

# Austral Bricks: A greener industry, brick by brick

## Sustainability Advantage Case Study

### Austral Bricks

Austral Bricks is Australia's largest manufacturer of clay bricks and pavers. The company employs 1,500 people, 450 of whom are based in Horsley Park, NSW. Austral Bricks undertakes quarterly internal environmental reviews of all operations and is currently audited annually for environmental management and compliance. Since commencing these audits in June 2000, all NSW sites have demonstrated consistent improvement in environmental management.

### Industry

Manufacturer of pavers, bricks, building materials, facade systems and landscaping products.



Austral bricks saved money in energy costs by modifying overhead lighting so isolated areas could be turned off in daylight hours.

### Sustainability drivers

Austral Bricks has been committed to improving its business sustainability since June 2000. The company's General Manager saw the Sustainability Advantage Program as an opportunity to work in partnership with the Department of Environment, Climate Change and Water NSW (DECCW) to increase its focus on priority projects with real environmental and economic outcomes.

### Achievements and savings

<b>Energy</b>	<ul style="list-style-type: none"><li>\$153,420 in energy saved annually from improvements to the compressed air system, power factor correction equipment and lighting</li></ul>
<b>Water</b>	<ul style="list-style-type: none"><li>32,058kL saved in two years by utilising rainwater in brick-making process</li></ul>

### Steps

#### Real projects, measurable outcomes

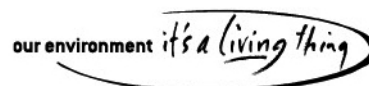
Austral Bricks' brick-making production process is highly dependent on gas, electricity and water resources. Through the Sustainability Advantage Program's Resource Efficiency module, Austral Bricks developed key business performance indicators and efficiency targets for all its resource consumption. In addition to the Resource Efficiency module, Austral Bricks has completed three additional modules including Vision Commitment and Planning, Environmental Risk and Responsibility and Supply Chain Management. As a result, Austral Bricks has achieved significant environmental and economic savings:

- annual saving of \$112,420 in electricity costs due to improvements in compressed air systems, improving management of air leaks and installation of smaller machines and driers
- annual saving of \$41,000 in electricity costs due to improvements to power factor correction equipment with a project payback time of around four years
- annual saving of \$20,000 in reduced water costs at one Austral Brick site due to the substitution of town water with rainwater in the brick-making process.

Using the professional expertise and technical support provided by Sustainability Advantage, Austral Bricks also implemented more efficient lighting in its brick-making sheds, resulting in an additional annual saving of \$3,000. One of the plants had 140 400W high bay lights switched on for 24 hours a day, seven days a week. The lighting was modified into quadrants to enable specific areas to be turned off in daylight. More than half the lights are now turned off during the day. Emergency lighting was also installed so that the main factory lighting can be turned off when no brick manufacturing is taking place.



Environment,  
Climate Change  
& Water



### Commitment to a smaller footprint

Austral Bricks has redesigned its brick-making process to reuse all product waste generated during manufacture. The company is also actively engaged in trialling other industries' waste by-products to get a competitive advantage through process improvement, cost savings and enhanced product performance. With support from the Sustainability Advantage Program, Austral Bricks is determined to continue investigating new additives and alternative resources to improve product performance and reduce its production and environmental footprint. Austral Bricks understands the full life cycle of its product and is closely involved in the development of the brick industry component of an Austral Bricks Life Cycle Inventory.

### An engaged executive

The Austral Bricks executive was engaged from the outset to drive sustainability performance. By understanding the interplay between different departments, Austral Bricks was able to consolidate its environmental priorities into a comprehensive sustainability action plan.

Austral Bricks continues to take a broad approach to its sustainability actions. For instance, the Sustainability Advantage Program is helping Austral Bricks create a thorough greenhouse gas inventory. This will include direct emissions from production processes and indirect emissions from its operations, such as energy used in raw material manufacture, outsourced activities and waste disposal, as well as staff flights, taxis and commuting.

### Outcomes

Austral Bricks values its participation in the Sustainability Advantage Program and the support, systems and resources DECCW provides. Key benefits to Austral Bricks include:

- consolidation of all sustainability initiatives into a coherent plan using the Sustainability Advantage Diagnostic
- direct and indirect cost savings through implementation of resource efficiency projects
- networking with other building products manufacturers to achieve common goals
- technical expertise and professional support provided by external consultants funded through the Program.

'Sustainability Advantage has provided the opportunity for Austral Bricks to work in partnership with DECCW to identify opportunities to improve our environmental performance across all areas of the business. The Program has the additional benefit of receiving third party recognition.'

Cathy Inglis, Group Technical Research and Engineering Manager, Austral Bricks

### Next steps

Austral Bricks recently repeated the Sustainability Advantage Diagnostic to review progress towards achieving its sustainability goals. The diagnostic results confirmed that Austral Bricks has made great progress and identified new priority actions:

- develop an Environmental Management System consistent with the ISO 14000 standard
- review and refine its Sustainability Strategy, building on achievements to date
- increase staff engagement in the strategy through initiatives such as dedicated car-pool parking spaces and bicycle facilities
- strengthen supply and value chain partnerships to reduce its environmental footprint outside the gate.

### More information

#### Austral Bricks

Cathy Inglis, Group Technical Research and Engineering Manager

**Call:** 02 9830 7700

**Email:** [cathy.inglis@australbricks.com.au](mailto:cathy.inglis@australbricks.com.au)

**Visit:** [www.australbricks.com.au](http://www.australbricks.com.au)

#### Department of Environment, Climate Change and Water NSW (DECCW)

**Call:** 02 8837 6000

**Email:** [sustainbus@environment.nsw.gov.au](mailto:sustainbus@environment.nsw.gov.au)

**Visit:** [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)

### Register

#### Contact DECCW's Business Partnerships

to register for Sustainability Advantage.

**Call:** 02 8837 6000

**Email:** [sustainbus@environment.nsw.gov.au](mailto:sustainbus@environment.nsw.gov.au)

**Visit:** [www.environment.nsw.gov.au/sustainbus](http://www.environment.nsw.gov.au/sustainbus)

**Achieve a Sustainability Advantage.** Sustainability Advantage is a business support service from the Department of Environment, Climate Change and Water NSW (DECCW). It is designed to help your organisation understand sustainability, successfully manage for a better environment and add business value.