteering, as well as using our networks to raise awareness about key community issues.



Boral partnership framework

## Partnership initiative

### Conservation Volunteers Australia (CVA) – Boral Living Green

Building on a 20-year association with CVA, Boral Living Green, which commenced in January 2005, supports the involvement of employees, their families, other stakeholders and local community groups, such as Landcare and Bushcare, on projects that provide environmental benefits for communities in the areas in which Boral operates.

## FY2008 outcomes/achievements

- Celebrating 20 years of partnership between Boral and CVA in 2008.
- 608 volunteer days across 14 conservation projects including weed removal, tree planting and collection of native seed and restoration of animal habitat in WA, Qld, NSW, ACT, SA and Vic. During the year, 15,050 trees/stems were planted and 63,700 m<sup>2</sup> weeded and regenerated.
- CVA participated in Koolkhan sawmill open day, engaging 100+ staff, family and community members.
- Living Green Nature Walks program was introduced in 2007, enabling Boral employees and their families to learn more about their environment by participating in guided walks in selected National Parks.

### Taronga Conservation Society Australia

Boral has partnered with the Taronga Conservation Society Australia (formerly Taronga and Western Plains Zoos) since early 2003, sponsoring the backyard precinct of Backyard to Bush. In 2006, we expanded our partnership to include the sponsorship of the Youth at the Zoo (YATZ) program.

- Many Boral employees, families and customers visited the Zoo in 2007/08 including 280 Boral attendees at the Twilight concerts in February/March 2008; and around 600 Boral staff and families at Boral's Family Day in November 2007.
- YATZ Eco Fair was held in January 2008 with Boral participation.
- Substantial quantities of Boral concrete were used in the new Great Southern Oceans precinct.

Creating a Better Earth



### Bangarra Dance Theatre

Boral has partnered with the Bangarra Dance Theatre, Australia's leading Indigenous dance company, since 2002. Since March 2007 we have been the Sydney season sponsor.

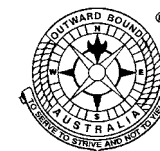
- In 2007/08, 160 Boral staff and their guests attended Bangarra's capital city main stage performances or regional performances. In November 2008, Bangarra will perform for a group of Boral employees and their families at Bangarra's Walsh Bay Theatre.
- Bangarra performed in Sydney, Melbourne, Brisbane and Canberra, and toured throughout regional Qld and NSW.
- Boral is the main Sydney season sponsor for 2008.



### Outward Bound Australia – Boral Family Re-Discovery Programs

Boral continues to offer Outward Bound Family Scholarships to Boral employees with a high school aged son or daughter and through the Harden Education Foundation for less advantaged youth in the community. Outward Bound is widely recognised for delivering a program focused on work/life balance and the scholarships are a key platform of Boral's broader commitment to corporate responsibility and to supporting, nurturing and developing its employees.

- Since the Boral Family Re-Discovery program was developed in 2003, a total of 69 family groups have participated in the program across five states.
- 7 family groups received Boral scholarships in 2007/08.
- 84% of past participants in the Outward Bound scholarships still work for Boral.



### Juvenile Diabetes Research Foundation (JDRF)

JDRF has been Boral's preferred charity since 2001. It provides Boral with structured opportunities to participate in fundraising and promote employee engagement whilst increasing awareness of Type 1 diabetes and the need for further research towards finding a cure. Since 2006, Boral has been a Global Walk Leader for the Walk to Cure Diabetes campaign.

- Boral has contributed over \$1.46 million to JDRF since our partnership began in 2001 including around 85% from employee fundraising efforts.
- In 2007/08, Boral's employees raised over \$443,000 for JDRF through the Walk to Cure Diabetes in Australia and the USA and through the Ride to Cure Diabetes and the Spin for a Cure events in Australia. 2,000 employees and family members participated in the October 2007 Walk to Cure Diabetes.
- 61 riders participated in the Ride to Cure Diabetes in January 2008 and raised \$230,000.
- The focus on engaging managers through JDRF corporate committees and Walk Captains continues.



### Building Communities in Asia

Boral commenced its Building Communities in Asia program with World Vision in 2005 following the devastating Boxing Day tsunami. In addition to working with World Vision in Indonesia and Thailand, Boral has been investing directly in community building activities in Bayah in Indonesia.

- Approximately \$30,000 of materials in-kind support provided to two World Vision projects in Thailand – the Phathalung Province School and the Trang Province School.
- A further \$70,000 of investment in community building activities in Indonesia including education to 90 secondary school children to improve their prospects of gaining a tertiary education, and the extension of pipelines to provide fresh water supply to five villages.
- Employees in Indonesia were involved in raising funds for 12 children to undergo restorative facial surgery.



### HomeAid

Boral USA has partnered with HomeAid, a leading national non-profit organisation providing shelter for the homeless. Boral's initial two-year commitment is for US\$50,000 in cash and US\$50,000 in-kind product donations.

- Boral is represented on HomeAid's US Board of Directors.
- Due to the US housing downturn some projects have been delayed, but two buildings in the California project have been built using our tile.
- Whilst a previously planned project in Georgia has been delayed Boral is still committed to providing the bricks once the project commences.





“During the year, Australian Construction Materials upgraded its management systems. We developed a best practice national Safety Management System for employees and contractors, which is currently being rolled out, and we developed a national Environmental Management System which has been piloted across six sites and is now being rolled out across the business. We are also continuing to improve our sustainability measurement, with centralised data capture of diesel and electricity now in place.”

**John Douglas**, Executive General Manager

# Australian Construction Materials



**475,000 tonnes**  
CO<sub>2-e</sub> emitted (6%↑)<sup>1</sup>



**482,000 tonnes**  
of waste recycled/re-used<sup>2</sup> (29%↑)



**1,436 million litres**  
of mains water consumed (2%↓)



**BSDT 2.8** (target 3.0)

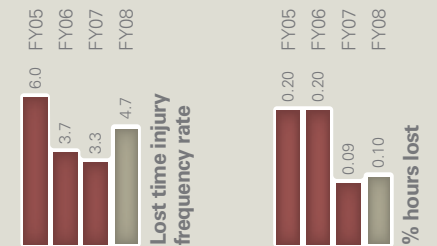
## Our performance

### Health and safety

- Tragically, an employee was fatally injured in a heavy vehicle accident in South Australia in December 2007. His vehicle rolled and collided with a concrete telegraph pole.
- LTIFR was 4.7 and % hours lost was 0.10.
- An extensive audit of electrical safety resulted in the identification of more than 10,000 hazards and \$7.1 million of capital expenditure to reduce this risk. Nearly two thirds of hazards already addressed.

## Our goals/plans

- 25% improvement on last three-year average LTIFR and % hours lost.
- *Complete roll-out of the national Safety Management System.*
- *Align contractor management under a national Safety Management System.*

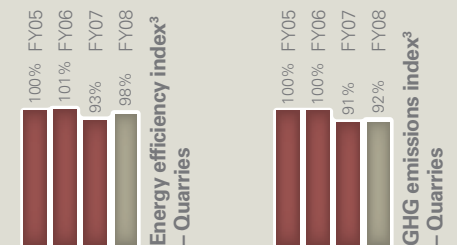


### Energy conservation and climate change

- Energy use and GHG emissions increased by 7% and 6% to 5.7 million GJ and 475,000 tonnes of CO<sub>2-e</sub>, respectively, reflecting higher production and increased reporting scope.
- Quarries energy and GHG emissions per unit produced increased 5% and 1% respectively.
- Emu Plains, one of ACM’s largest quarries, improved electricity efficiency by 25%.

Reduce emissions per unit and offset Boral’s increases in absolute emissions as a result of market demand growth.

- *Continue electrical efficiency audits and programs in quarries.*
- *Investigate increased use of compressed natural gas in concrete fleet.*
- *Investigate trials of second generation biodiesel.*



Human Resources

Environment

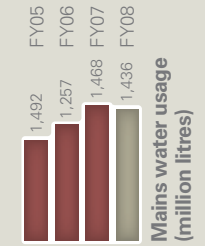
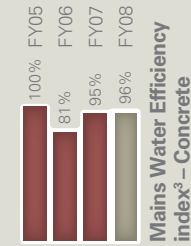


**Water conservation, extraction and protection**

- Mains water use of 1,436 million litres reduced by 2% year-on-year, mainly due to increased capture and use of rainwater.
- Concrete increased its mains water usage per unit of production by 1%, while Quarries decreased water use per unit by 28% due to increased capture and use of rainwater.
- Use of treated effluent for concrete was successfully trialled in South East Queensland.

Reduce mains water consumption across the division.

- *Identify areas where more accurate, granular monitoring is required at high usage sites.*
- *Roll-out of treated effluent for concrete at suitable sites in eastern states.*

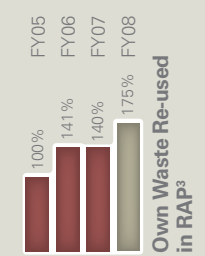
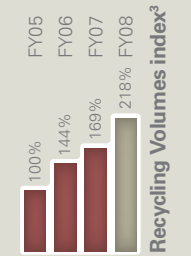


**Waste and resource management, recycling and re-use**

- ~482,000 tonnes of waste was re-used or recycled, up 29% on the prior year.
- Recycling facilities in NSW and Victoria increased processing of construction and demolition waste by 29% in FY08, or 118% above 2005 levels, replacing virgin resources.
- Recycled asphalt pavement volumes increased by 11% in FY08, or 75% above 2005 levels.

Minimise waste from our operations and increase the amount of waste re-used and recycled that would have otherwise gone to landfill.

- *Further grow recycling business.*
- *Further expand recycled asphalt pavement.*



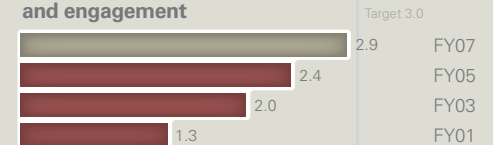
**Community relations and engagement**

- ACM has Stakeholder Engagement Plans for sensitive quarry sites. Community consultation models are in place at key sites and new developments.
- In Queensland, ~130 million tonnes of proven reserves were consented over two years underpinned by effective stakeholder engagement.
- After considerable investment in a State Environment Effects Statement to support an application to extend the Montrose Quarry, the application was rejected without independent review.

Maintain the support and goodwill of communities surrounding Boral's activities through engaging and consulting on relevant issues.

- *Implement community relations and engagement initiatives.*
- *Continue to undertake stakeholder risk assessments for all businesses, prioritising sites that require development of stakeholder engagement plans.*

**BSDT Scorecard  
Community relations and engagement**



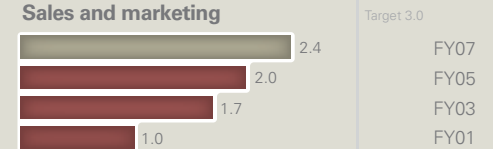
**Sales and marketing**

- Up to 30% recycled asphalt was incorporated into more than 150,000 tonnes of asphalt for the EastLink project since 2006.
- Third party assurance of concrete inputs, recognising their recycled materials and cementitious waste content.
- Installed ThoroughTrack synthetic horse racing surfaces at seven sites, eliminating the need for water for maintenance.

Provide customers with sustainable product solutions.

- *National consistency around the use of recycled materials, cementitious waste and recycled water content in concrete.*
- *Identify opportunities to support environmental standards.*

**BSDT Scorecard  
Sales and marketing**



**About Australian Construction Materials (ACM)**

ACM, Boral's largest division, has a diverse number of businesses including Quarries, Concrete, Asphalt, Transport, Contracting and Quarry End Use, which incorporates a landfill operation at Deer Park in Victoria. The division has 410 operating sites, 4,600 employees and 2,000 contractors in Australia.

ACM's sustainability data includes second brand operations Concrete, Alsaf, GoCrete, Q-Crete and Allens Asphalt. ACM's total GHG emission excludes Boral's Deer Park landfill operations; a model is under development for calculating landfill GHG emissions for FY09.

<sup>1</sup> In preparation for reporting under the National Greenhouse and Energy Reporting Guidelines, Scope 2 factors have been applied for electricity in FY08. In previous years, Boral applied full lifecycle (Scope 2 and 3) to electricity emissions. Historical comparisons have been adjusted to take into account Scope 3 electricity changes.

<sup>2</sup> If waste data is not available, waste is calculated through a mass balance equation or estimated through sampling. Waste recycled/re-used includes both internal waste and external waste consumed.

<sup>3</sup> Indexed to 100% in FY05 as base year. Energy/GHG calculations based on total quarries energy and GHG emissions divided by tonnes of quarries production; water calculations based on total concrete water use divided by m<sup>3</sup> of concrete production; recycling and RAP calculation based on own waste re-used in tonnes divided by tonnes of RAP produced.



“For our business it is critical that the cement industry is recognised as an emissions-intensive, trade-exposed (EITE) industry and that there is recognition for EITE industries in the Carbon Pollution Reduction Scheme. Whilst our FY08 emissions increased by 6% due largely to higher lime production volumes, we are continuing to work on emission reductions. We avoided over 76,000 tonnes CO<sub>2-e</sub> pa through a mineral and slag addition project and the Berrima kiln upgrade has abated 410,000 tonnes CO<sub>2-e</sub> over two years.”

**Phil Jobe**, Executive General Manager

# Cement



2.5 million tonnes CO<sub>2-e</sub> emitted (6%↑)<sup>1</sup>



1.1 million tonnes of waste and by-products recycled/re-used<sup>2</sup> (16%↑)



453 million litres of mains water consumed (1%↓)



3.0<sup>3</sup> (target 3.0)

## Our performance

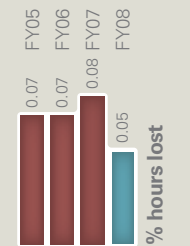
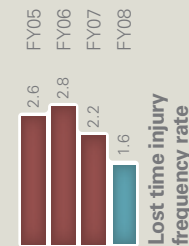
### Health and safety

- LTIFR of 1.6 and % hours lost of 0.05, due to strong performance improvement in Asia where LTIFR was down 27% and hours lost decreased by 38%.
- Rigorous internal audit of CRB businesses contributed to improved safety compliance.
- Implementation of Boral's hazard identification and safety management software system "SiteSafe" in Asia.
- Blue Circle standardised its site-based systems into a National Health, Safety, Environment and Quality Management model.

## Our goals/plans

25% improvement on last three-year average LTIFR and % hours lost.

- Continue focus on electrical safety.
- Enhance awareness and employee engagement through increased safety conversations.
- Improve contractor safety, especially on construction sites.

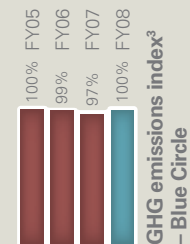
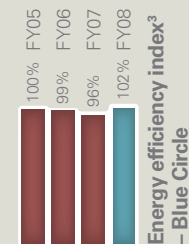


### Energy conservation and climate change

- Energy use increased by 9% to 12.9 million GJ and GHG emissions increased 6% to 2.5 million tonnes of CO<sub>2-e</sub>, partly due to higher cement and lime production.
- Energy use and GHG emissions per tonne of clinker produced increased by 7% and 3%, respectively, mainly due to slowing of the Berrima kiln in the first half of the year to match lower market demand and an increasing number of kiln start-ups.

Reduce emissions per unit and to offset Boral's increases in absolute emissions as a result of market demand growth.

- Implement approved energy efficiency projects at all major sites under the EEO program.
- Continue to resolve regulatory issues to recommence the use of alternative fuels and increase the use of alternative iron source materials.
- Obtain EITE status and protection for cement and lime production.



Human Resources

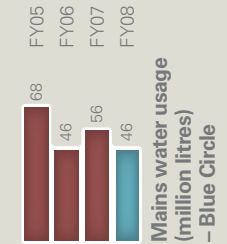
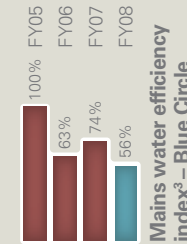
Environment

**Water conservation, extraction and protection**

- Blue Circle used 46 million litres of mains water in FY08, down 17% on the prior year due to the use of alternative sources of water (eg pit water from quarries) to offset increases in production. Mains water usage in Asia was ~407 million litres.

Reduce mains water consumption across the division.

- Update water security plans across key sites.
- Resolve regulatory issues around use of industrial-treated waste water as alternative water supply at Berrima.

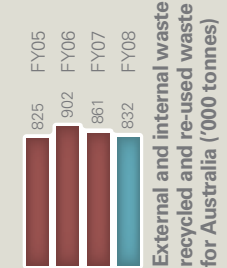
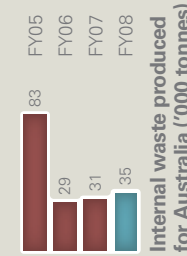


**Waste and resource management, recycling and re-use**

- Blue Circle re-used and recycled ~831,000 tonnes of internal/external waste and by-products, including ash produced by power plants, slag used in clinker production, and tyres, Hi Cal 50, tallow and waste oils producing ~1 PJ of alternative fuels.
- Berrima continued to work with suppliers and regulators on the use of iron bearing wastes to reduce the requirement to mine virgin iron ore.

Minimise waste from our operations and increase the amount of waste or by-products re-used and recycled that would otherwise go to landfill.

- Continue to engage with the community regarding the use of non-standard fuels at Berrima.
- Explore options to use refuse derived fuel at Waurn Ponds.



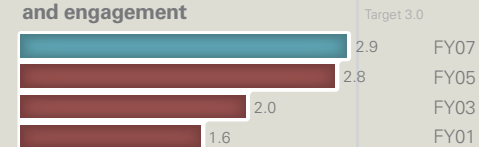
**Community relations and engagement**

- Berrima, Maldon, Galong and Waurn Ponds sites have active Community Liaison Committees and community engagement programs.
- Through Boral's *Building Communities* partnership with World Vision, ~\$30k of cash and materials provided to projects in Thailand in FY08. Further support to local communities in Indonesia by establishing water supply to five villages, funding and providing English and technical education to ~90 secondary school students.

Maintain the support and goodwill of communities surrounding Boral's activities through engaging and consulting on relevant issues.

- Strengthen community relations and engagement initiatives through Boral *Living Green* projects.
- Continue to support local communities around our Asian operations.

**BSDT Scorecard<sup>4</sup> Community relations and engagement**



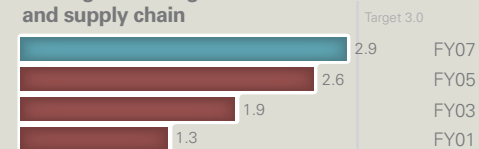
**Strategic sourcing and supply chain**

- Blue Circle Ash has gained acceptance of EnviroAgg<sup>®</sup> products in the masonry industry. EnviroAgg<sup>®</sup> uses more recycled materials and is light weight, high strength and has improved fire rating.
- In July 2008, DECC issued Berrima with three Penalty Infringement Notices relating to air testing procedures by contractors, procedures for receipt and use of non-standard fuels, and receipt of out of specification fuel. Berrima has improved procedures relating to contractors and suppliers of standard and non-standard fuels.

Manage supply chain in a sustainable way including consideration of environmental, health and safety, and social standards.

- Continue to grow volumes of sustainable products such as EnviroAgg<sup>®</sup>.
- Ensure external suppliers and contractors are adhering to recognised standards of safety, quality control and testing procedures.

**BSDT Scorecard<sup>4</sup> Strategic sourcing and supply chain**



**About Cement**

Cement comprises: Blue Circle Southern Cement and Construction Related Businesses (CRB) (Formwork & Scaffolding, Windows and De Martin & Gasparini concrete placing) in Australia and the Asian construction materials operations in Indonesia and Thailand. Blue Circle manufactures cement and lime and markets fly ash through its 50% owned Fly Ash Australia and operates a 50% owned joint venture cement milling facility in Brisbane, Sunstate Cement Ltd. The division has 142 operating sites under Boral management, around 2,000 employees in Australia, and around 3,500 employees in Asia. Environmental data is for 100% owned businesses excluding De Martin & Gasparini and Formwork & Scaffolding as data from these businesses is immaterial.

<sup>1</sup> In preparation for reporting under the National Greenhouse and Energy Reporting Guidelines, Scope 2 factors have been applied for electricity in FY08. In previous years, Boral applied full lifecycle (Scope 2 and 3) to electricity emissions. Historical comparisons have been adjusted to take into account Scope 3 electricity changes.

<sup>2</sup> If quantitative waste data is not available, waste is calculated through a mass balance equation or estimated through sampling. Waste recycled/re-used includes internal waste, external waste and by-products consumed.

<sup>3</sup> Indexed to 100% in FY05 as base year. Energy/GHG calculations based on total energy use and GHG emissions from clinker production divided by tonnes of clinker produced; water calculations based on total mains water use divided by tonnes of cement produced, including net clinker sales since FY07.

<sup>4</sup> BSDT scores excludes Asia. BSDT assessments were introduced into Indonesia in 2005 and into Thailand in 2007. Current BSDT score for Asia is 1.6.



“All our manufacturing sites gained accreditation to Australian Standard 4801:2001 during the year, signifying that our businesses have best practice Occupational Health Management Systems in place to further improve our already solid safety performance. We also took greater responsibility for product life-cycle through Midland Brick’s recycling program, which was awarded the 2008 HIA GreenSmart Award for Resource Efficiency and two awards in the Keep Australia Beautiful Sustainable Cities Award.”

Keith Mitchelhill, Executive General Manager

# Clay & Concrete Products



364,000 tonnes CO<sub>2-e</sub> emitted (7%↓)<sup>1</sup>



215,000 tonnes of waste recycled/re-used<sup>2</sup> (7%↓)



200 million litres of mains water consumed (6%↑)



3.1 (target 3.0)

## Our performance

## Our goals/plans

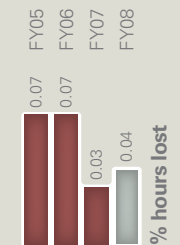
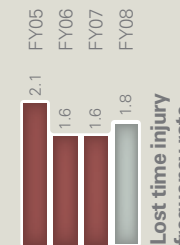
Human Resources

### Health and safety

- Accreditation to AS/NZS 4801:2001 across manufacturing sites.
- LTIFR of 1.8 and % hours lost of 0.04.
- Reviewed electrical systems at all sites as part of an electrical safety program and upgraded roofing contractor management system.
- Bricks NSW awarded the 2007 National Safety Council of Australia’s Award for Business Excellence through OH&S Management.

25% improvement on last three-year average LTIFR and % hours lost.

- *Maintain safety system accreditation to AS4801.*



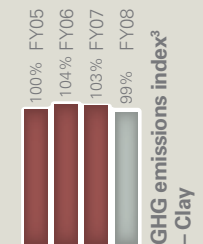
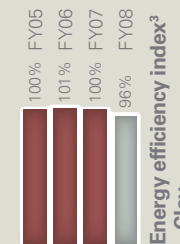
Environment

### Energy conservation and climate change

- Energy use and GHG emissions decreased by 7% to 5.1 million GJ and 364,000 tonnes of CO<sub>2-e</sub>, respectively, reflecting lower production and efficiency gains from kiln optimisations, improved product design and energy efficient lighting.
- Clay product energy use and GHG emissions per tonne of production decreased by 4% on prior year, reflecting energy efficiency gains.
- Midland Brick participated in the Federal Government’s EEO program focusing on two of its kilns.

Reduce emissions per unit and offset Boral’s increases in absolute emissions as a result of market demand growth.

- *Carry out Energy Efficiency Opportunities (EEO) assessments for Badgerys Creek, Darra and Scoresby.*
- *Implement selected EEO initiatives at Midland Brick to deliver a reduction in kiln energy usage.*



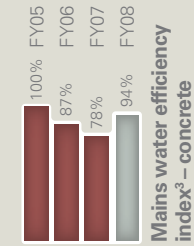
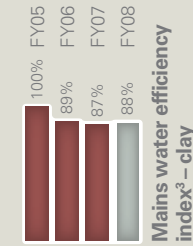
Social Responsibility

**Water conservation, extraction and protection**

- Mains water use increased 6% from FY07 due in part to difficulties in using recycled water, and temporary pipe leakages. At 200 million litres, mains water consumption remains 20% below FY05 levels.
- On a per tonne of clay production basis, mains water use increased by 1.4%.

Reduce mains water consumption across the division.

- *Reduce mains water usage at Badgerys Creek through a recycled waste water program.*
- *Initiatives to increase the harvest of on-site water.*

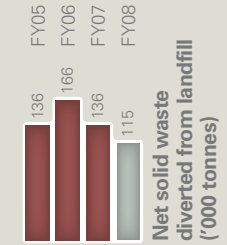
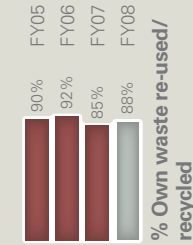


**Waste and resource management, recycling and re-use**

- C&C, a net consumer of waste, used 125,000 tonnes of external waste in production in FY08, and re-used/recycled 88% of own waste.
- Introduced lightweight masonry block in NSW, which uses over 50% recycled material by weight.
- Midland Brick's recycling program collected 14,000 tonnes of brick and concrete waste from customer sites, up 80% on last year.

Minimise waste from operations and maximise percentage of waste re-used and recycled.

- *Increase usage of demolition waste through Midland Brick Recycling Program.*
- *Single site pilot program to reduce reliance on virgin clay materials by up to 5%.*



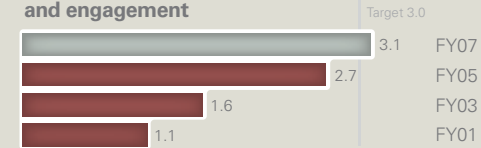
**Community relations and engagement**

- Ongoing community engagement groups at various sites.
- Midland Brick and Conservation Volunteers Australia program to help preserve natural habitat of Western Swamp Tortoise continued. Activities included weed control, reduction of exotic flora, fence repair to reduce unauthorised access, and planting seedlings to improve biodiversity.

Maintain the support and goodwill of C&C's surrounding communities through a high level of engagement and consultation.

- *Implement community relations and engagement initiatives.*
- *Plant approximately 10,000 trees around selected WA sites.*

**BSDT Scorecard  
Community relations and engagement**



Marketplace and Supply Chain

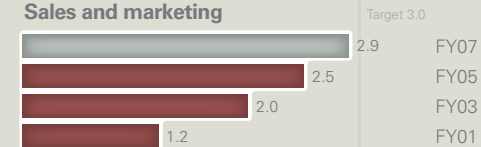
**Sales and marketing**

- Developed a new, lightweight masonry product, over 20% lighter than conventional blocks: key benefits include improved manual handling, reduced energy use for transport, and increased use of waste.
- Through Think Brick and Newcastle University, continued to research and promote Thermal Mass as a factor in energy efficient building.

Ongoing development of sustainable products.

- *Development of lifecycle inventory and lifecycle assessments for key products.*

**BSDT Scorecard  
Sales and marketing**



**About Clay & Concrete Products (C&C)**

C&C manufactures, distributes and markets clay products (terracotta roof tiles, clay bricks and pavers) and concrete products (concrete roof tiles, masonry blocks, bricks and pavers). The division has 23 manufacturing sites under Boral management, approximately 1,800 full-time equivalent employees and approximately 900 contract employees in Australia.

<sup>1</sup> In preparation for reporting under the National Greenhouse and Energy Reporting Guidelines, Scope 2 factors have been applied for electricity in FY08. In previous years, Boral applied full lifecycle (Scope 2 and 3) to electricity emissions. Historical comparisons have been adjusted to take into account Scope 3 electricity changes.

<sup>2</sup> If waste data is not available, waste is calculated through a mass balance equation or estimated through sampling. Waste recycled/re-used includes both internal waste and external waste consumed.

<sup>3</sup> Indexed to 100% in FY05 as base year. Calculation based on total for clay or concrete products (as identified) divided by tonne of clay or concrete product produced as indicated. Masonry tonnage amended to standardise lightweight and standard weight products.



“During the year, we continued to investigate the viability of plantation and co-generation strategies in light of the proposed Australian Carbon Pollution Reduction Scheme. We also supported our hardwood log supplier Forests NSW in attaining AFS certification, a globally recognised certification scheme, providing additional assurance that Boral’s log stocks are drawn from sustainably managed forests. Our own Plywood business also achieved AFS certification for timber sourcing and resource stewardship.”

**Bryan Tisher**, Executive General Manager

# Timber



**29,000 tonnes**  
CO<sub>2-e</sub> emitted (2%↑)<sup>1</sup>



**223,000 tonnes**  
of waste recycled/re-used<sup>2</sup> (2%↑)



**81 million litres**  
of mains water consumed (10%↓)



**BSDT 2.8** (target 3.0)

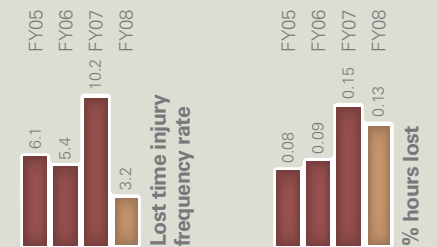
## Our performance

### Health and safety

- Safety performance improved in FY08, with a reduction in lost time injuries to five compared to 16 in FY07.
- LTIFR decreased to 3.2, down from 10.2 in FY07 and % hours lost decreased from 0.15 to 0.13 in FY08.
- The annual Safe Mate system audit continued to show incremental improvement in safety management across the business as well as highlighting improvement opportunities.
- Programs in hazard reduction, manual handling education and improved injury management were undertaken.

## Our goals/plans

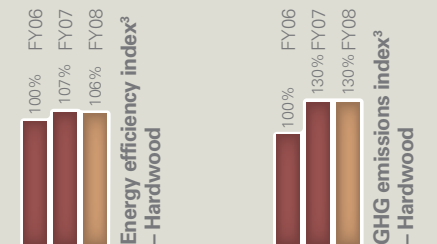
- 25% improvement on last three-year average LTIFR and % hours lost.
- *Expand “Safe Mate” strategy to fully incorporate Boral’s best practice elements.*
  - *Further evolve manual handling initiatives.*



### Energy conservation and climate change

- GHG emissions increased by 2% to 29,000 tonnes of CO<sub>2-e</sub> reflecting increased production volumes.
- Energy use of 858,000 GJ remained steady year-on-year.
- Energy and GHG emissions per tonne of hardwood production remained relatively steady year-on-year.

- Reduce emissions per unit and offset Boral’s increases in absolute emissions as a result of market demand growth.
- *Continue to develop plantation strategy in light of any potential carbon trading schemes/tax regimes.*



Human Resources

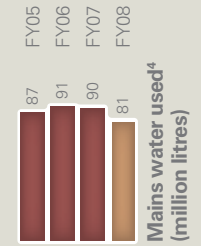
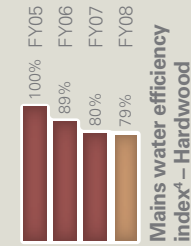
Environment

**Water conservation, extraction and protection**

- Mains water use of 81 million litres decreased 10% in FY08 due to significant water saving projects at Ipswich and the "wet bulb" kiln initiatives at Murwillumbah.
- Water savings and "leak control" program at HPP has reduced daily water consumption at site by up to 30%, saving more than 15.9 million litres of mains water to date.

Reduce mains water consumption across the division.

- Further develop Plywood water saving programs to achieve an overall reduction of 25% on mains water use.
- Implement processing systems for storm water and process water to reduce mains water consumption by a further 20% at HPP.

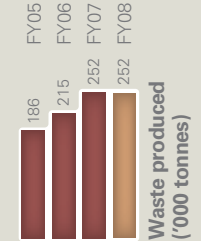
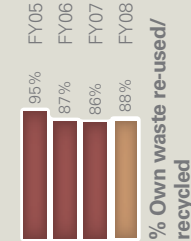


**Waste and resource management, recycling and re-use**

- Used ~223,000 tonnes of timber residues in paper production, biomass fuels, landscaping and animal husbandry.
- Sawdust residues from northern NSW operations used as biomass fuel for co-generation facilities and as a heating fuel for Boral's Kempsey brick plant.

Improve conversion of timber resource to value-added timber product.

- Improve sawing technologies, particularly 'sizing' on log breakdown and re-sawing.
- Continue business case studies into biomass fuels and co-generation options.



**Social Responsibility**

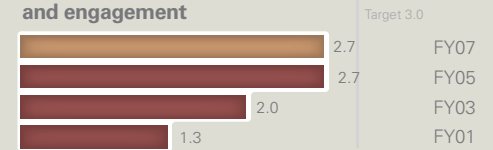
**Community relations and engagement**

- Provided financial assistance to 10 teachers and career advisers to attend the National Careers forum at the Australia Timber conference.
- Ongoing community engagement group established at Ipswich.
- ~100 attended the Koolkhan open day.
- Site visits by ~100 school, TAFE and regional medical students.

Contribute positively to regional communities.

- Build plant scale; develop alternate markets/products to strengthen long-term sustainability of Boral's operations, which are recognised as important regional employers.
- Participate in local Conservation Volunteers Australia projects.
- Investigate public open days at other timber facilities.

**BSDT Scorecard Community relations and engagement**



**Marketplace and Supply Chain**

**Sales and marketing**

- Boral Plywood achieved certification of the Chain of Custody System (AS4707-2006) and Australian Forestry Standard certification (AS4708-2007). These certifications provide assurances that Boral's plywood products have systems in place to track the timber from its origin in a certified sustainable forest through to the point of manufacture.

Use Boral's supply chain to deliver improved sustainability outcomes.

- Obtain Chain of Custody and AFS certification for Boral's hardwood products.
- Continue to develop systems and processes for the transport of goods to ensure compliance with chain of responsibility requirements.



**About Timber**

Boral Timber incorporates Hardwood, Softwood and Plywood operations. The softwood manufacturing operations are 50% owned by Boral through the Highland Pine Products (HPP) joint venture; HPP is managed by a separate joint venture board. Boral Timber reports data for 100% Boral owned businesses. HPP's equity share of GHG emissions data is reported as part of Boral's overall equity share of joint venture data (Scope 3 emissions) on page s42.

The division has 17 operating sites under Boral management and approximately 750 employees in Australia.

<sup>1</sup> In preparation for reporting under the National Greenhouse and Energy Reporting Guidelines, Scope 2 factors have been applied for electricity in FY08. In previous years, Boral applied full lifecycle (Scope 2 and 3) to electricity emissions. Historical comparisons have been adjusted to take into account Scope 3 electricity changes.

<sup>2</sup> If waste data is not available, waste is calculated through a mass balance equation or estimated through sampling. Waste recycled/re-used includes both internal waste and external waste consumed.

<sup>3</sup> Indexed to 100% in FY06 as base year (due to improved data collection since FY06) on a per unit of production basis.

<sup>4</sup> Indexed to 100% in FY05 as base year per unit of production.



“It has been an exciting year with the achievement of zero LTIs, a first for a Boral division and the commissioning of our new plant in Queensland. Our new plant sets new standards, utilising efficient calcining and drying technology, extensive rainwater harvesting, and recycling of major waste streams. Our employee and customer survey results are also pleasing with an 86.9% customer satisfaction index and 93% of employees being engaged or highly engaged.”

Ross Batstone, Executive General Manager

# Plasterboard



116,000 tonnes CO<sub>2-e</sub> emitted (3%↓)<sup>1</sup>



43,000 tonnes of waste recycled/re-used<sup>2</sup> (14%↑)



309 million litres of mains water consumed (8%↓)<sup>2</sup>



BSDT 3.1 (target 3.0)

## Our performance

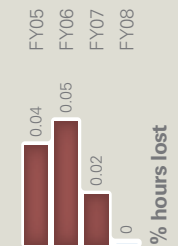
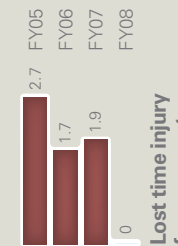
### Health and safety

- Zero LTIFR and hours lost in FY08.
- Over 1,700 actions raised with 96% closed out by the agreed date, well above the FY08 targeted rate of 85%.
- More than 10,000 safety conversations recorded in the business, enabling transparent and open communication at all levels.

## Our goals/plans

25% improvement on last three-year average LTIFR, and % hours lost.

- Continue the focus on high risk activities and the use of national management systems.
- Continue to implement lead indicators to encourage behaviours needed to enhance performance for both employees and contractors.



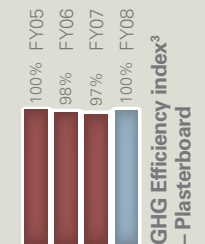
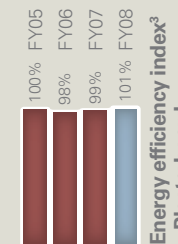
Human Resources

### Energy conservation and climate change

- Underlying energy use and GHG emissions of 1.6 million GJ and 116,000 tonnes of CO<sub>2-e</sub> decreased by 3% year-on-year.
- However, total energy use and GHG emissions per unit of Australian plasterboard increased by 2% and 3% year-on-year as a result of commissioning of the Pinkenba plant.
- Boral's equity interests in Australia (GRA and Rondo) generated 4,000 tonnes of CO<sub>2-e</sub>, while the Asian plasterboard JV LBGA emitted 165,000 tonnes of CO<sub>2-e</sub>.

Reduce emissions per unit and offset Boral's increases in absolute emissions as a result of market demand growth

- Carry out energy efficiency assessments at Port Melbourne
- Reduce GHG emissions per tonne of production at Pinkenba through the use of new technologies



Environment

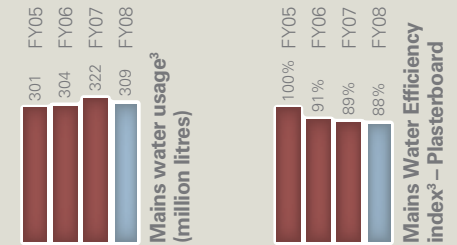


**Water conservation, extraction and protection**

- 309 million litres of mains water was used in FY08. Despite the commissioning of the Pinkenba plant, mains water was down 4% from FY07 due to the implementation of water efficiency improvement plans across the three plants.
- Mains water use per unit of board produced decreased by 5% in FY08 relative to FY07.

Reduce mains water consumption across the division.

- *Reduce reliance on mains water at Pinkenba by up to 30% through the use of harvested rainwater.*
- *Investigate rainwater harvesting at Port Melbourne and Camellia.*

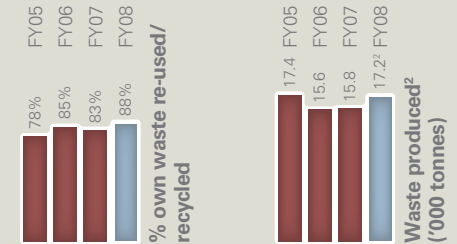


**Waste and resource management, recycling and re-use**

- As a net consumer of waste, plasterboard recycled/re-used more than 43,000 tonnes of waste in FY08.
- Excluding commissioning waste at Pinkenba, % of own waste re-used and recycled increased 5% in FY08 to 88% due to improved plant performance and data collection.
- Waste produced as a result of commissioning of the Pinkenba plant will largely be re-used/recycled over time. However, ~450 tonnes of waste unable to be stockpiled was sent to landfill.

Minimise waste from our operations and increase the amount of waste re-used and recycled that would have otherwise gone to landfill.

- *Investigate further waste recycling opportunities.*
- *Continue reducing all forms of waste.*



**Social Responsibility**

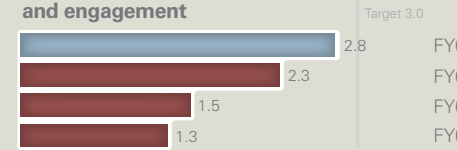
**Community relations and engagement**

- Boral Plasterboard is an active community and industry body which meets regularly with the Peninsular Committee, an industry body at Rosehill.
- Extensive community consultation prior to the construction of Pinkenba plant.
- Extend BWell health and wellbeing education and events to extended family and friends. Initiated the inclusion of 100+ family and friends for the 2007 City 2 Surf.
- Participated in JDRF resulting in staff raising double the average Boral fundraising effort.

Maintain the support and goodwill of communities surrounding Plasterboard's activities through engaging and consulting on relevant issues.

- *Ensure community concerns are considered when implementing major capital works which may impact the community.*

**BSDT Scorecard  
Community relations and engagement**



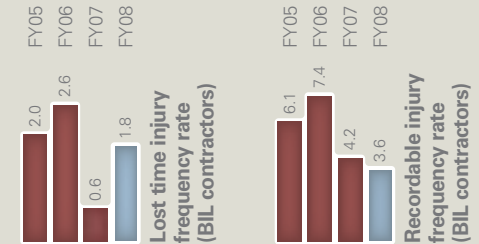
**Marketplace and Supply Chain**

**Strategic sourcing and supply chain**

- BIL (Boral Interior Lining) continues to lead the industry in safety performance by maintaining industry best practice for RIFR <7.5 and LTIFR < 3.
- BIL implemented a rewards system and standardised Public Liability insurance cover for plasterers in Victoria in FY08.
- BIL's OH&S Management System has been nominated for the 2008 Worksafe Victoria Awards.
- Plasterboard has adopted product Life Cycle Analysis to measure GHG emissions and other impacts, to establish a baseline for continuous improvement.

Manage Boral's supply chain in a sustainable way including consideration of environmental, health and safety, and social standards.

- *Introduce crane trucks to help eliminate manual handling for waste removal.*
- *Review safe work practices at site delivery to look at ways of eliminating potential falls from heights.*
- *Continue to develop Life Cycle Analysis work for plasterboard.*



**About Plasterboard**

Operations are focused on gypsum mining and the manufacturing of plasterboard and plaster products such as cornices, ceiling tiles and compounds. The division has: four operating sites and 50 distribution sites under Boral management; a 50% share of Gypsum Resources Australia (under GRA management); a 50% share of Rondo Building Systems (under Rondo management); and a 50% share of LBGA (under LBGA management working under Lafarge systems). Boral Plasterboard operates with 650 employees in Australia.

<sup>1</sup> In preparation for reporting under the National Greenhouse and Energy Reporting Guidelines, Scope 2 factors have been applied for electricity in FY08. In previous years, Boral applied full lifecycle (Scope 2 and 3) to electricity emissions. Historical comparisons have been adjusted to take into account Scope 3 electricity changes. Year-on-year emissions and water comparison excludes the commissioning of Pinkenba.

<sup>2</sup> If waste data is not available, waste is calculated through a mass balance equation or estimated through sampling. Waste recycled/re-used includes both internal waste and external waste consumed. Year-on-year comparison excludes the commissioning of Pinkenba.

<sup>3</sup> Indexed to 100% in FY05 as base year. Calculations based on total divided by square metres of plasterboard produced for Australia only.



“This year our focus has been on managing the market downturn, which has had a significant impact on our facilities and workforce. Despite this, we have continued to meet or exceed our sustainability objectives, including commissioning the Terre Haute brick plant, the first to be built to the US Green Building Council’s LEED standards. Also, all of our businesses became Founding Members of The Climate Registry, to promote disclosure and verification of GHG emissions.”

**Emery Severin**, Executive General Manager

# USA



**352,000 tonnes**  
CO<sub>2-e</sub> emitted (23%↓)<sup>1</sup>



**3.5 million tonnes of waste and by-products recycled/re-used<sup>2</sup> (8%↓)**



**341 million litres**  
of mains water consumed (21%↓)<sup>1</sup>



**BSDT 3.1 (target 3.0)**

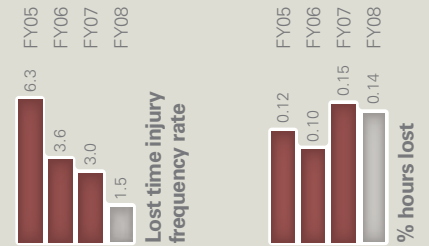
## Our performance

### Health and safety

- 50% LTIFR reduction to 1.5 due to strong performances in Denver Construction Materials and Bricks. Percent hours lost decreased to 0.14.
- Workers compensation claims costs decreased by 34%.
- The Behavioural Accident Prevention Process continues to deliver strong results with 418 barriers removed, or being removed, to promote safer work practices.

## Our goals/plans

- 25% improvement on last three-year average LTIFR and % hours lost.
- *Develop a simple framework for reliable risk evaluation and risk management.*
- *Continue to review Contractor Safety Management Systems.*
- *Fully integrate behavioural-based safety management with traditional compliance safety processes.*



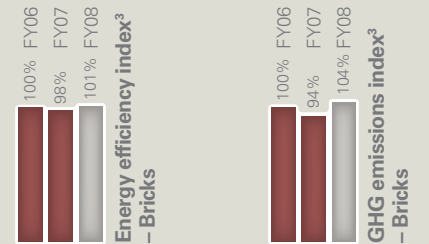
### Human Resources

### Energy conservation and climate change

- Energy use and GHG emissions of 6 million GJ and 352,000 tonnes of CO<sub>2-e</sub> decreased by 24% and 23% year-on-year, respectively, primarily reflecting lower production.
- Energy use and GHG emissions per tonne for brick production were up 3% and 5% against the prior year, reflecting curtailed production levels and subsequent decreased efficiencies.
- The new Terre Haute brick plant is currently operating on ~80% landfill gas.
- Boral Bricks has piloted a technology that converts waste products into alternative fuel to reduce our dependency on fossil fuels.

Reduce emissions per unit and offset increases in absolute emissions as a result of market demand growth.

- *Continue to increase use of biofuels such as landfill gas and wood waste.*
- *Improve energy efficiency by shifting production capacity to higher efficiency plants.*



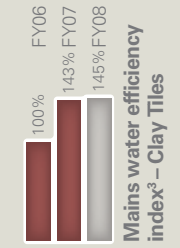
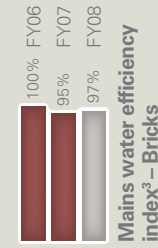
### Environment

**Water conservation, extraction and protection**

- Mains water use reduced by 21% on prior year largely due to lower production volumes.
- Bricks mains water usage per unit of production was up 2% on prior year, again as a result of decreased production efficiencies.

Reduce water consumption across the division.

- *Improve collection and recycling/re-use of water.*
- *Continue elimination of unnecessary water use.*
- *Outsource water intensive activities such as truck washing and saw cutting to entities better able to recycle/re-use.*

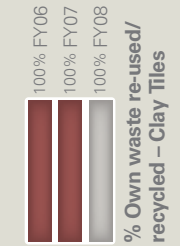
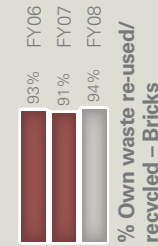


**Waste and resource management, recycling and re-use**

- USA remains a net consumer of waste, re-using/recycling ~3.5 million tonnes of external and internally generated waste and by-products and re-using/recycling 94% of its own waste.
- US Tile continues to re-use or recycle 100% of tile waste.
- Bricks USA achieved a 56% reduction in the landfilling of production waste compared with FY07.

Minimise waste from our operations and increase the amount of waste re-used and recycled that would otherwise go to landfill.

- *Increase use of waste materials in product mix.*
- *Generate less production waste from new plants and kiln retrofits.*



**Social Responsibility**

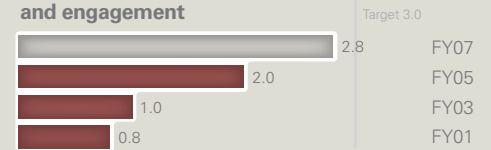
**Community relations and engagement**

- Employees, families and friends have fundraised >US\$145,000 for JDRF since 2005.
- Through Boral's HomeAid partnership, clay roof tiles were provided for Casa de Amparo, an emergency housing facility for abused, neglected or abandoned children. Bricks were donated to the Phoenix Pass, a shelter for women and children.
- Six educational scholarships of \$US4,000 each for employees' children.

Maintain the support and goodwill of communities surrounding Boral's activities through engaging and consulting on relevant issues.

- *Participate in the JDRF Walk for a Cure and match employee fundraising to a limit of US\$25k pa.*
- *Support HomeAid through provision of materials to designated projects in 2008/09.*

**BSDT Scorecard Community relations and engagement**



**Marketplace and Supply Chain**

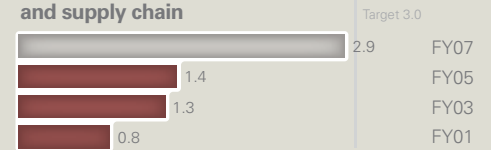
**Sales and marketing**

- US Tile has applied for Cradle to Cradle certification for a line of products. Cradle to Cradle evaluates product lifecycle and its impacts on the environment, human health and social equality.
- BMTI has increased its volume of marketable treated fly ash by almost 7% on last year that would otherwise have required landfilling.

Continue to develop sustainable products and promote sustainability of existing products.

- *Certify products to applicable and reputable "environmental" standards.*
- *Continue product development and innovation to enhance the use of marketable fly ash, a waste by-product that would otherwise go to landfill.*

**BSDT Scorecard Marketing, procurement and supply chain**



**About USA**

Boral's US operations include clay brick and roof tile manufacturing, fly ash marketing and re-use and concrete and quarry operations in Denver, CO. and Oklahoma City, OK. The division has 106 operating sites and 58 distribution sites under Boral management and over 2,200 employees in the USA. Boral owns 50% of the MonierLifetile joint venture which is under MonierLifetile management. Boral is also a 50% joint partner in a clay roof tile operation in Trinidad. Sustainability data is reported for 100% owned businesses only.

<sup>1</sup> Previous years' data has been restated due to invoice and metering reconciliation. FY07 data has been restated by an additional 22,000 tonnes of CO<sub>2</sub>e and 20 million litres of mains water, while FY06 data was overstated by 100 million litres of mains water.  
<sup>2</sup> If waste data is not available, waste is calculated through a mass balance equation or estimated through sampling. Waste recycled/re-used includes internal waste, external waste and by-products consumed.  
<sup>3</sup> Indexed to 100% in FY06 as base year. Calculations are based on total energy, GHG emissions and mains water for Bricks USA or Clay Tiles divided by tonnes of product produced.

## Independent Assurance Statement

To the Board of Directors, Management and Stakeholders of Boral Limited:

Boral Limited (Boral) commissioned Net Balance Management Group Pty Ltd (Net Balance) to provide independent assurance of the *2007/2008 Sustainability Report* (the 'Report'). The Report presents Boral's sustainability performance over the period 1st July 2007 to 30th June 2008. Boral was responsible for the preparation of the Report and this statement represents the assurance provider's independent opinion. Net Balance's responsibility in performing our assurance activities is to the Board and Management of Boral alone, in accordance with the terms of reference agreed with them. Other stakeholders should perform their own due diligence before taking any action as a result of this statement.

### Assurance Standard

The assurance was undertaken in accordance with the *AA1000 Assurance Standard*, which is based on the principles of Materiality, Completeness and Responsiveness. A detailed description of these principles can be found in our full statement at [www.boral.com.au/sustainability](http://www.boral.com.au/sustainability).

### Assurance Objectives and Process

The objective of the assurance process is to provide stakeholders of Boral with an independent opinion on the quality of the report. This is confirmed through verification of the claims made, and a review of the organisation's underlying systems, processes and competencies that support the report with respect to the principles of materiality, completeness and responsiveness. Ensuring continuous improvement in data management systems and associated reporting processes is also a complementary objective.

The assurance engagement was undertaken between June and September 2008. A detailed description of the assurance process can be found in our full statement on the website.

### Assurance Level and Limitations

The level of assurance provided is reasonable as defined by the scope and methodology described in this assurance statement. A detailed description of the assurance limitations is contained in our full statement at [www.boral.com.au/sustainability](http://www.boral.com.au/sustainability).

### Our Independence and Capacity

A detailed description of our independence and capacity can be found in our full statement at [www.boral.com.au/sustainability](http://www.boral.com.au/sustainability).

### Our Opinion

Based on the scope of the assurance process, the following represents the assurance provider's opinion:

- The findings of the assurance engagement provide confidence in the information contained within the Report. The level of data accuracy was found to be within acceptable limits. Data trails selected were easily identifiable and traceable, and the personnel responsible were able to reliably demonstrate the origin(s) and interpretation of data.
- The statements made in the report appropriately reflect environmental, social and economic performance achieved during the period.
- All errors noted by the assurance provider were satisfactorily addressed by Boral prior to finalising the report.

Overall, the assurance provider is satisfied that the Report is an appropriate representation of Boral's sustainability performance during the reporting period.

### Conclusions

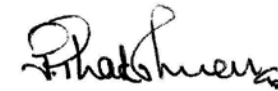
- **Materiality:** Environmental, social and broader economic aspects and issues that are considered material to stakeholders and peers have been addressed and communicated within the Report. Boral has restructured this year's report so that it is in line with the requirements of the BSDT, which provides a consistent approach between how Boral internally assesses performance against material aspects and how Boral reports this performance to stakeholders externally.
- **Completeness:** Boral has effective systems in place to measure, monitor and manage sustainability issues. Net Balance carried out visits to a number of sites during the assurance engagement and found that the teams responsible for managing sustainability were competent and had a good understanding of the material aspects of Boral's sustainability performance. Net Balance found that the information presented is comparable (in terms of year-on-year performance) and is in a format that is easily understandable by a range of stakeholders. Overall, Net Balance felt that the information presented is a fair representation of Boral's sustainability performance and is presented in a balanced manner.
- **Responsiveness:** Boral was found to be responding appropriately to the concerns of its stakeholders and adequately communicating those responses within the Report. Net Balance found that Boral actively engages with customers, industry groups, Government and the communities in which they operate. Results of stakeholder engagement are presented in a clear and concise manner within the report.

### The Way Forward

It was found that Boral has a robust process in place for collecting sustainability performance information and that the Report appropriately addresses Boral's environmental, social and economic material issues. To ensure that Boral continues to improve, Net Balance has provided broad based suggestions for reporting on materiality assessment and stakeholder engagement, along with internal training and awareness raising on the assurance process. These have been outlined in a more detailed report presented to Boral management.

On behalf of the assurance team

3rd September 2008  
Melbourne, Australia



### Terence Jeyaretnam

Director, Net Balance & Lead CSAP  
(IRCA UK)

Email:

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# Glossary and Data

## Sustainability data table

	For the year ended 30 June 2008	Boral operations <sup>1</sup>	Year-on-year change <sup>2</sup>	Boral's equity share of JVs <sup>3</sup>
<b>Human Resources</b>				
<b>People and Safety</b>				
Employees, FTE's		<b>15,928</b>	(1.6%)	
LTIFR, per million hours worked		<b>2.5</b>	(11%)	
Hours lost, %		<b>0.08</b>	(11%)	
<b>Environment</b>				
<b>Energy consumed</b>				
Coal, tonnes ('000)		<b>283.67</b>	3%	–
Natural gas, petajoules		<b>13.20</b>	(8%)	17.71
Electricity, GWh		<b>830.12</b>	4%	103.84
Diesel, litres (millions)		<b>162.23</b>	3%	3.27
LPG, litres (millions)		<b>4.72</b>	(8%)	0.08
Petrol, litres (millions)		<b>8.44</b>	9%	0.08
Alternative fuels, petajoules		<b>1.79</b>	(17%)	1.00
<b>Greenhouse gas emissions</b>				
CO <sub>2-e</sub> , tonnes (millions)		<b>3.79</b>	1%	0.20
<b>Water consumption</b>				
Mains water, litres (millions)		<b>2,819.8</b>	(4.6%)	63.16
River water, litres (millions)		<b>308.3</b>	N/A	
Surface water, litres (millions)		<b>2,866.5</b>	N/A	
Ground/bore water, litres (millions)		<b>791.9</b>	N/A	
<b>Waste</b>				
Waste product produced, tonnes ('000)		<b>1372.2</b>	2%	190
Waste recycled/re-used <sup>4</sup> , %		<b>43% – 100%</b>	N/A	
Waste and by-products re-used or recycled tonnes ('000)		<b>5,557.4</b>	3.6%	
External waste used, tonnes ('000)		<b>4,322.9</b>	2%	
<b>Social Responsibility</b>				
<b>Community investment</b>				
Community investment in eight key partnerships (total cash and materials)		<b>\$591,500</b>	–	
<b>Employee fundraising</b>		<b>\$443,000</b>	32%	

<sup>1</sup> 100% owned Boral operations.

<sup>2</sup> On a comparative basis, excluding year-on-year scope changes.

<sup>3</sup> Includes data from the following Australian and Asian JV businesses: Sunstate Cement, Gypsum Resources Australia, Rondo, Highland Pine Products, and Lafarge Boral Gypsum Asia (energy and GHG data only).

<sup>4</sup> Boral's total waste recycled / re-used represents a range across Boral's products.

## Glossary and abbreviations

BSDT	Boral Sustainability Diagnostic Tool	LUAC	Large User Abatement Certificate
Calcination	The process of reducing limestone to quicklime by roasting in the kiln	NGAC	NSW Greenhouse Abatement Certificate
CDP6	Carbon Disclosure Project	Number of employees	Number of employees on a full-time equivalent basis is used to identify total employee numbers and employee numbers by division and by region. The number of employees does not include contractors.
CO <sub>2-e</sub>	Carbon dioxide equivalent	Operating sites	Wholly owned or 50% owned JV operating site excluding sales, administration and distribution offices
CNG	Compressed Natural Gas	RAP	Recycled asphalt pavement
CRI	Corporate Responsibility Index	Recycling	Waste material being used in a new product
CPRS	Carbon Pollution Reduction Scheme	Re-use	The incorporation of waste material back into the same product
EMS	Environment Management System	RIFR	The Recordable Injury Frequency Rate (RIFR) is the number of employee injuries that result in medical treatment as well as those that result in lost work time per million work hours
EOWA	Equal Opportunity for Women in the Workplace Agency	Staff turnover	The number of employee departures during the year divided by the average number of full-time equivalent staff members employed during year, and multiplied by 100
Fly Ash	Fly ash is a by-product of coal-fired electricity generating plants; it has cementitious properties and is therefore used as an important (cost-reducing) additive in cement	Water usage	Reported water usage is the amount of mains water consumed for the 12 month period to 30 June or in some cases, as stated for Clay & Concrete Products, for the 12 month period covered by usage invoices that most closely match the financial year ended 30 June
FY	Financial Year		
Greenhouse Gases (GHG)	Greenhouse gases (GHG) are gases in the atmosphere that are linked to the greenhouse effect. The main GHG are CO <sub>2</sub> and methane. GHG emissions for Boral are reported in tonnes of CO <sub>2</sub> equivalent (CO <sub>2-e</sub> ), calculated from energy use data using conversion factors from the Department of Climate Change and from the EPA AP 42 factors in the US. Reported GHG emissions are for the 12 month period to 30 June		
GJ	Gigajoule		
HIA	Housing Industry Association		
JDRF	Juvenile Diabetes Research Foundation		
LBGA	Lafarge Boral Gypsum in Asia		
LTIFR	The Lost Time Injury Frequency Rate (LTIFR) for a particular period is the number of employee Lost Time Injuries (LTIs) per million hours worked during the period. Contractors are not included in employee LTIFR. Contractors LTIFR is reported separately on page s16		