

19 September 2019

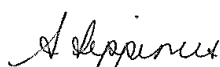
Australian Securities Exchange  
Attention: **Companies Department**

**BY ELECTRONIC LODGEMENT**

Dear Sir / Madam

Please find attached for immediate release to the market the FY2019 Sustainability Report for Brickworks Limited.

Yours faithfully  
BRICKWORKS LIMITED



**Susan Leppinus**  
Company Secretary



SUSTAINABILITY REPORT  
2019

**BRICKWORKS**  
LIMITED

## About this

# REPORT

This year, Brickworks Limited (Brickworks) has prepared a stand-alone Sustainability Report to complement the Annual Report, providing expanded disclosure on our non-financial performance, impacts and opportunities. It has been informed for the first time by the Global Reporting Initiative (GRI) Standards, a leading independent Environmental Social and Governance reporting standard.

With the assistance of EY, we have expanded our materiality review, by interviewing internal and external stakeholders, investigating customer expectations and reviewing a range of publications. Further information is available in the Stakeholder Engagement and Materiality Assessment Process sections of this report. EY provided a Statement of Independence to support this materiality review.

The Sustainability Report provides detailed information on the issues that have been identified as most significant through our materiality review. Details on our GRI Index is included in the Appendix.

The boundary of the Sustainability Report covers Brickworks Limited's Australian operations where the company has operational control. The sustainability performance of our recently acquired U.S. operations Glen-Gery will be included in the FY20 Sustainability Report, following the integration of the operations with Brickworks' Management Systems. However, some coverage of the Glen-Gery operations is included in this report.

The reporting period for most topics is 1 August 2018 to 31 July 2019, aligned with the Brickworks financial year. An exception is energy and carbon data, where the reporting period is 1 July 2018 to 30 June 2019, aligned with the National Greenhouse Gas and Energy Reporting Scheme. Details of our fundraising efforts for the Children's Cancer Institute are for the 2018 calendar year.

As part of our expanded disclosure, EY performed a Limited Assurance<sup>1</sup> engagement for metrics internally identified as significant risks, including:

- Lost time injury frequency rate (LTIFR)
- Total recordable injury frequency rate (TRIFR)
- Environmental fines
- Scope 1 and 2 greenhouse gas emissions and energy consumption

A copy of the Limited Assurance Statement from this audit is included in this report.

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<sup>1</sup> This year, the Limited Assurance was limited to Australian Operations only.

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## *A Message from the*

# Managing Director

At Brickworks, we are passionate about our sustainable vision for the built environment and the role our genuine building products play in creating beautiful, healthy and sustainable homes and environments. This year we are taking another step forward on our sustainability journey, with the launch of our Sustainable Business Framework, linking our purpose with the material issues of our Sustainability Strategy. These areas – Our People, Community, Environment and Responsible Business – are issues important to both our stakeholders and Brickworks. This year our first stand-alone Sustainability Report allows a chance to cover these issues in depth, informed by international standards such as the Global Reporting Initiative.

As one of Australia's leading manufacturers of quality building products, Brickworks' purpose has sustainability at our core - to create beautiful products that last forever. Our product range offers valuable features for healthy, energy efficient and sustainable housing. For example, bricks are naturally sustainable products, made from non-toxic ingredients, are non-flammable, low maintenance, weatherproof, reusable, recyclable, inert, have excellent acoustic properties, are colourfast and durable with a 100-year warranty lifetime.

Building material choice can be the difference between a minor incident or major, as witnessed during the 2017 Grenfell Tower fire disaster in London. Brickworks is committed to customer health and safety through product quality systems and testing. All Brickworks clay and concrete products are non-combustible and pass AS 1530.1, combustibility test for building materials. Some competitors claim compliance through an exemption when their products cannot pass the non-combustibility test. Brickworks supports the growing calls from consumers and industry participants for tighter controls and increased compliance in relation to the use of building products in construction projects.

As Australia's largest brick manufacturer, we were pleased to announce the acquisition of America's fourth-largest brickmaker Glen-Gery in November 2018, bringing geographic diversity to Building Products, with exposure to the U.S. and Australian construction cycles. This acquisition extends our sustainable vision for the built environment across two continents, and in FY20 Glen-Gery will be incorporated into our upcoming five-year sustainability strategy. Our next Sustainability Report will be extended to include the performance of Glen-Gery's operations following its integration with Brickworks' Management Systems.

By investing in technology and discovery, we deliver better products and anticipate the needs of our industry as it evolves. A recent example is Bristle Roofing and Brickworks Building Products' current design and development of a Net Zero home concept that promotes the installation of solar energy systems during the construction phase of a new home. In addition, Bristle Roofing's solar roof tiles won the 2019 HIA Industry and Product Innovation Award for its solar roof tiles.

During FY19 we progressed all 9 targets set last year, which drove improvements in safety, employee development, diversity, energy, water, resource efficiency, community and governance. Our FY20 targets include a continuation of these focus areas, as well as an investigation of diversity and carbon targets.

Brickworks recognises the importance of increased disclosure and action related to climate risk and has commenced preparing a plan to meet the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). This plan will continue to be progressed in FY20.

Natural gas is the company's second largest cost after staff wages. Gas prices have significantly increased over the last 2 years, with a 20-65% price increase in 2018 and 29-45% increase in 2019. To counteract the adverse impact, in September 2018, Brickworks entered a 5-year gas supply agreement with Santos, securing the supply of wholesale gas for its Qld, Vic, NSW and SA operations. The agreement

commences on 1 January 2020 and provides the East Coast operations with a flexible source of gas at market competitive and stable long-term prices. Further negotiations are currently underway for an additional 7-years supply of natural gas from the Narrabri Gas Project. In FY20, Brickworks will continue to review alternative sources of gas while leveraging supplier relationships to improve long-term supply.

At Brickworks we believe there is no task that we undertake that is so important that we can't take the time to find a safe way to do it. We are focussed on safety leadership and integrating safety awareness into all levels of the organisation and business processes. Safety performance at our Australian operations improved in FY19, recording a lower annual injury rate. Injury rates at Glen-Gery are higher than our Australian operations. A key focus area for FY20 is to drive improvement in Glen-Gery's safety performance by providing behavioural safety leadership training and incorporating key health and safety programs into the business. We will continue to strive for further improvements with a FY20 target to reduce injury rates by at least a further 10 percent.

Regrettably, in December 2018 a serious vehicle accident occurred that injured pedestrians, our driver and, tragically resulted in the loss of a bystander's life. Our thoughts and deepest sympathies are with the families, and we have an unrelenting focus to achieve zero injuries and fatalities at our operations.

Brickworks is committed to developing and maintaining corporate governance and in FY19, the Board focussed on Board renewal. Brickworks is pleased to announce the appointment of Malcolm Bunday, as an independent non-executive Director to the Brickworks Board, with effect from 1 October 2019. This appointment restores the Board to 7 directors, which was reduced in 2018 when David Gilham retired from the Board.

Brickworks recognises the importance of gender diversity in its board, and has developed a target to increase female board membership to 28% by 2020. The Board is seeking to appoint an independent female non-executive director with property experience as a successor to Brendan Crotty when he retires. The Company has engaged an external recruitment company to assist with this process.

We also continued our focus on inclusion and diversity in 2018, establishing a Diversity Council to drive our Diversity and Inclusion Strategy. The percentage of women in senior executive roles has increased from 7% in 2015 to 27% in 2019. During FY20, we will expand on these successes by continuing our focus on mentoring and initiatives to increase gender diversity. Sustaining our strong culture, diversity and talent of our people is critical to our long-term success.

Given the importance to our Board of having a business strategy that is sustainable, this year sustainability will be formally incorporated into the charter of the Audit and Risk Committee (ARC). The ARC will be presented with an Environmental Social Governance (ESG) risks and opportunities paper and a five-year Sustainability Strategy.

I would like to thank everyone working across the Brickworks group for their dedication, hard work and continued focus on safety and the Brickworks values. Our sustainability journey continues into the new financial year, building on the achievements of this year across our strategic focus areas.



**LINDSAY PARTRIDGE AM**  
Managing Director

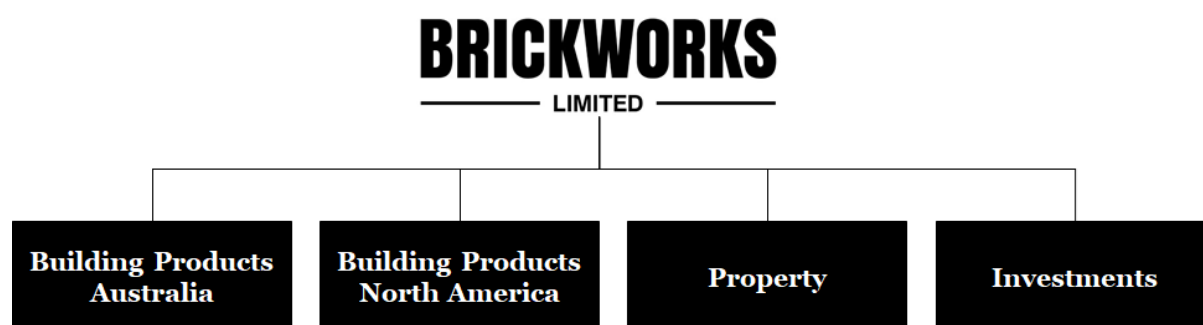


# About Us

Brickworks Limited is an ASX200 publicly listed company, with a long, successful, and proud history, dating back to 1934.

Brickworks is one of the nation's leading providers of building products, employing 1,494 full time equivalent employees across its Australian operations (permanent and part time employees, excluding casuals) and 617 employees in the U.S.

From bricks to precast concrete panels, pavers, roofing tiles and timber products, Brickworks offers a full suite of building products.



Brickworks has a diversified corporate structure that has delivered stability of earnings over the long term. Following the acquisition of Glen-Gery in the United States, there are now four divisions within the Brickworks Group structure:

1. Building Products Australia
2. Building Products North America
3. Property
4. Investments

Brickworks headquarters are in Horsley Park, NSW, approximately 45kms west of Sydney's CBD. Brickworks has a vast network of operational sites and display centers in Australia. In total, Brickworks comprises 30 manufacturing sites currently in operation, comprising:

- 11 Brick plants
- 2 Roofing plants
- 10 Masonry plants
- 4 Timber mills
- 3 Precast plants
- 33 Quarries

In addition, the Building Products Group has 35 display centres across the country, complemented by an extensive reseller network of more than 100 displays. Brickworks has invested in CBD design studios in major capital cities across Australia.

Brickworks completed the acquisition of Glen-Gery in North America on 23 November 2018. Glen-Gery has leading market positions in the Midwest, Northeast and Mid-Atlantic states and sells around 230 million bricks per year. It has 10 manufacturing plants (nine brick and one manufactured stone) and controls around 95% of raw material inputs, through ownership of 29 quarries located near its manufacturing sites. Details of Glen-Gery's sustainability performance will be included in the FY20 Sustainability Report.

For the year ended 31 July 2019, Brickworks total revenue was \$919 million. This included Building Products Australia revenue of \$755 million, across five major divisions – Austral Bricks, Bristile Roofing, Austral Masonry, Austral Precast and Auswest Timbers.

Our

# BRANDS



Brickworks Building Products is one of Australia's largest and most diverse building material manufacturers. Under the Brickworks Building Products umbrella are some of Australia's best-known building materials brands. Our products include bricks, pavers, masonry blocks, retaining wall systems, precast concrete panels, concrete and terracotta roof tiles, timber products, terracotta façades and specialised building systems.

With a broad product portfolio and manufacturing and sales facilities across Australia & North America, Brickworks Building Products is uniquely placed to service the demands of the building industry.

Brickworks continues to lead the way through design, style, innovation, sustainability and collaboration. The company's commitment is to inspire, support, create and build better environments and places for its customers and communities.



Founded in 1908, Austral Bricks is Australia's largest, best-known and most efficient clay brick and paver manufacturer. The company has a well-established national presence with manufacturing and sales facilities in every state. It has long been at the forefront of product innovation and efficient, sustainable production. The introduction of robotic brick handling equipment and the ongoing pursuit of energy and resource efficiencies has enabled Austral Bricks to maintain its competitive edge.

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



BOWRAL BRICKS

When Bowral Bricks began production in 1922, a teenage Don Bradman was still scoring runs for the local side. Today their distinctive dry-pressed bricks are highly valued by discerning architects and builders across the country. The unique combination of traditional craftsmanship and modern technology will ensure that the Bowral Bricks brand will remain the benchmark for brick excellence for many years to come.

[www.bowralbricks.com.au](http://www.bowralbricks.com.au)



Daniel Robertson has been building Australia from the ground up since 1853.

Our name signifies a continued commitment to deliver outstanding products that are distinctive and aesthetically beautiful.

Our culture of innovation has driven us to develop unique colours, shapes and textures in brick.

[www.danielrobertson.com.au](http://www.danielrobertson.com.au)



With a heritage reaching back to 1862, Nubrik premium-quality bricks are still moulded the traditional way on century-old presses. Their time-honoured expression of authenticity and elegance is acknowledged by architects, builders and discerning homebuyers who also value their rich colour blends, solidity and crisply-defined edges.

[www.nubrik.com.au](http://www.nubrik.com.au)



Founded in 1890, Glen-Gery is one of the U.S.'s largest brick manufacturers and operates nine brick manufacturing facilities and one manufactured stone facility. Glen-Gery products are sold nationally through a network of over 500 distributors in the United States and Canada.

Glen-Gery is an industry leader for its' diversified product line of more than 600 brick products, which are available in a wide-array of sizes and textures.

<https://www.glengery.com/>



Through organic growth and acquisition, Austral Masonry has grown from a single Victorian plant to become a major player in the concrete masonry market along Australia's East Coast. As well as grey concrete blocks, the workhorses of the building industry, our masonry division manufactures coloured concrete masonry units, pavers and retaining wall systems for residential and large-scale commercial applications.

[www.australmasonry.com.au](http://www.australmasonry.com.au)





GB Masonry collection has been a symbol of quality in the masonry industry since 1978, specialising in sandstone style concrete blocks with an authentic sandstone appearance.

GB Masonry combines industry leading machinery with manual chiselling to produce the hand-crafted sandstone products on which the business made its name. For products that show the skill of master block makers there is no rival to the GB Masonry collection of premium concrete masonry blocks.

[www.gb-masonry.com.au](http://www.gb-masonry.com.au)



Ceramic facade systems are a cost and time efficient approach to cladding commercial and upscale residential buildings. The Terraçade system, developed in Australia by Brickworks Building Products, combines the visual appeal and colourfastness of terracotta with the low maintenance and functional efficiency demanded in today's competitive market.

[www.terraçade.com.au](http://www.terraçade.com.au)



Austral Precast is Australia's premier supplier of high-quality, innovative and customisable precast concrete product solutions. Using state-of-the-art technology, production techniques and systems, our precast division produces a diversified range of wall, floor, column, and client-specific precast solutions. To meet the construction industry's ever-increasing demands, the company operates from five plants located along the eastern seaboard and in WA.

[www.australprecast.com.au](http://www.australprecast.com.au)



UrbanStone began manufacturing paving products in early 1993. UrbanStone are leading craftsman of Australia's finest engineered stone, natural stone and porcelain stoneware.

Having set a new standard in style and distinction, the UrbanStone range is consistently specified by landscape architects, designers and specifiers, and feature in prominent commercial and residential projects across the country.

From a standard range of paving solutions to bespoke options, UrbanStone offers products that suit any style and project.

[www.urbanstone.com.au](http://www.urbanstone.com.au)



Pronto Panel's durable, lightweight and simplistic nature makes it perfectly suitable for both residential and commercial applications. Pronto Panel's minimal components and availability of various sizes minimizes cutting, allowing for an efficient assembly and installation.

Pronto Panel satisfies the performance requirements of the Building Code of Australia. The certified structural capacity of Pronto Panel ensures compatibility for projects requiring fire resistance and acoustic insulation.

[www.prontopanel.com.au](http://www.prontopanel.com.au)



From production facilities in WA, Vic and the ACT, Auswest Timbers manufactures a diverse range of timber products. Green structural timbers are processed for mine, wharf and rail track construction, as well as for floor joists, roofing timbers and roof tile battens.

[www.auswesttimbers.com.au](http://www.auswesttimbers.com.au)



Established in 1929, Bristile Roofing is one of the country's largest suppliers and installers of concrete and ceramic roof tiles, offering a comprehensive range of more than 40 colours and seven profiles. Over recent years, the company has expanded to include metal roofing, fascia's and gutters together with a range of innovative roofing solutions including solar and batteries.

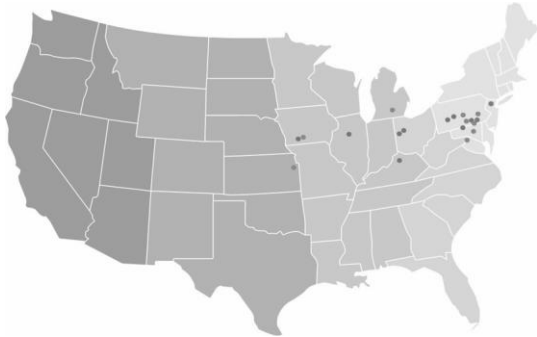
[www.bristilerooting.com.au](http://www.bristilerooting.com.au)



Construction of the Southern Cross Cement import terminal in Brisbane has now commenced and is expected to be fully installed and commissioned in FY19. This strategic investment will strengthen Brickworks Building Products' core business, by securing high quality and cost-effective raw material supply for our Austral Masonry, Bristile Roofing and Austral Precast operations.

[www.sscement.com.au](http://www.sscement.com.au)

# Glen-Gery



In November 2019, Brickworks acquired Glen-Gery, a company with a long and rich history in brick making, dating back to 1890. With 10 manufacturing plants (nine brick and one manufactured stone) and 29 quarries, Glen-Gery has leading market positions in the Midwest, Northeast and Mid-Atlantic states.

## GREEN BUILDING LEADERSHIP - LEED CERTIFICATION

Glen-Gery is proud to manufacture products which support a sustainable environment. Our range of bricks and pavers can contribute to buildings achieving Leadership in Energy and Environment Design (LEED) Certification, developed by the U.S. Green Building Council.

LEED buildings cost less to operate, by saving energy, water, resources, generate less waste and support human health.

Many of Glen-Gery's clay bricks incorporate recycled content. We "close the loop" by returning our production waste into the raw material mix; and incorporating reclaimed waste from other industrial process streams.

Our bricks are locally produced. 500-Mile LEED Radius Guides have been published on our website [www.glengery.com](http://www.glengery.com) → Brick Technical Information → LEED and Sustainability

## SUSTAINABLE FEATURES OF GLEN-GERY'S PRODUCTS

Beyond aiding LEED certification, our products contribute in many other ways which are important to a sustainable environment.

The benefits of our clay brick and stone products include: long lasting and durable, reusable and recyclable, thermal mass for reduced reliance on artificial heating and cooling, fire resistant for safe buildings, mold resistant and chemical free for a healthy home.

## GLEN-GERY'S PRODUCTS ADD LUXURY TO AFFORDABLE HOUSING DEVELOPMENTS

Circa Central Park is an 11-story mixed-use building with 38 one-to-five bedroom luxury residences and an additional 10 units that are designated as affordable housing. Located on a prominent site on Frederick Douglass Circle in Upper Manhattan, Circa offers modern, indoor-outdoor living with sweeping views of Central Park.

Glen-Gery brick was chosen due to its wide range of colour and brick options available. This allowed the design team to tailor the design in a singular way that enhances the overall building aesthetic.

## INNOVATION AND DESIGN

Glen-Gery's on-line visualizer design tool "Picture Perfect" allows homeowners, builders and architects to bring their design ideas to life. Users can choose from over 500 Glen-Gery brick and stone products to design their dream home. The free tool is available at [www.glengery.com/visualizer](http://www.glengery.com/visualizer)

## CERTIFIED BRICK SPECIALISTS

32 of our brick sales professionals have gained the Brick Industry Association Certified Brick Specialist certification. Our staff have achieved high level training in clay brick products, and have passed 13 in-depth technical and sales training examinations.

## SAFETY AWARD

In May 2019, Glen-Gery's Iberia Plant in Ohio was awarded the Marion Area Safety Council Small Industry Safety Award for the third year in a row; and a 100% Award for achieving zero lost-time injuries over the entire year. Congratulations to all the women and men working at our Iberia Plant.



# Brickworks at a GLANCE

Brickworks has a diversified corporate structure that has delivered stability of earnings over the long term. There are four divisions within the Brickworks Group structure that span Australia and the U.S.: Building Products Australia, Building Products U.S., Property and Investments.

	EARNINGS BEFORE INTEREST AND TAXES (EBIT) BY BUSINESS DIVISION	Investments:	\$104m
		Property:	\$158m
		Building Products (Aus):	\$57m
		Building Products (US):	\$6m



## AUSTRALIA

NUMBER OF FACTORIES	NUMBER OF RETAIL OUTLETS	BRICKS MANUFACTURED	NUMBER OF EMPLOYEES
			
<b>30</b>	<b>35</b>	<b>600M</b>	<b>1494</b>



## UNITED STATES

GLEN-GERY ACQUIRED	NUMBER OF FACTORIES	FIRST YEAR REVENUE	NUMBER OF EMPLOYEES
			
<b>23/11/2018</b>	<b>10</b>	<b>\$121M</b>	<b>617</b>



BRICKWORKS  
LIMITED

# OUR BUSINESS

*We create beautiful products  
that last forever*

OUR BUSINESS

Brickworks Limited / Sustainability Report 2020 / 13



## Sustainability

# FRAMEWORK

*Brickworks is committed to social and environmental responsibility. As one of Australia's largest and most diverse building products manufacturers, we believe we have a responsibility to our shareholders, employees, industry, environment and the wider community.*

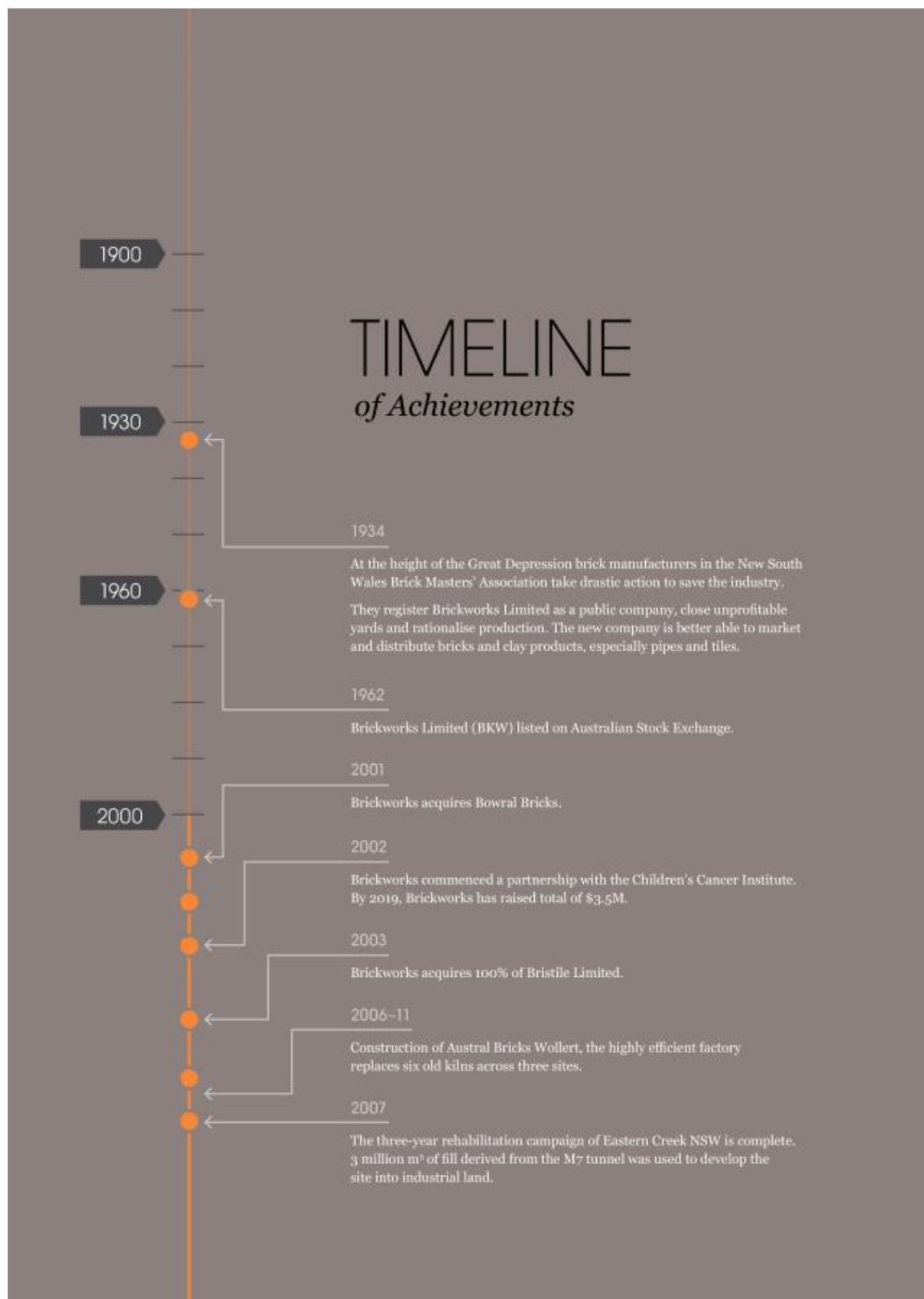
With the aim of improving Brickworks' sustainability disclosure; we developed a Sustainability Framework which links our sustainability commitments with our business strategy. Central to the framework is our business purpose "We create beautiful products that last forever".

Our framework also defines our approach to sustainability reporting, and is based on four key topics – Our People, Community, Environment and Responsible Business. An expanded materiality assessment was completed in FY19, providing updated guidance on material issues of importance to our stakeholders. These material issues formed the basis of reporting coverage in the key topic areas.

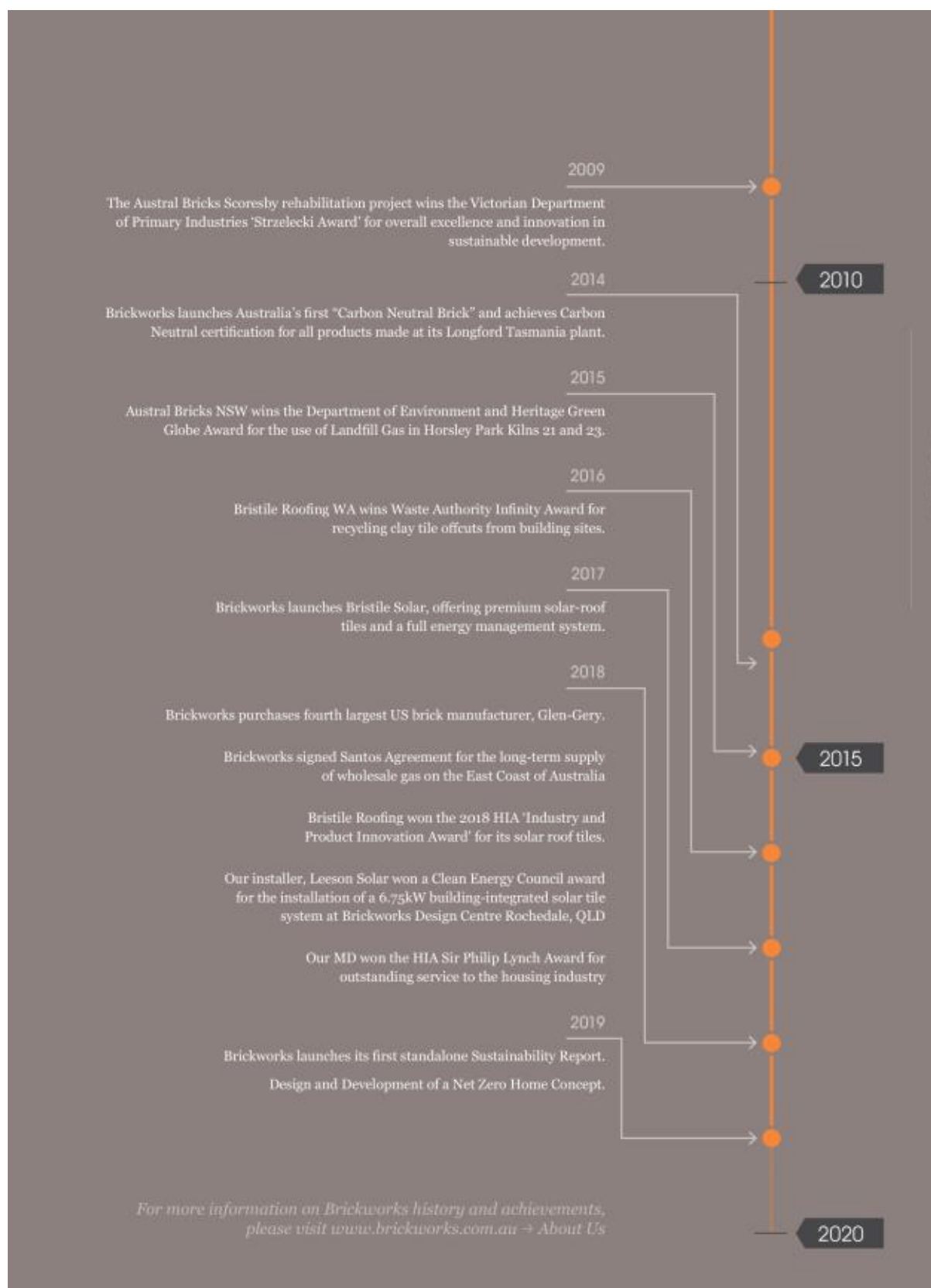


Material issues identified include: improving resource efficiency, waste management, reducing energy usage and greenhouse gas emissions, climate risk (understanding carbon risks and opportunities), strengthening environmental compliance, engaging closely with local communities, sustainable supply chain (responsible procurement), developing innovative building products (innovation and sustainable products), corporate conduct (governance), health, safety and wellbeing.

This report outlines our approach to managing these material sustainability issues, a review of our sustainability performance during FY19 and disclosure of our ambitions for FY20.



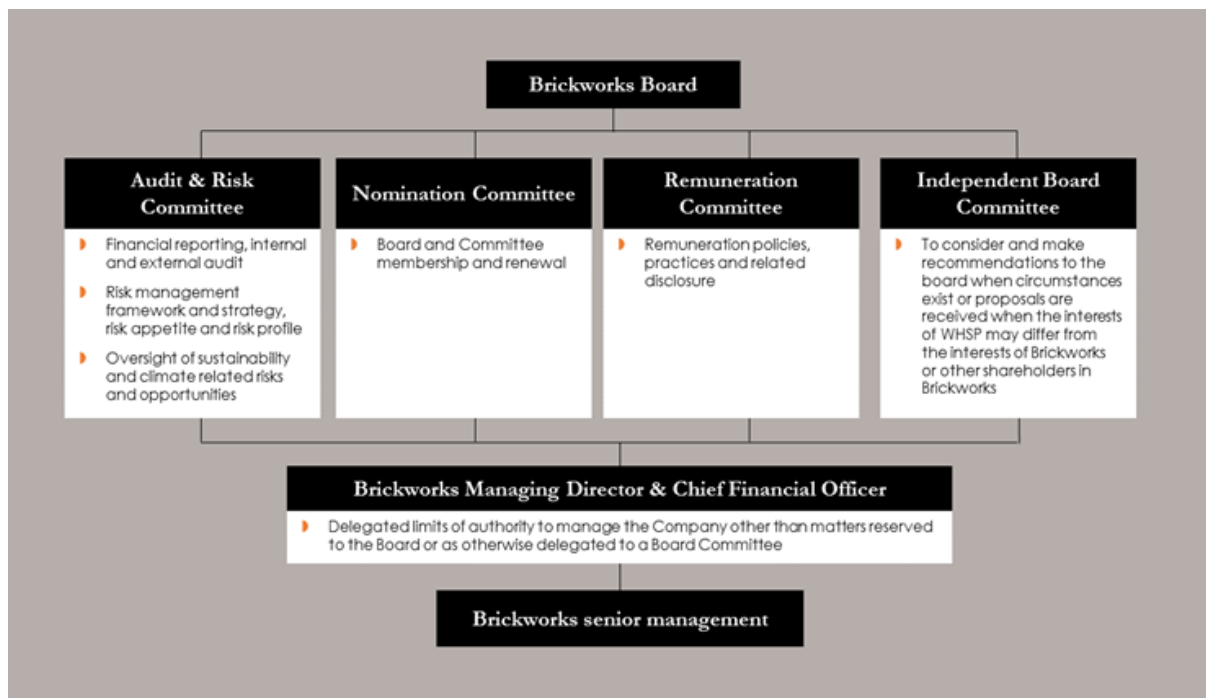




# GOVERNANCE

Sustainability is embedded into the Brickworks business strategy. The Brickworks Audit and Risk Committee (ARC) is responsible for the oversight of sustainability governance, with day-to-day management of the Group governance arrangements delegated to the Managing Director and Chief Financial Officer. Annually, key management personnel make presentations to the Board on safety, human resources, risk, environment and sustainability issues and targets. During FY20, sustainability will be formally incorporated into the charter of the ARC, and the ARC will be presented an Environmental Social Governance (ESG) risks and opportunities paper and a five-year Sustainability Strategy.

Our Environmental Policy includes our sustainability commitments and can be downloaded from [www.brickworks.com.au](http://www.brickworks.com.au) → about us → policies.



Sustainability risk management is integrated through key performance indicators (KPIs) which are set at business level. This year several sustainability KPIs were linked to the divisional bonus structure, for items including: health and safety performance; environmental management training and systems development; and the development of community engagement plans and natural gas efficiency plans.

# Sustainability PRIORITIES

*Sharing our approach to managing our most significant sustainability issues, a review of our sustainability performance during FY19 and disclosure of our ambitions for FY20.*

## SUSTAINABILITY REPORT 2019 HIGHLIGHTS



**\$919M**

FY19 total gross revenue



**\$1.6M**

saved through improved waste management



**100%**

Community Engagement Plans at relevant sites



**22**

participants in our Mentoring Program



**27%**

female senior executives



**5.99%**

reduction in carbon emissions



**100%**

Gas Efficiency Plans at high gas using sites



**\$3.5M**

donated to Children's Cancer Institute



**100%**

Water Efficiency Plans at relevant sites



**5.67%**

reduction in energy use



**1494**

Australian employees



**1.7**

LTIFR



**19.6**

TRIFR

A photograph of two construction workers in safety gear (hard hats, safety glasses, and high-visibility orange jackets) working on a brick wall. The worker on the left is wearing an orange hard hat and safety glasses, and the worker on the right is wearing a red hard hat and safety glasses. They are both looking down at the bricks they are working on. The background is dark and out of focus.

**BRICKWORKS**  
LIMITED

## OUR PEOPLE

*Sustaining a strong culture driven by diverse and talented people is critical to our long-term success*

Culture

## Developing

# OUR PEOPLE

### CULTURE

Brickworks recognises that sustaining a strong culture driven by the diversity of our people is critical to our long-term success. During FY19, we continued our focus on building and sustaining a strong culture with the continued integration of the 'WE ARE BRICKWORKS' Values and Behaviours. These values and behaviours drive unity and focus across the organisation by providing a simple way for employees to understand what the organisation stands for, and how success is achieved at Brickworks.

Values are embedded in our recruitment and selection criteria to ensure we are bringing people into the business who demonstrate our values.

#### VALUES AWARDS

Across the business, we hold a variety of initiatives to celebrate staff living the company values. Austral Bricks VIC, holds Employee of the Quarter Awards.

Employees success in undertaking their day-to-day roles according to the company values is measured through annual performance reviews. In FY19 we relaunched the Code of Conduct with a Roadshow to help our people understand our expectations for their behaviours.

Next year will see the launch of our Values survey, which will help to identify pockets in the workplace that require additional focus.

### EMPLOYEE ENGAGEMENT

We drive positive employee engagement through our strong employee value proposition, and multiple benefits offered to permanent employees; including paid parental leave, support for further education and employee share schemes. We host frequent social and celebratory events for employees, including company update evenings as an informative and fun networking opportunity for all employees.

During FY19, we rolled out pulse engagement surveys in some divisions to help identify areas for improvement. On an ongoing basis we conduct and review exit interviews to understand areas requiring focus.

### EMPLOYEES AND OTHER WORKERS

Brickworks reports details of its workplace profile to the Workplace Gender Equality Agency (WGEA) on an annual basis. Key data taken from our WGEA report for 2018/19 includes:

- Total workforce (Australia) = 1494
- Workforce Building Products (Aus.) = 1483
- Property and Group functions = 11
- Total female breakdown = 20%
- Senior Executives – female = 27%
- Average age of employees = 43.2
- Employees aged 50 and over = 31.8%
- Average length of service = 8.6 years

Workplace profile:

- Management (total 8.6%) (female 14.1%)
- Professionals (total 10.6%) (female 25.9%)
- Tech/Trades (total 15%) (female 3%)
- Administrative (total 8.2%) (female 79.7%)
- Sales (total 17.6%) (female 40%)
- Operators/labourers (total 40%) (female 1%)

### EMPLOYMENT

Employee voluntary turnover (resignations and retirements) is trending down across the business, currently sitting at 10.7% for the previous rolling 12 months, down from 13.2% the previous year.

### LEARNING AND DEVELOPMENT

At Brickworks, we aim to provide an employee experience that aids in staff growth and development. We are committed to investing in the talent of our people, through formalised graduate, apprentice, mentoring and succession planning programs.

All employees and managers are encouraged to undertake two hours of learning every week, and are encouraged to further their professional development by accessing a learning allowance and development programs provided by the company. Our online e-learning platform and open learning sessions provide accessible learning opportunities. During FY19, Brickworks rolled out two significant learning and development programs; the Graduate and Mentoring Programs.

## GRADUATE PROGRAM

Our 24-month structured graduate program is available across all business divisions. Firstly, all graduates attend a graduate induction process to gain business understanding and build networks. They are provided technical and professional skills training as they undergo business rotations across critical business functions. In their second year, they choose a specialist rotation to deepen their experience and skills in the nominated area.

Graduates are assigned specific business projects throughout the program, challenging them to create a tangible business impact. They also participate in an external project-based development program run by GHD called Smart Seeds. This program brings together individuals from a cross section of industry to co-create solutions to complex local problems. Graduates have the opportunity to work collaboratively in teams and to pitch their proposals to industry leaders.

During the program, graduates have access to a support network, a career coach and a structured mentoring program. We hold an annual graduate conference for participants to network with their cohort, share experiences and elevate their profile with senior leaders.

## MENTORING PROGRAM

Launched in April 2018, Brickworks' Mentoring program has moved beyond pilot stage. The 9-month program begins by matching mentors with mentees. We have a structured matching criteria process, including a matching review and candidate meetings with senior management.

Once the program commences, and throughout the 9 months, participants attend an information briefing session and undertake a mentor and mentee training session to connect, build rapport, learn coaching tools and set goals. Mid-way through the program, there is a formalised meeting to track progress against goals. The program provides materials such as a mentoring guidebook, mentoring skills workbook and relevant articles to help each match in their journey.

The 2018 program had 31 participants enrolled in the program, all with high priority mentoring relationship goals; including professional development, identifying skill gaps and developing a 5-year plan. Overall, 22 participants graduated at the end and 100% of participants reported that they would recommend the program to a colleague. Feedback on improving the program included;

extending the program duration, running additional forums for mentors to share learnings, opening the program up to all lines of the business and all locations for more diversification.

Our FY20 target is for 30 employees to join the mentoring program.

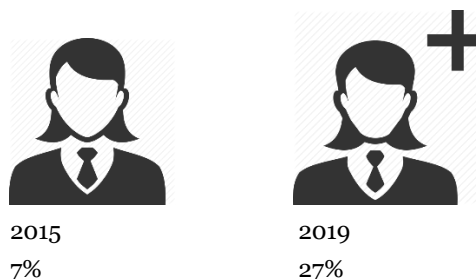
## DIVERSITY AND INCLUSION

Brickworks is committed to an inclusive culture where all employees are treated with dignity and respect, and valued for their contributions, diverse backgrounds, experience and perspectives.

Led by the Managing Director, the Brickworks Diversity Council drives the company's Diversity & Inclusion Strategy. During FY19, the key focus was to deliver a range of initiatives to increase the gender diversity across the leadership of the company, predominately focusing on attracting and retaining female leaders. Female leadership (managers level and above) has increased from 11% in 2015 to 14% in 2019.

### COMMITMENT TO DIVERSITY

We have established a Diversity Council to drive our Diversity and Inclusion Strategy. The percentage of women in senior executive roles (General Managers and above) has increased from 7% in 2015 to 27% in 2019. During FY20, we will expand on these successes by continuing our focus on mentoring and initiatives to increase gender diversity.

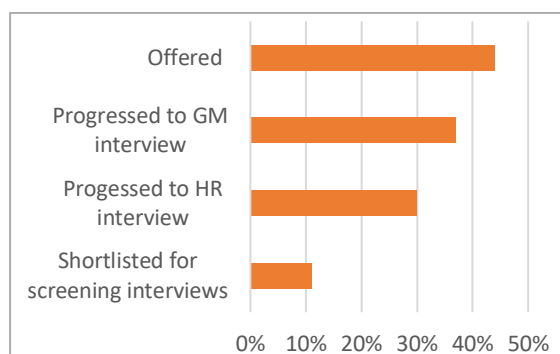


Our focus on gender diversity in leadership will continue during FY20 with targets being developed to further this commitment.

To continually grow our female talent internally, the graduate program was reviewed through a diversity lens. Of the 400 candidates who applied for our 2019 graduate intake program, 11% of those initially shortlisted were female. By offer stage, the percentage of female graduates sat at 44%.



## Female Graduate Recruitment Outcomes



## WOMEN IN MANUFACTURING

Josie Costanzo- General Manager Austral Bricks Vic, was one of the keynote speakers at the 2nd Women in Manufacturing Summit held in Melbourne.

The “Be Bold” theme for the year, addressed how to stand out as an exceptional leader and how to equip yourself with the skills to be bold, brave and better.

We would like to congratulate Josie on being chosen to speak at the event and are elated to have her as one of our leaders.

A cohort of senior leaders also attended the Women in Leadership Conference in May in Sydney, bringing back new ideas and strategies to help attract and retain more female leaders at Brickworks.

## EMPLOYEE WELLNESS

The use of our employee assistance program (EAP) has increased across the group with additional promotion and broader scope of services being offered; including transition assistance, nutrition, financial, wellness and manager support. These services are provided to all staff and immediate family members to ensure our teams are supported in broad aspects of their lives.

## HEALTH AND WELLBEING WORKSHOPS

Austral Bricks Vic successfully launched the Employee Health and Wellbeing Program in FY19. A two-day Health and Wellbeing Expo was held to promote the initiative. The program is designed to assist employees to improve their health and energy, and learn new relaxation techniques. Each month there are workshops on specific topics, from men’s and women’s health to sleep and nutrition.

## COLLECTIVE BARGAINING AGREEMENTS

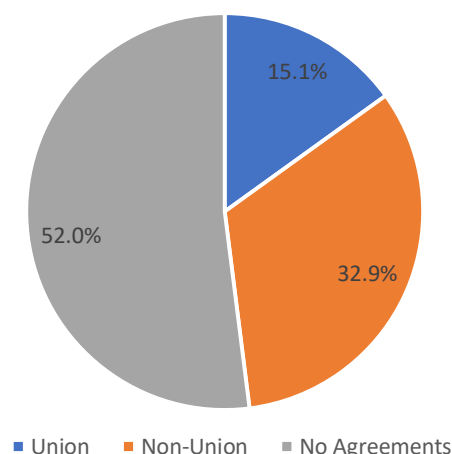
Brickworks operations include fifteen non-union enterprise agreements and five union enterprise agreements. In addition, some sites have individual agreements and a number of sites are covered by the respective modern awards.

During financial year 2019, four site-based enterprise agreements were successfully negotiated and executed, reflecting the strong working relationship that exists between manufacturing staff and local management teams across the organisation.

Of the site agreements negotiated during the year, there was a trend towards direct negotiation with employees.

A total of 48% of our employees are covered by a collective bargaining agreement. About one third of those agreements are union based.

## Percentage of Employees Covered by Collective Bargaining Agreements



## COMPLIANCE

A number of Fairwork, Equal Employment Opportunity and Human Rights mediations and conciliation have resulted in settlements, however, no fines or non-monetary sanctions were received in FY19.

# Health and SAFETY

*There is no task that we undertake that is so important that we can't take the time to find a safe way to do it.*

## STRATEGY

Brickworks is committed to minimising the risks to health and safety of its employees, contractors and the general public. We believe that continual improvement in health and safety is a key requirement for a sustainable workplace. The Brickworks strategy is to have high compliance to legislation, focussed safety leadership and a proactive generative culture that integrates safety into all business processes.

## PERFORMANCE (AUSTRALIA)

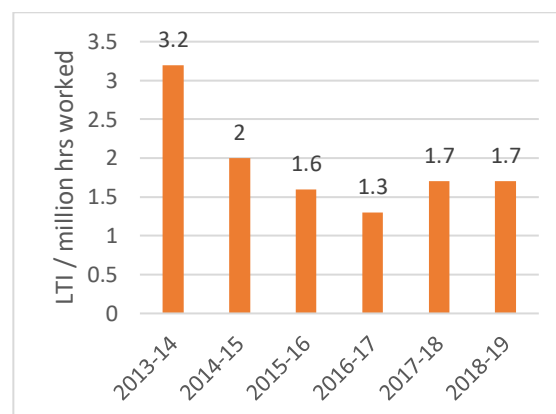
The boundary of this report, and the associated assurance by EY, extends to Brickworks' Australian operations. Detailed performance data of our recently acquired U.S. operations (Glen-Gery) will be included in the FY20 report. In the interim, 8-months safety data for Glen-Gery has been provided.

In Brickworks, safety performance is measured utilising lead and lag performance indicators to benchmark our performance, both internally and externally, to drive progressive safety outcomes. Performance targets are set within the Brickworks Workplace Health and Safety Management System with a key target being a 10 percent reduction in injury rates each year.

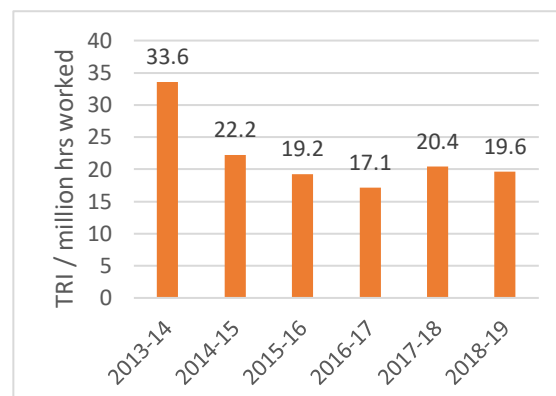
Safety performance improved in FY19, recording a lower annual injury rate. The acquisition of new businesses impacted these results, with 12 percent of all medical treatments recorded in FY19 coming from new Australian business operations.

There were 5 lost time injuries (LTIs) recorded in FY19, compared to 5 in FY18. The lost time injury frequency rate (LTIFR<sup>2</sup>) was 1.7. There were 52 medical treatment injuries recorded in FY19, compared to 55 in FY18. The total recordable injury frequency rate (TRIFR<sup>3</sup>) was 19.6.

## Lost Time Injury Frequency Rate<sup>4</sup>



## Total Recordable Injury Frequency Rate<sup>3</sup>



## PERFORMANCE (GLEN-GERY)

For the period 1 December 2018 to 31 July 2019 there were 6 lost time injuries (LTI's) recorded. The lost time injury frequency rate (LTIFR) was 7.6 and there were 17 medical treatment injuries (MTI's) with a total recordable frequency rate (TRIFR) of 29.1.

We are currently introducing new initiatives for workers health and safety at Glen-Gery. A key focus

<sup>2</sup> Lost Time Injury Frequency Rate (LTIFR) determined as total number of LTIs / total hours worked from August 2018 to July 2019 x 1,000,000 hours worked. Note: Lost Time Injuries include any work-related injury or illness which results in the worker losing time off work for a period of one complete shift or greater, the day (consecutive or not) after the injury or occupational illness.

<sup>3</sup> Total Recordable Injury Frequency Rate (TRIFR) determined as total number of LTIs + MTIs / total hours worked from August 2018 to July 2019 x 1,000,000 hours worked. Note: Medically Treated Injuries include any work-related injury or illness requiring treatment from a medical

practitioner (not including lost time injuries). They do not include injuries requiring first aid treatment only, or non-work related injuries, such as those associated with commuting.

<sup>4</sup> Results provided for Brickworks employees only. Whilst Brickworks monitors safety performance of contractors carrying out work on Brickworks sites; injuries and frequency rates are not reported. Reporting boundaries will be reviewed in future years, and reported when complete and accurate data can be reliably obtained. Results associated with Australian operations only.

of Brickworks FY20 safety strategy is to provide behavioural safety leadership training and incorporate key Health and Safety programs into the Glen-Gery business to achieve better employee safety outcomes.

## KEY INITIATIVES

Fundamental to Brickworks' work health and safety strategy are numerous safety initiatives. These initiatives are underpinned by a work health and safety management system, utilised across the company.

Employee education continues to be a key safety initiative and a lead indicator that is measured at Brickworks. Online training is available 24/7 to all Brickworks employees, with courses assigned based on the employee's role in the business. Further, the national rollout of a behavioural safety leadership program for managers and supervisors has commenced in Brickworks. This program will contribute to stronger safety performance by improving the safety culture within the company.

Health and wellbeing of employees is important at Brickworks. Employees are provided advice, education and professional assistance from the company's EAP provider to improve their personal health. A mental health first aid training program is underway to provide timely support throughout the business. Our FY19 target was for 10% of Brickworks employees to undertake training in mental health first aid. We achieved 75% of this target. We believe we will reach our target by the first half of FY20. In addition, functional health assessments for all of Brickworks new starters ensures that new employees are fit for the physical requirements of their positions.

Brickworks' commitment to a drug and alcohol-free workplace is essential for the welfare of employees, contractors and visitors. Mandatory random testing continues across all divisions of Brickworks and is fully supported by employees and unions. Drug and alcohol testing are undertaken for all new recruitment health assessments. Contracting teams working for Brickworks are also tested as part of this program. During FY19, 64% of our staff were randomly tested for drugs and alcohol throughout the year, exceeding our target of 25%.

All visitors to Brickworks sites must follow the company's induction and sign in rules prior to entering operational zones. Vehicle loading is undertaken in accordance with the National Heavy Vehicle Law, State legislation and Industry based Codes of Conduct, such as the "Think Brick Code of Conduct – Load Restraint". Austral Bricks has held WA Heavy Vehicle Accreditation for more than 10 years.

During FY19 we undertook a review of our National Transport systems and completed an audit of our Australian fleet of heavy vehicles in response to a

serious vehicle accident that occurred in December 2018. The objective of the review was to analyse our existing transport procedures, documentation, National Heavy Vehicle Accreditation Scheme knowledge, compliance with regulations and company policies. Recommendations for improvements were made to ensure that all sites are complying with the National Heavy Vehicle Laws and regulations, including:

- Chain of Responsibility (COR)
- Fatigue Management
- Speed Management
- Mass and Dimension
- Load Restraint

Our FY20 target is to implement the recommendations of the audits across all sites.

Chain of Responsibility training has commenced in NSW with other states to complete training in FY20.

An initiative rolled out in FY19 was scheduled medical tests for heavy vehicle drivers. The aim of the initiative is to identify that all drivers are certified fit by an occupational physician to operate a heavy vehicle on a public road. Driver medicals have commenced in QLD with other states to complete in FY20.

Wellbeing programs and systems alone will not eliminate workplace injuries, therefore a program to continually improve workplace environments is essential. Brickworks actively encourages employees and contractors to identify physical hazards and effective controls to reduce workplace risk. Any new plant installed has an independent risk assessment undertaken to validate its risk-free operation.

### DEFENSIVE DRIVING COURSE

The Bristle Roofing Qld sales team organised a driver safety course as part of their Safety Risk Reduction Program. The course was chosen due to the significant amount of time the sales representatives spend driving.

### AUSTRAL PRECAST'S HEALTH HUB

The team at Austral Precast in Salisbury QLD has been working with Employ Health to implement a new onsite Health Hub. The aim of the program is to improve the overall health and wellbeing of workers, manage manual task risks, and decrease injury rates. Employees are provided with a range of services, including onsite physiotherapy, injury rehabilitation, preventative rehabilitation, dynamic warm up and stretch programs, health and wellness screening, physical capacity screening and various forms of training.

# ENVIRONMENT

*Brickworks is committed to managing our operations in an environmentally sustainable manner, whilst considering economic and social influences.*

ENVIRONMENT





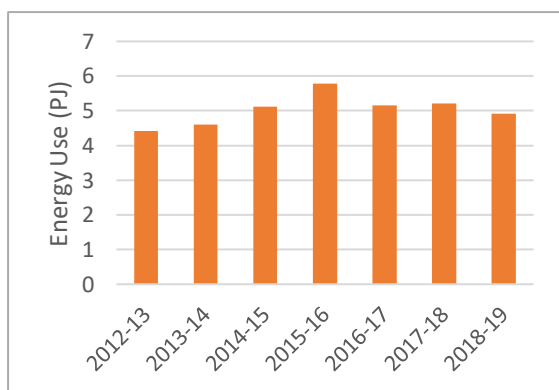
# Energy and CARBON

Brickworks continues our commitment to reducing energy use and carbon emissions. Our strategy for FY20 is to drive energy efficiency opportunities and continue our use of renewable fuels as substitutes for natural gas.

## ENERGY

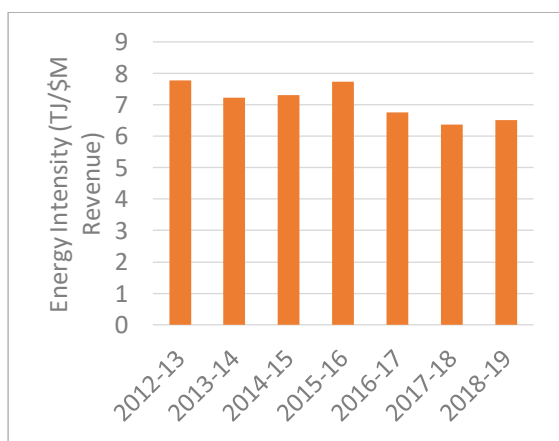
In FY19, Brickworks Building Products Australia (BBP) total energy usage was 4.9 PJ, a 5.67% reduction from 5.2 PJ the previous year.

### Total Energy Consumption (PJ)<sup>5</sup>



Energy intensity (energy consumption vs revenue) was 6.5 TJ per million dollars of revenue across BBP Australia, a 2.38% increase, reflecting fluctuations in revenue between FY18 and FY19.

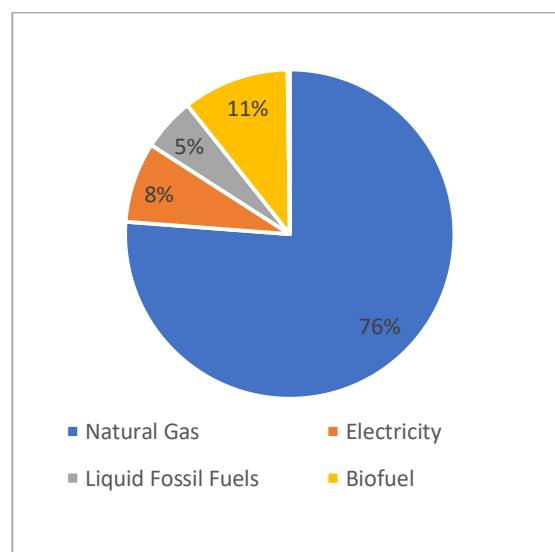
### Energy Intensity (TJ/\$M Revenue)



The majority (76%, 3.73 PJ) of the company's energy requirements come from natural gas, largely used at Austral Bricks manufacturing facilities. Gas efficiency is measured at a factory level and results are reported to the Managing Director weekly.

In November 2018, Brickworks acquired Glen-Gery U.S. which consists of nine brick factories, all fuelled by natural gas. During FY20, Glen-Gery's gas consumption data will be incorporated into Brickworks reporting processes.

### 2019 Energy Mix



Alternative biofuels made up 11% of the Group's energy requirements, with fuel sources including landfill gas and sawdust. Austral Bricks Horsley Park Plant 21 and 23 both continue to substitute natural gas with landfill gas, sourced from neighbouring landfills. This total is slightly below expectation because of short term interruptions in landfill gas supply to Plant 23 due to a required blower replacement completed in July 2019. Sawdust is the primary fuel used to fire the kiln at Austral Bricks Longford, Tasmania and is acquired from various Tasmanian sawmills.

Natural gas is a major cost, accentuated by significant increases in gas prices over the last 2-years, with a 20-65% price increase in 2018 and 29-45% increase in 2019. To counteract the adverse impact, in September 2018, Brickworks entered a 5-year gas supply agreement with Santos, securing the supply of wholesale gas for its Qld, Vic, NSW and SA operations. The agreement commences on 1 January 2020 and provides the East Coast operations with a flexible source of gas at market competitive and

<sup>5</sup> Total energy use is for Australian operations only. Energy consumption associated with recently acquired US operations

will continue to be monitored and reported if material to the group.

stable long-term prices. Further negotiations are currently underway for an additional 7-years supply of natural gas from the Narrabri Gas Project. In FY20, Brickworks will continue to review alternative sources of gas while leveraging supplier relationships to improve long-term supply.

Energy efficiency is a focal point, using audits, regular maintenance and upgrades to ensure that energy efficiency is continuously managed. Heat recovery systems are utilised in all brick manufacturing facilities. Over the last year, we prepared gas efficiency plans for all high gas-using sites. During FY20, we are targeting the implementation of gas efficiency plans.

A project to install real-time gas metering at our east coast high gas-using sites is underway. The improved sub-meters allow for high quality, granular gas data collection. The data will be used for a range of important management improvements, including gas forecasting, identification of kiln and dryer errors, efficiency monitoring and improved understanding of gas requirements for production. It is expected that this information will support efficiency improvements across sites.

We have progressed upgrades of lighting, efficient motors and hydraulic systems. Small-scale solar systems were installed at selected sales centres across the country, and we continue to investigate the viability of solar at our manufacturing facilities.

#### **COMPRESSED AIR LEAKS**

Compressed air leaks can be a major cause of energy wastage, becoming costly if left unchecked. In February 2018 we overhauled the compressed air system at Austral Masonry's factory in Ayr Queensland, which has seen an improvement in energy efficiency.

#### **AWARD WINNING SOLAR PANEL INSTALLATION**

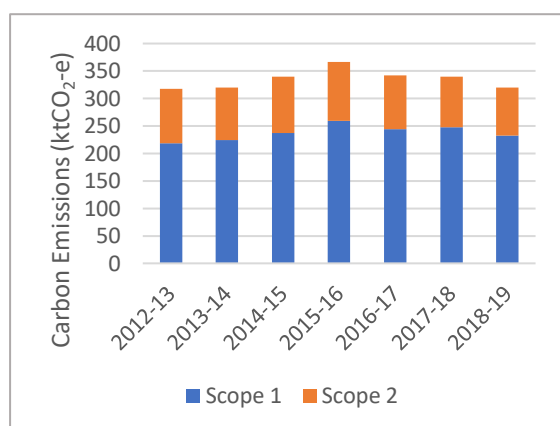
Small-scale solar systems were installed at selected sales centres across the country. Our Brickworks Building Products Display Centre in Rochedale, QLD proudly displays a 6.75kW building-integrated Bristle Roofing solar tile system. Congratulations to the installer (Leeson Solar) for winning the 2018 Clean Energy Council 'Under 30 kW grid connect PV power system' award for the installation.



## CARBON

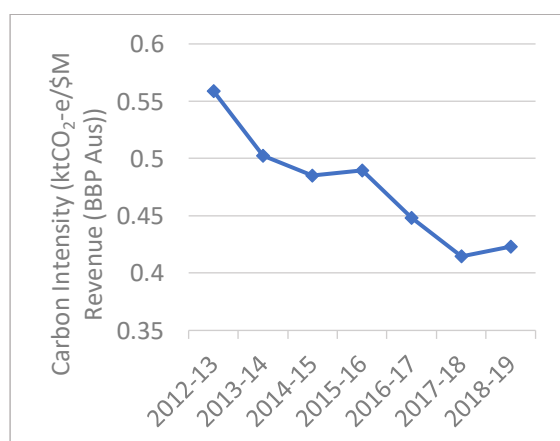
Greenhouse gas emissions are reported and audited for the National Greenhouse and Energy Reporting Scheme (NGERS). Scope 1 and Scope 2 carbon emissions are determined using the methodology and factors outlined within NGERs. Reported carbon emissions include those associated with Brickworks Building Products Australian operations only. In FY19, emissions were 232,116 tCO<sub>2</sub>-e (Scope 1) and 87,486 tCO<sub>2</sub>-e (Scope 2), Carbon emissions continue a downward trend with a 5.99% decrease on the previous year.

### Total Carbon Emissions<sup>6</sup>



Carbon intensity is 2.04% higher than the previous year, attributable to short term interruptions in landfill gas supply to Plant 23, due to a required blower replacement completed in July 2019, and fluctuations in BBP Australia revenue between FY18 and FY19.

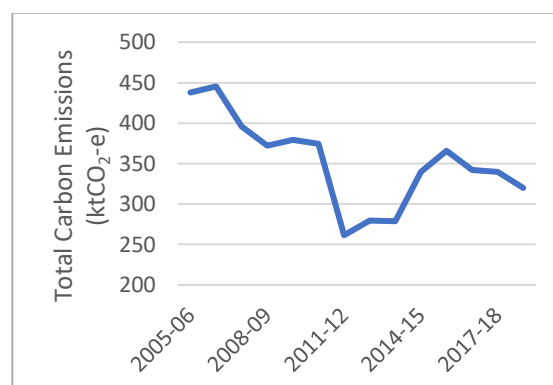
### Carbon Intensity (ktCO<sub>2</sub>-e/\$M Revenue)



Carbon emissions have followed a general downward trend, with a 27% decrease compared to the base year 2005/06 (Scope 1 & 2). The decrease can be

attributed to efficiencies gained from alternate fuels, manufacturing consolidation, equipment upgrades and operational improvements. To further strategies around carbon management, we will explore additional greenhouse gas metrics and targets over the upcoming year.

### Carbon Emissions Since 2005 (ktCO<sub>2</sub>-e)



Our corporate greenhouse gas emissions and energy data is publicly available on the Clean Energy Regulators website:

[www.cleanenergyregulator.com.au](http://www.cleanenergyregulator.com.au) → National greenhouse and energy reporting data.

A copy of our Limited Assurance report for energy and carbon data is contained within the Appendix.

### TRANSPORT FUEL EFFICIENCY

During FY19, Austral Bricks WA introduced an energy efficiency initiative with the installation of telematics on its truck fleet. The telematics system monitors fuel usage, carbon emissions and driver behaviour to enable improved vehicle utilisation, thereby reducing fuel usage and emissions.

### ALTERNATIVE FUELS

Austral Bricks has utilised landfill gas at Horsley Park's Plant 21 since 2013 and Plant 23 since 2014. The combustion of landfill gas emits 10 times less carbon than natural gas. Horsley Park used 161,542 GJ of landfill gas throughout the year, offsetting approximately 2,000 tonnes of carbon, equivalent to planting approximately 30,000 trees per year.

### LOW CARBON MANUFACTURING

Sawdust is the main fuel source at Austral Bricks Longford. The site used 10,904 tonnes or 113,401 Gigajoules of sawdust throughout the year. The combustion of sawdust emits 40 times less carbon than natural gas, offsetting 5,696 tonnes of carbon, equivalent to removing approximately 1000 cars from the road each year.

<sup>6</sup> Reported carbon emissions include those associated with Australian operations only. Carbon emissions associated with recently acquired US operations will continue to be monitored and reported if material to the group. Brickworks applies an

operational control basis of reporting, using the National Greenhouse and Energy Reporting (NGER) legislation. Scope 1 and Scope 2 carbon emissions are determined using the methodology and factors outlined within NGERs.

## Understanding

# CARBON RISKS & OPPORTUNITIES

Brickworks recognises the tangible business benefits of disclosure of, and action on, climate change-related risks. The Task Force on Climate-related Financial Disclosures (TCFD) recommendations provide a disclosure framework supported by investors and regulators.

We have commenced preparing a plan to meet the recommendations of the TCFD as a staged approach starting in FY20. Our FY20 commitment is to finalise the plan and begin its implementation.

### BRICKWORKS TCFD COMMITMENTS

	KEY TCFD TASKS		
	2019-2020	2020-2021	2021-2022
Governance	<ul style="list-style-type: none"> <li>Establish TCFD Working Group and terms of reference               <ul style="list-style-type: none"> <li>Formalise Board responsibilities and processes                   <ul style="list-style-type: none"> <li>Formalise management responsibilities and processes regarding climate risk                       <ul style="list-style-type: none"> <li>Audit and Risk Committee (ARC) oversight of climate-related risks and opportunities                           <ul style="list-style-type: none"> <li>ARC review of material climate risk and opportunities</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>		
Strategy	<ul style="list-style-type: none"> <li>Undertake materiality assessment               <ul style="list-style-type: none"> <li>Identify climate-related risks and develop scenarios and appropriate scenario assumptions                   <ul style="list-style-type: none"> <li>Undertake scenario analysis and identify potential impacts and opportunities                       <ul style="list-style-type: none"> <li>Formalise integration of climate-related risk assessment into strategy, financial and business planning                           <ul style="list-style-type: none"> <li>Report outcomes of scenario analysis                               <ul style="list-style-type: none"> <li>Describe strategies to improve the organisation's resilience to climate-related scenarios                                   <ul style="list-style-type: none"> <li>Integrate scenario analysis &amp; climate risk management into strategy, financial and business planning</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>		
Risk	<ul style="list-style-type: none"> <li>Undertake climate-related risk assessments               <ul style="list-style-type: none"> <li>Incorporate climate risk into risk assessments processes</li> </ul> </li> </ul>		
Metrics and Targets	<ul style="list-style-type: none"> <li>Develop set of relevant metrics and measurement and monitoring methods               <ul style="list-style-type: none"> <li>Develop targets                   <ul style="list-style-type: none"> <li>Implement targets                       <ul style="list-style-type: none"> <li>Disclose performance against relevant metrics and targets, and the related risks                           <ul style="list-style-type: none"> <li>Provide historic trends &amp; performance against metrics based on available production data                               <ul style="list-style-type: none"> <li>Establish target review cycle</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>		

# Resources, WASTE & WATER

## RESOURCE EFFICIENCY

Our products are engineered to reduce material requirements, while maintaining structural integrity. We achieve this through innovative product design, raw material substitution and process resource efficiency.

A key driver of resource efficiency is process optimisation and product innovation through a deep understanding of the technical properties of clay and shale raw materials. In FY19, we reviewed our raw materials and initiated a project to build a comprehensive library of the technical properties of all clay and shale raw materials. During FY20, this library will be completed to support further optimisation of materials usage and product innovation.

Brickworks continuously evaluates opportunities for closing the loop and driving the circular economy. The objective of a 'closed-loop' or 'circular economy' is to minimise waste and keep resources in use for as long as possible. This approach maximises a product's value at each point in its life, decoupling economic growth from the use of natural resources.

We continue to drive closed loop initiatives across the business. We achieved up to 50% material replacement in some masonry products, substituting cement and aggregate with fly ash, bottom ash and crushed concrete. We minimise our raw clay requirement by utilising clay sourced from infrastructure projects, which would otherwise be landfilled.

## PRODUCT RE-ENGINEERING

High void bricks manufactured in Queensland have reduced raw material requirements by 11% and energy requirements by 15%. Trials are underway at Austral Bricks Wollert NSW and Golden Grove SA with good initial success.

## ADVANCES IN RAW MATERIAL UTILISATION.

Our Research and Development team continually innovates to optimise the use of raw materials through utilisation of lower quality clay reserves. Recent examples in Queensland have led to a doubling of clay reserves by utilising deeper materials effectively to produce high quality products.

## WASTE REUSE

Recycled clay now makes up 20-30% of raw materials across Queensland and NSW. Significant construction works across these states allow for significant use of clay or shale to be recycled into brick products.

## MATERIAL SUBSTITUTION

Material substitution is an important area of focus for the Group. In FY19, we conducted a successful trial, replacing dust and bottom ash for our grey block, manufactured at Austral Masonry Prospect NSW. Up to 50% material substitution has occurred in some masonry and precast products.

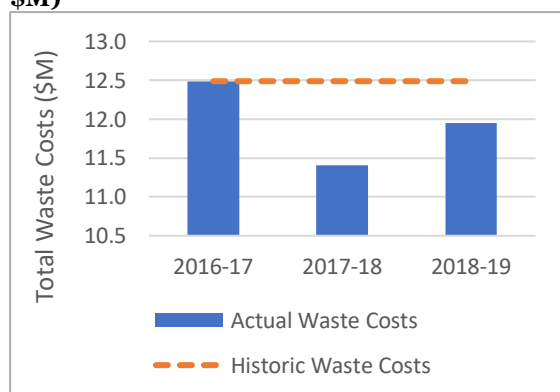
## WASTE

Brickworks is committed to minimising the amount of waste sent to landfill from its manufacturing facilities. Opportunities for the reuse of waste are a key focus area for our brick and concrete businesses to decrease material costs, increase resource efficiency and drive the circular economy.

Bricks are recyclable, allowing damaged or rejected clay products to be returned to the raw material mix. Production waste reduction continues as a focus to save energy, water and additives.

Over the last 12 months, a National Quality Initiative has been implemented across all divisions. This initiative examines production waste data tracked across the last 3 years. Production waste consists of waste, reparations and downgrades. Improved monitoring and management have led to continued improvement, reducing waste costs by a total of \$1.6 million over the last 24 months.

### Total Production Waste Costs (Quality Costs \$M)



We made a commitment for FY19 to develop waste reduction and recycling plans, with our National Quality Initiative meeting this target. Our FY20 target is to continue implementation of these production waste reduction and recycling plans at all manufacturing facilities.

Optimised recycling procedures, such as source separation of waste, were implemented at a number of factories, improving our ability to recycle production waste.

#### SOURCE SEPARATING WASTE

Austral Bricks Cardup installed a bunker system to ensure production waste is sorted by colour to enable improved recycling.

#### RECYCLING PRODUCTION WASTE - Crushing and recycling production waste.

Bristle Roofing Dandenong manufactures concrete roof tiles. The team has developed a procedure to return production waste into the raw material mix, thus reducing raw material requirements necessary to manufacture concrete roof tiles, and diverting waste from landfill.

## WATER

Water is a limited resource in most of Australia and critical to our production process and operations. Brickworks understands the importance of water efficiency.

In FY19, all manufacturing sites completed a water recycling investigation, and water management plans were reviewed, meeting our FY19 target.

The focus of the review was to:

- Identify opportunities for increased water recycling
- Ensure our operations, particularly raw material quarrying, do not endanger local water bodies
- Ensure our facilities meet water restrictions in the relevant states.

Many of our manufacturing facilities use runoff or bore water as the major water supply. Mains water is generally only used when ponds are dry, or ground water allocation has been met.

#### WATER REUSE

Brickworks Administration at Horsley Park NSW uses 100% recycled water to irrigate the gardens. The water is sourced from process water from Plant 1 and rainwater. The Horsley Park Quarry uses 100% collected rainwater for dust suppression.

Brickworks is committed to minimising its mains water usage at all manufacturing sites. During FY20, we will extend water management plans to identify further opportunities to reduce mains water.

#### STORMWATER MANAGEMENT

Our Quarrying teams have created an innovative solution to manage excess stormwater. Due to market conditions, plant closures, and two years of above average rainfall, WA had the unique issue of excess stormwater collecting across their quarry sites. Offsite discharge of excess water is limited by sites to avoid the release of potentially turbid water from suspended clay. Our WA team developed an innovative solution to manage the excess water. A trailer mounted with a water pump and a discharge canon was built by a local company. The device has the functionality to disperse water to 50 metres at a rate of 2,000 litres per minute, and the capacity to vertically lift water up to approximately 8 meters. The water can be used for irrigation and dust suppression.

*Local*

# COMMUNITIES

We recognise the importance of maintaining positive relationships with all stakeholders, and the effect that has on our business success. We are embedded in our local communities where we operate, with many of our employees living in the local area. We are reliant on local goods, services, markets and natural resources. Developing mutually beneficial relationships makes us a desirable company to do business with.

We continue to attend community forums, such as consultation for development applications and community group meetings. We maintain strong relationships with legislative and regulatory authorities. In addition, company representatives are involved with industry groups to promote issues, such as sustainable building products.

In FY19, Brickworks developed stakeholder maps and community engagement plans for sites at risk of community concern. The plans have improved our socio-political knowledge of the area, ability to identify community concerns and expectations, knowing when to engage and methods of engagement.

Sites identified as requiring a plan have developed their site-specific plan and a local community engagement procedure. During FY20, our target will be to implement Community Engagement Plans across these sites.

## COMMUNITY GROUP ENGAGEMENT

Cardup WA: Austral Bricks operates a brick factory and clay pit in Cardup. The area has an active local community group with which we engage on a quarterly basis, and on occasion undertake tours of operations.

We have developed a Community Engagement Plan that has been approved by the local authority. High on the agenda are issues such as land use planning, dust management and vehicle movements. In addition to providing updates on issues and responding to questions, we aim to ensure our engagement with the group is always a pleasant experience by offering refreshments.

## IMPROVING RELATIONS

## NEIGHBOURHOOD

At Ford Road Quarry Queensland, we undertake regular community engagement. The site has implemented a range of operational improvements, including road sealing, transport fleet management and dust suppressants.



# REHABILITATION

Our Environmental Policy includes a commitment to establish, operate and rehabilitate Brickworks sites in a manner that promotes optimum environmental and social outcomes.

Rehabilitation and land-use planning is an essential aspect of managing our quarries, with a focus on meeting legislative requirements and community expectations. We are committed to meeting the outcomes of our rehabilitation and mine closure plans. Within our Environmental Management System, we monitor progress of rehabilitation projects across the group, to ensure the protection and enhancement of biodiversity. We maintain a compliance register via the EnviroEssentials platform to ensure awareness of all relevant legislation. Environmental compliance including rehabilitation compliance is reported to the Managing Director through the monthly General Managers meetings and the Board is briefed on any significant matters.

## PARTNERSHIPS WITH THE TRADITIONAL CUSTODIANS

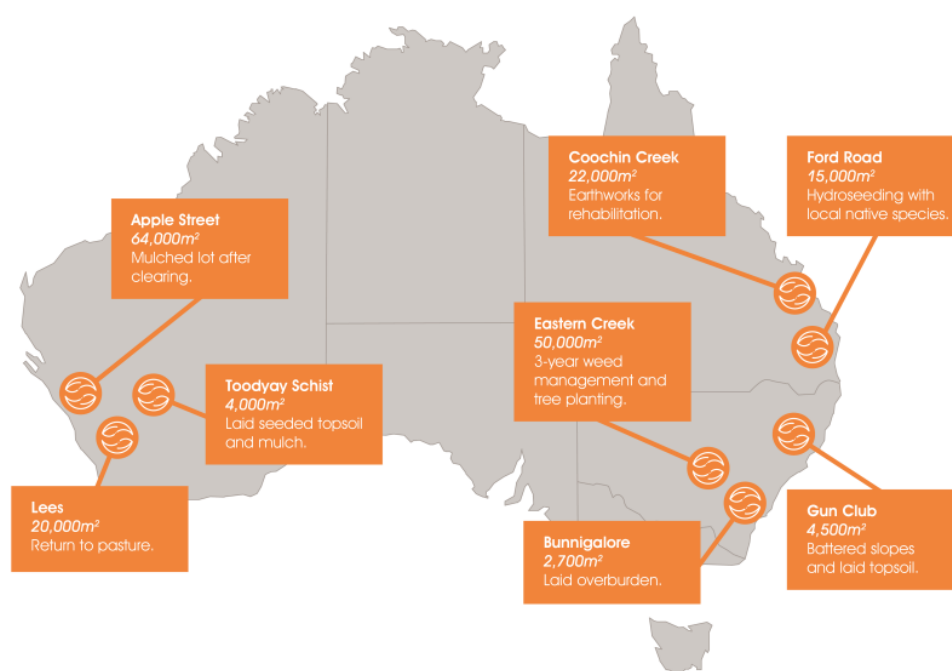
Austral Brick NSW committed \$200,000 over a three-year period to rehabilitate a section of Eastern Creek. In partnership with Muru Mittigar – a leading Indigenous Social Enterprise that has a unique model of traditional land management practice, we aim to return local flora to its original state by undertaking weed control, replanting and regeneration of local native species.

## HYDROSEEDING – A SUCCESS

In November 2018, our operations at Ford Road Rochedale Queensland, trialled hydroseeding as part of our progressive rehabilitation program. We have completed 1.5ha of hydroseeding to minimise our environmental footprint. We included in the hydroseed mix a combination of mulch, soil binder, a cover crop and a native seed mix. The mulch and soil binder reduced any fugitive dust and erosion from the area as well as minimised the amount of sediment moving off the site. The seed mix comprised seeds from koala preferred Eucalyptus species and other native seed species, providing a mix of top, mid and lower storey plants. The results are looking promising after the wet season rains, with a good seedling strike rate and a wide variety of species starting to establish in the area.

All relevant quarry sites have a rehabilitation plan, which includes details of the anticipated lifetime of the quarry and future land-use of the site. Progress is independently audited on a regular basis from 1-3 years depending on the site risk category. During FY19, we undertook a Rehabilitation Planning Review to improve our future land-use planning. A range of rehabilitation projects were undertaken last financial year, with a total of 182,200 m<sup>2</sup> of rehabilitation projects commenced.

## REHABILITATION PROJECTS DURING FY19





## Environmental

# PERFORMANCE

### ENVIRONMENTAL MANAGEMENT SYSTEM

Brickworks monitors its environmental performance and compliance in accordance with its Environmental Management System, aligned with ISO14001:2004, utilised across the company.

Manufacturing and raw material sites are audited regularly by internal and external auditors. Any issues are reported as either a hazard or an incident and rectified in a timely manner. Fifteen external, and two internal site audits were undertaken, meeting our audit target of seventeen.

Hazard and incident reporting are undertaken in accordance with our Risk Management Framework, involving assessment of the likelihood of an event occurring, the potential impact of each event and the controls and processes in place to continually mitigate each risk. This information is reported to Divisional and Group management. Issues of material concern are reported to the board monthly.

During the last year, we made a range of improvements to core components of our Environmental Management System, including the implementation of site level environmental plans and environmental awareness training. Continuous improvement to the system and training will continue during FY20.

During FY20, a rollout of online software will commence to support the Environmental Management System.

### COMPLIANCE<sup>7</sup>

In FY18, Austral Bricks received an Enforceable Undertaking for breaching the Mining Act 1992 at two clay pits in southern NSW. Details of the Enforceable Undertaking was determined in FY19, of which Austral Bricks implemented by April 2019, including:

- A donation of \$50,000 to Wingecarribee Shire Council for the restoration of the Bong Bong Common
- A minimum of \$50,000 for training and auditing of Austral Bricks staff
- \$51,960 in royalties and administration levies
- Recovery of the Regulators investigation and monitoring costs of \$15,500

Austral Bricks has continued to work closely with the Resource Regulator to ensure all aspects of the Enforceable Undertaking are addressed.

To prevent similar non-compliances from occurring, Brickworks undertook a mining due diligence and reviewed compliance registers to ensure that all requirements were clearly identified and understood.

During FY19, we received zero prosecutions and one uncontested infringement notice for \$250, relating to the offsite discharge of turbid stormwater at our Parns clay pit in WA. An immediate response was undertaken to comply with the issued notice, and an improved dewatering procedure implemented at the site. Our FY20 target remains at zero environmental fines.

During FY19, the Austral Bricks Horsley Park NSW Hydrogen Fluoride Emissions Reduction Program was closed out and a Scrubber Installation Program was commenced. At Austral Precast Wetherill Park NSW, a Preventative Action Notice was issued relating to site water management, and adequately addressed through the installation of a first flush water treatment system.

Brickworks treats all non-compliance instances with the upmost importance. Details of incidents, notices and complaints are raised at the weekly General Manager's meeting, which the Managing Director attends. Each non-compliance incident is investigated and tracked to ensure corrective actions are undertaken within designated deadlines.

### EMISSION CONTROLS

We are committed to minimising our impact on the environment. Our objective is to comply with environmental law and community standards as they evolve.

All our brick factories hold licences issued by the state environmental regulator, and are required to meet emissions limits that have been assessed by the regulator as acceptable to the environment and human health. To monitor compliance with emissions limits, we engage qualified air monitoring consultants to undertake air emissions testing for parameters specified in our licences. Should an exceedance of the emissions limits occur, the matter is reported to the regulator. An investigation and

<sup>7</sup> Reported environmental fines and penalties include those received and paid during the reporting year (ending 31 July). Penalties received

regarding property and penalty notices are excluded. All figures reported in Australian dollars. Reported fines and penalties are associated with Australian operations only.

corrective actions are undertaken in accordance with Brickworks' Environmental Management System.

Our other building products divisions generally do not have specific emissions limits within licences, however, emissions are limited to the provisions of state and local laws. We are committed to managing these sites to a high standard, to ensure our activities do not interfere with the health of the environment or amenity of our neighbours.

We undertake regular, proactive maintenance of our plant and pollution control equipment. Maintenance activities are scheduled into our maintenance management system, as per the equipment specifications.

When necessary, we review our operations, implement environmental and efficiency improvement programs, and invest in upgrading kilns, plant, control systems and emission control technologies. During FY19, we developed investment plans for air emission control technology across our NSW brick business. We have committed to installing limestone scrubbers at our Horsley Park brick manufacturing facilities through a staged rollout program, commencing in FY20.

Most of our large facilities trigger reporting requirements under the National Pollutant Inventory (NPI). Brickworks estimates its emissions using a calculation tool that incorporates monitoring results and NPI's emission estimation technique manuals. The latest emissions data can be downloaded by searching "Austral Brick" at [www.npi.gov.au/npi-data/latest-data](http://www.npi.gov.au/npi-data/latest-data).

During FY19, upgrades were implemented to streamline internal NPI reporting systems.

## *Environmental*

# AWARDS

In FY19, Brickworks held its second year of Awards for Environmental Excellence, celebrating and promoting environmental excellence with our employees. The three categories of awards included Environmental Champion, Environmental Innovation and Environmental Collaboration. Over 30 nominations were received, demonstrating the passion and enthusiasm across the Brickworks business.

### ENVIRONMENTAL CHAMPION

Our Environmental Champion award winner this year was a Graduate Engineer at Austral Bricks Tasmania. A dedicated employee who showed integrity by following through on commitments, undertaking proactive inspections and closing out hazards. He went the extra mile by providing training to colleagues and supporting the Environmental Management System.

### ENVIRONMENTAL INNOVATION

The Transport Team at Austral Bricks WA implemented an innovative solution to fuel and emissions reduction. Through the fitting of telematics with GPS capability, drivers now receive accurate reporting of fuel efficiency. This initiative has successfully encouraged improved driver behaviour and improved fuel efficiency.

### ENVIRONMENTAL COLLABORATION

Employees from Caloundra, Yatala and Rochedale in Queensland worked together to design and install flood prevention infrastructure at the Coochin Creek Sand Mine, which was critical for the successful closure of the site. Successful rehabilitation projects are an important part of Brickworks' social licence to operate.

Each winner received a trophy and a gift voucher. Congratulations to all our worthy winners and the nominees.

# COMMUNITY

***Brickworks is committed to social responsibility in our communities and we aim to make a valued contribution to our communities.***

# COMMUNITY

## Support

### CHILDRENS CANCER INSTITUTE

Brickworks is a long-standing partner with the Children's Cancer Institute (CCI), the only independent medical research institute in Australia dedicated to research into the causes, cure and prevention of childhood cancer.

Brickworks became partner of CCI in 2002 with the first pledge made towards the CCI Capital Appeal of \$70,000. To date, Brickworks' total partner value exceeds \$3.5 million dollars. Our total partner value comprises of direct and indirect sources of revenue, including corporate and staff donations, state fundraising, sponsorships and supporting CCI events.

The reporting period for our CCI partnership is the 2018 calendar year and it was another successful year of partnership. Together, the team at Brickworks raised over \$683,000, helping CCI move closer to achieving the vision of curing all children with cancer.

#### STAFF DONATIONS

The ongoing company support for CCI's work has been supplemented with staff donations, primarily through the Casual Friday program. In return for a payroll donation of \$2 per week, staff are issued with a "Care for Cancer Kids" shirt to wear with their casual clothes on Fridays. 2018 saw the Brickworks staff contribute an amazing \$69,818 through the Casual Friday program.

Our Brickworks staff have offered their time and efforts to drive a range of fundraising activities for CCI, including the Diamond Ball and Build for a Cure initiative. This fundraising supports real impacts through programs such as CCI's Zero Childhood Cancer.

#### DIAMOND BALL TICKET SALES

Brickworks were proud to be Diamond Partner of Diamond Ball Sydney, and Founding Partner of Diamond Ball Melbourne. An amazing \$172,930 was raised through ticket sales and donations at the Sydney event, and over \$244,000 at the Melbourne Diamond Ball. Total Contribution - \$477,930.

#### BUILD FOR A CURE 2018

Brickworks once again initiated the Build for a Cure in 2018, this time in Medowie just outside of Newcastle NSW. In collaboration with Macdonald Jones Homes and the McCloy Group, an entire house was built in an extraordinary 21 days. The fully furnished, luxury 4-bedroom home was donated in full, including the time that selfless volunteer tradesmen and women took out of their own personal schedule to build the 'House Built with Love'. On October 21, the house was sold for an incredible \$650,000 with all proceeds from the sale going directly to CCI's research.

Brickworks is continuing their support of the CCI in FY20 with many more fundraising and support events planned for the coming year.

The contributions from both Brickworks and its staff has provided the opportunity for several pieces of vital equipment to be purchased by CCI Australia. The contributions will help CCI continue their life saving work that impacts thousands of families around Australia.

#### CCI DELIVERS REAL IMPACTS THROUGH THE ZERO CHILDHOOD CANCER PROGRAM

Before her first birthday, Ellie was diagnosed with an aggressive tumour the size of a football in her tiny chest. Through the Zero Childhood Cancer program, Ellie's tumour samples were put through multiple complex tests. The results identified a drug that could target the tumour. Ellie is now 2 years old and looking forward to less hospital visits in 2019.



## DIVISIONAL SUPPORT

### **SHIRE OF TOODYAY – LOCAL COMMUNITY SUPPORT**

Brickworks has two clay pits in the Shire of Toodyay WA. Toodyay is a small country town situated inland in the Avon Valley region, 80km Northeast of Perth, with a population of 4,439. Brickworks support several different events and sporting teams within the shire including:

- \$3,000 per year for the Toodyay Show fireworks display
- \$550 per year for the Toodyay Junior Football Club as co-sponsor for the players awards and sponsorship of the Coca-Cola Café
- \$700 per year for the Toodyay Tennis Club as the players T-shirts sponsor

### **JERSEY DAY**

The Austral Bricks sales team in NSW supported Jersey Day, a day that was inspired by the story of Nathan Gremmo who was tragically lost in an accident in 2015. Nathan's family chose to give the gift of life to others through organ donation, to honour the legacy of Nathan's generous personality. Staff were asked to donate money and spread the word through their social media accounts to raise awareness, positivity and start the conversation about life-saving organ donation. The staff showed their support through donations, spreading the word and wearing a jersey on Friday 31<sup>st</sup> August 2018, Jersey Day.

### **AUSTRAL BRICKS DONATED 160,000 BRICKS FOR NEW RONALD MCDONALD HOUSE**

Austral Bricks donated 160,000 premium quality face bricks for the new Ronald McDonald house, opened at Westmead in Sydney. The new facility provides a 60-room house, with space to accommodate 1,360 families per year. Last year 400 families had to be turned away, but with the new house, turning away families is a thing of the past. It is the largest House of its kind in NSW, which will help provide even more families with a home away from home while their sick or injured child is undergoing treatment. It will become home for up to 371 people each night for many years to come. Ronald McDonald House Westmead first opened its doors in 1995 and is one of 16 houses around Australia that are operated to provide essential accommodation and support for families with seriously ill or injured children.

### **AUSTRALIA'S BIGGEST MORNING TEA AT HORSLEY PARK NSW RAISES FUNDS TO FIGHT CANCER**

The Brickworks team at Horsley Park NSW hosted a Cancer Council Biggest Morning Tea function in May 2018. The staff raised \$560 for the Cancer Council by donating and selling food and cooking a breakfast BBQ. The Cancer Council works across every area of every cancer, from research to prevention and support.

### **BRICKWORKS FAMILY COMES TO ISLA'S AID**

In November 2018, Isla, the 15-month-old daughter of Josh Gancs, a Bristle Roofing factory employee, had been diagnosed with an Ependymoma brain tumour. The team was heartbroken to learn of this terrible news and pledged to do what they could to assist the family in their time of need. The Austral Precast team organised a fundraising BBQ for Isla that same week and raised \$1,753. After a few, quick phone calls a further \$1,150 was donated by generous suppliers. This brought the total amount raised by the team to \$2,903. This amount will contribute to the existing \$17,948 raised so far by staff at Brickworks and those in the wider community that know Isla and her family.

### **COMPUTER EQUIPMENT DONATION TO SUPPORT LOCAL SCHOOL**

Over the past two years Brickworks has supported their local school, Horsley Park Public School in NSW, by donating monitors, tablets and computers. Brickworks has also organised the installation of an interactive TV in one of the support unit classrooms, to provide students with new and advanced learning resources. The two TVs most recently donated have been installed in the school's office and are being used for the visual display of photos, and professional training during meetings.

### **DRESSED FOR SUCCESS FUNDRAISING EVENT HELD AT SYDNEY DESIGN STUDIO**

In May 2018, Brickworks hosted a charity event called Dressed for Success, with proceeds going to help women in need. Dressed for Success is an international, not-for-profit organization that empowers women to achieve economic independence. By providing a network of support, professional attire and the development tools needed, the organisation helps women thrive in work, and in life. Over 200 people attended the event, which had second-hand designer garments for sale that were donated specifically for the event. The event successfully raised over \$35,000.

### **AUSTRAL MASONRY NSW SUPPORTS FREE SAILING LESSONS FOR KIDS**

One of our long-time customers, Terry Hough, Managing Director Brickmart, worked with Austral Masonry NSW to help the Coomba Park Aquatic Club achieve their dream of long-term sailability. Austral Masonry NSW supplied a variety of grey blocks to support the project and surrounding mid-north coast sailing communities. Construction was completed by volunteers whose efforts ensured that the club could run their programme of free sailing lessons for all kids, including sailability days for the disabled.



# PARTNERSHIPS



## *Sustainable Partnerships*

As one of Australia's largest and most diverse building products manufacturers, Brickworks Building Products takes its position of industry leadership seriously. We believe the group and its member companies have a responsibility not only to our shareholders and employees but also to the industry, environment, and the wider community. It is for this reason we consider our partnerships carefully and endeavor to align with other firms who share our vision and values for a more sustainable future.

## *Think Brick*

Think Brick is the peak body representing Australia's clay brick and paver manufacturing industry. Brickworks is a national member as both firms support the vision of inspiring brick architecture and building design in all areas of the built environment: commercial, residential, and landscape.

Our partnership with Think Brick has enabled Brickworks to support ongoing research programs at the University of Newcastle, contributing significantly to the industries understanding of the thermal performance of Australian housing. A Study of the Thermal Performance of Australian Housing Phase II was recently published, demonstrating the thermal benefits and performance of bricks compared to lightweight cladding used in housing construction.

## *Housing Industry Association*

The Housing Industry Association (HIA) is the official body of Australia's home building industry. Brickworks has aligned with the HIA to promote industry standards in our goal towards becoming Australia's best building products company.

## *Australian Brick & Block Training Foundation*

Brickworks has partnered with the Australian Brick & Block Training Foundation (ABBTF) who help ensure there is an adequate and competent bricklaying and block laying workforce to support the market. The scheme also works to improve the standing of bricklayers and block layers within the industry. The funding received from the bricklayer training levy goes towards these necessary training schemes.



# *Responsible* **BUSINESS**

***We continue to lead the way through design, style,  
innovation, sustainability and collaboration***

# PRODUCT INNOVATION

## *and Design*

*Brickworks partners with architects and builders to create innovative products and support the construction of highly efficient homes.*

**Our goal is to remain Australia's leading building products company.** It is therefore critical that Brickworks continually strives to improve quality and product integrity, while investing in product innovation.

Throughout the year, Brickworks' Australian operations formed a cross-functional, national technical team and conducted a strategic review of Research, Development and Quality functions. The review identified opportunities for alignment and collaboration across Brickworks Building Products to help create unique products with unrivalled quality.

We have improved our monitoring and tracking of a range of quality indicators, including waste and reparations. As a result, our teams have focussed on quality projects that have shown substantial improvements in customer satisfaction.

Brickworks is a market leader in creating premium and fashionable building products. Throughout the year we released many new products to the market.

Austral Bricks has now introduced new ranges of locally manufactured and imported specialty products, including new products to the Access range; Melbourne Series and San Selmo Reclaimed ranges. Innovation of products has resulted from access to new clay resources across the group. Performance optimisation has occurred through unique formulations and firing techniques, leveraging our state of the art manufacturing plants. This combination of traditional materials with new manufacturing technology has combined to deliver our unique range of new high-quality finishes.

Austral Masonry's acquisition of Urbanstone in FY18 has significantly expanded our offering of premium stone and concrete paving products for both residential and commercial applications. This offering includes a range of formats, colours and finishes, using natural stone and stone aggregate for beautiful, tactile, durable and luxurious speciality engineered products. A further addition to our existing GB Masonry offering is the Breeze Block range in Nickel, Pewter and Porcelain stone aggregate finishes.

## PRODUCT DESIGN

When compared to a solid clay brick, our bricks' core patterns can reduce clay content by up to 45%, while retaining their structural integrity. The reduced clay content minimises energy requirements during manufacturing, and provides a lighter weight product which is beneficial for the wellbeing of bricklayers.

### SMART CORE DESIGN

**Verticore** is one of our most efficient bricks, currently manufactured in Bellevue, WA. The double-course brick boasts a 40-45% core void and weighs an average of 4.8kg.

New product development and process improvement are high on our agenda. Our projects are categorised as either variation, evolution or innovation. Payback potential is considered and progress is monitored and reported monthly. During FY19, we had multiple new products under development and undertook many process improvements.

### PRODUCT LAUNCH EVENTS

We hold product launch events for significant new products, such as the product launch of our new brick colours added to the Access, Melbourne Series, Metallix, Industrial and Indulgence Range; held at our new Melbourne Design Studio.

Continuous improvement is central to Austral Bricks' corporate culture. The company has a long history of investment in research and development and new technologies to improve the quality of our products and services and respond to changing consumer tastes and the needs of the construction industry. We will continue to monitor customer aspirations throughout FY20.

## INNOVATION

Innovation is all about embracing change. We actively reflect on ways to refine and improve our products. Our innovation is organic, not just taking on market challenges, we look for new opportunities within our business.

With vision and innovation, we maintain our leading position in the market. By investing in technology and discovery, we deliver better products and anticipate the needs of our industry as it evolves.

### **Identifying Future Trends**

We hold events including the Double Talk and International Speaker Series at our Design Studios which connects industry professionals and drives innovation. These networking opportunities improve our ability to identify future trends in fashionable and sustainable building products.

## INVESTING IN INNOVATION

In May 2019, Brickworks and FBR established a joint venture company - Fastbrick Australia Pty Ltd - to test the commercialisation of robotic bricklaying in the Australian market. Fastbrick Australia will offer Wall as a Service™ using masonry blocks developed by Brickworks and brick laying services from FBR's robotic bricklayer "HadrianX".

Sustainable

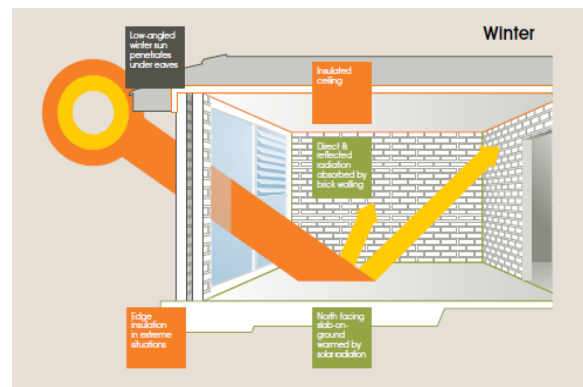
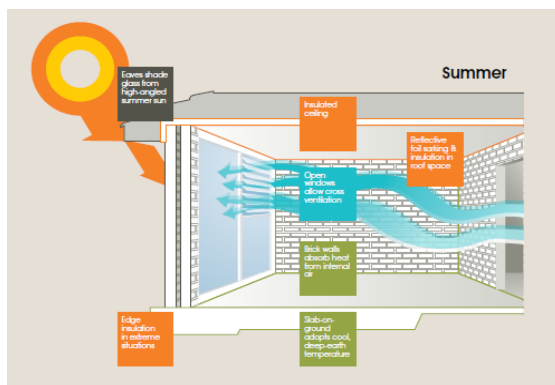
# PRODUCTS

*Our genuine building products create the most beautiful and sustainable environments and places in Australia.*

## SUSTAINABLE BUILDINGS

As one of Australia's largest and most diverse building product manufacturers, our product range offers valuable features for energy efficient and sustainable housing. Our clay and concrete products offer thermal mass, a well-established Passive Design Principle. Clay and concrete products have long product life expectancies, making the energy embodied in bricks a once-off investment that pays dividends now, and in the future. Our precast panels are designed for disassembly, making buildings completely demountable. We know our quality products last forever, which is why many of our products come with a 100-year guarantee.

### Principles of Passive Solar Design



### Case Study: Burwood Brickworks 6 Green Star

Brickworks Building Products is proud to have a range of its clay bricks specified on the latest 6 Star development in Burwood, Victoria. The project holds sentiment to our company, as the site was previously the head office, factory and quarry site of Nubrik – Austral Bricks Victoria.

Brickworks Building Products website [www.brickworksbuildingproducts.com.au](http://www.brickworksbuildingproducts.com.au) shares more case studies and technical information.

## SUSTAINABILITY PERFORMANCE RESEARCH

Brickworks works in partnership with industry group Think Brick Australia, and its subsidiaries ARTA and CMAA. Our partnership supports ongoing research programs at the University of Newcastle that contribute significantly to our understanding of the thermal performance of building products. A range of Technical Manuals are available on Think Brick's website to help the building industry create more energy efficient buildings. In FY20, we will continue to support this research through our ongoing engagement with Think Brick.

### Case Study: Sustainable Buildings Incorporate Thermal Mass

Austral Precast goes above and beyond to bring innovative, durable and cost-effective building solutions to the Australian market. From balustrades to walls, precast panels are proving an easy solution for architects and builders, with their high-quality finish, thermal mass and environmental benefits.

This made Austral Precast the obvious choice for architects Elenberg Fraser and the Aria Property Group for the 16-storey Oxley + Stirling Residences in Brisbane. The newly completed project incorporates 219 stylish apartments and more than 1,300 sqm of rooftop recreational facilities.

## CARBON NEUTRAL BRICKS

Austral Bricks continues its ongoing partnership with the Department of Environment and Energy's National Carbon Offset Standard (NCOS) since the implementation of the certification six years ago. The Carbon Neutral Brick is just one of the many innovative and sustainable products produced by Brickworks.

The entire range of bricks produced at Austral Bricks Longford, Tasmania is certified as carbon neutral, including transport and end-of-life elements. The



factory uses low carbon technology for its energy supply, substituting natural gas with sawdust.

The product's emissions are offset through the purchase and retirement of carbon credits sourced from a range of International and Australian projects. This strategy enables us to provide affordable carbon neutral bricks.

The NCOS Public Disclosure Summary is available in the Environmental Documentation section of our website [www.australbricks.com.au](http://www.australbricks.com.au)

## BRISTILE SOLAR ROOF TILES AND BATTERIES

Bristile Roofing offers the award winning, innovative and sustainable Solar Roof Tile and Sonnen Battery with integrated inverter. The solar tile interlinks seamlessly with a range of roof tiles while the DC battery, with a built-in inverter that is exclusive to Brickworks, negates the requirement of a standalone inverter. The DC battery comes with a smart app, supporting household energy optimisation and management. The introduction of Bristile Roofing's integrated solar tiles means that households can enjoy the benefits of rooftop solar, without compromising on style.

Bristile's solar roof tiles won the 2018 HIA Industry and Product Innovation Award. Our Brickworks Building Products Display Centre in Rochedale, QLD proudly displays a 6.75kW building-integrated Bristile Roofing solar tile system. Congratulations to the installer (Leeson Solar) for winning the 2018 Clean Energy Council 'Under 30 kW grid connect PV power system' award for the installation.

## NET ZERO

Bristile Roofing and Brickworks Building Products are currently in the design and development phase of a Net Zero home concept that promotes the installation of solar energy systems during the construction phase of a new home. An energy usage calculator analyses the recommended solar power system and battery size to enable a house to generate all the power it needs. The system reduces energy costs and the household's carbon footprint.

## RECYCLED BRICKS

'Project Zero' set the challenge to achieve zero energy consumption (hence the name Project Zero) by using energy efficient and aesthetically pleasing materials when renovating an existing, inner-city Brisbane home. Recycled bricks were selected as a primary material, due to their thermal mass properties. For this project, the bricks were sourced from the demolition of the old kiln at Austral Bricks Rochedale Queensland.

While the use of recycled bricks dramatically lowered the embodied energy of the new build, their configuration also contributed to the home's ongoing energy efficiency. Double-cavity walls, coupled with

bricks' thermal mass, gave the structure substantial insulation. By combining a series of simple yet effective energy saving measures, Project Zero demonstrated that sustainable design can be beautiful and innovative.

## ENVIRONMENTAL PRODUCT DECLARATIONS

During FY19, we completed a Life Cycle Assessment (LCA) of our clay bricks, manufactured in Longford Tasmania, measuring their environmental impact from "cradle to gate with options". Impacts such as global warming potential, energy sources, water usage and waste disposal are disclosed. The LCA was prepared in accordance with ISO14025 *Environmental Labels and Declarations* and EN15804 *Sustainability of construction works - Environmental product declarations*. The document is available within the Product Information section of the Austral Bricks website [www.australbricks.com.au](http://www.australbricks.com.au)

Bristile Roofing's LaEscandella roof tiles hold an Environmental Product Declaration covered under their membership to HISPALYT Spanish Association of Brick and Clay Tile Manufacturers. The EPD is available on [www.en.aenor.com](http://www.en.aenor.com).

Austral Bricks' Nubrik – Traditional and Artisan Ranges of clay bricks, manufactured at our Wollert plant in Melbourne, have obtained the **Declare** label in June 2019. The label means the bricks have been "declared" Living Building Challenge (LBC) Red List free. The Red List contains the worst in class materials prevalent in the building industry, disclosing them as polluting, toxic and bioaccumulate in the environment. The disclosure is available on LBC's website: [www.living-future.org/declare-products/nubrik-range/](http://www.living-future.org/declare-products/nubrik-range/)

A strategic review of additional product disclosures will be investigated throughout FY20.

## TERRAÇADE – ECOSPECIFIER GLOBAL VERIFIED PRODUCT

Austral Bricks' Terraçade façade design system resolves environmental and structural issues to produce effective and safe building enclosures. The Terraçade product was put through the Ecospecifier Verification program to qualify its leading position as a façade system that is worthy to be used in green building projects.

Consisting of modular fired clay units, the two versions of the product: Terraçade TN (designed to act as a rain screen and a rear ventilated façade system) and Terraçade XP (designed to act as a rear ventilated curtain wall system) both contribute to improving a building's overall performance and energy rating.

Details of the certification are available by searching "Terraçade" on Ecospecifier Global's website: [www.ecospecifier.com.au/products/](http://www.ecospecifier.com.au/products/)

## Product

# WELLNESS

Over time, we are all spending less time in nature and more time indoors, either at work or at home. There is a direct correlation with this trend and health impacts. Your home environment should be as natural and healthy as possible, and bricks are a great start to improve home wellness.

Bricks are a healthy, natural building material that improve indoor air quality. Poor indoor air quality, caused by a range of products in our homes, is a large contributor to negative health effects, such as headaches, tiredness or lethargy, asthma and allergic responses.

As bricks are manufactured from naturally occurring materials, they don't emit volatile organic compounds (VOCs) as many lightweight products do. The use of the natural features of brick can eliminate the need for paints, which emit VOCs. Bricks are naturally mould resistant; the mildly porous surface of bricks and lack of organic matter does not support conditions for mould to grow.

Bricks have a high thermal mass, meaning they regulate internal temperature fluctuations in a way most materials don't, helping to keep an even temperature in winter and summer. This means there is less reliance on artificial forms of heating and cooling, and costly energy bills are reduced. Bricks also act as a sound barrier, reducing noise impacts between rooms or from outside.

Not only are bricks better for your health, they are also better for our planet. Bricks are taken from the ground and can be returned to the ground without causing landfill or pollution. They can be reused, keeping their original properties and features intact, or even recycled.

### HOME WELLNESS MOVEMENT

Brickworks is serious about how our products can improve wellness in the home. Our Austral Bricks business is proudly supporting Simonds Homes in a growing 'home wellness' movement. Our bricks are used in Simonds homes and recognised as a wellness product, contributing strongly to the ambition of home wellness through stylish finishes and the thermal benefits of bricks.

Home wellness isn't just about the physical impacts of materials in your home, it is also about mental wellness. Brickworks has explored the impact of colours and textures on mental wellbeing, creating a series of Mood Boards in collaboration with some of Australia's top style gurus, including Wendy Moore, Home Beautiful's Editor-in-Chief and Kim Chadwick, Trend Forecast Director.

These Mood Boards help customers style their homes to reflect current trends, and choose surface textures, colour palettes and material choices that evoke emotions. By using these Mood Boards to drive mental and physical health and wellbeing, we aim to create a closer connection with nature for our customers.

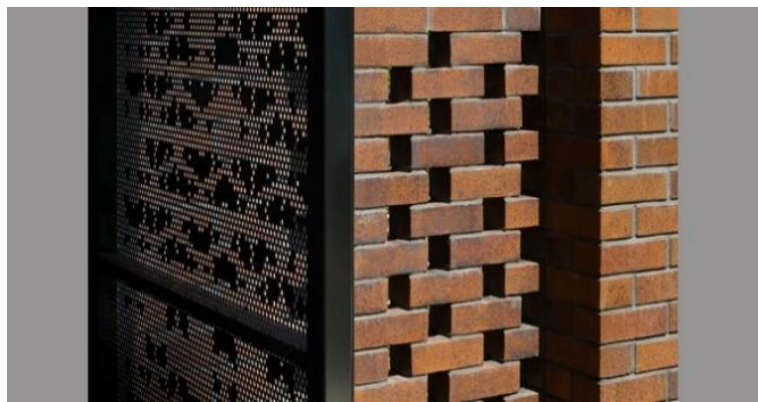
*High Quality*

# AFFORDABLE HOUSING

Rising household bills and rental prices place financial pressure on Australian households and the dream of owning a house is out of reach for many. At Brickworks, we believe that affordable can mean high quality. Many of Brickworks' high-end products have featured in affordable housing developments across the country.

## **LIVEABLE HOUSING DESIGN**

Our Claypave Regal Tan features on the exterior of Glenalva Terrace, a disability housing project in Enoggera, Queensland and Austral Bricks Symmetry Range Linseed was used in the Step Up, Step Down mental health facility in Queensland's regional Gladstone.



Brickworks supports the work of the National Housing Finance and Investment Corporation (NHFIC) via its membership with the Housing Industry Association (HIA). HIA proposed an election imperative for the access to housing finance. Following the federal election, the government has committed \$500 million to NHFIC to underwrite first home buyers with a deposit of <20% and \$25 million to research Australia's housing demand, supply and affordability

In FY20, Brickworks will further explore opportunities to supporting affordable housing developments.

## **SUPPORTING THE CONSTRUCTION OF HOPE STREET YOUTH REFUGE**

Brickworks donated products at cost to help build the Hope Street, Melton affordable housing facility. Hope Street, Melton provides support and transitional affordable accommodation for young people and young families for 12 months to two years.



## Product

# SAFETY

*Brickworks places the upmost importance on consumers health and safety.*

### CUSTOMER HEALTH AND SAFETY

Building material choice can be the difference between a minor incident or a major, as witnessed during the 2017 Grenfell Tower fire disaster in London. All our products are tested to meet quality standards, which are key in the prevention of involvement with defective building materials.

Many building products on the market have proven to have weaknesses and fail the test of time, or hold safety concerns such as the recent case of non-compliant aluminium composite panels. Only through the passage of time do building products prove their long-term safety and durability. Bricks have been proven over centuries as a superior material choice as they are non-flammable, low maintenance, weatherproof, reusable, recyclable, inert, have excellent acoustic properties, are colourfast and durable with a 100-year warranty lifetime.

#### BENEFITS OF CLAY AND CONCRETE PRODUCTS



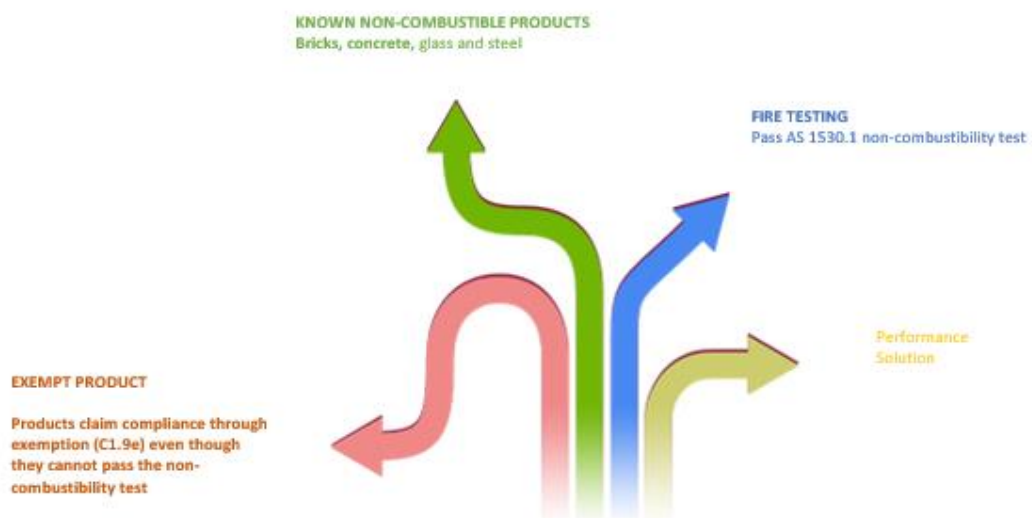
### ALL BRICKWORKS CLAY AND CONCRETE PRODUCTS ARE NON-COMBUSTIBLE

Brickworks is committed to customer health and safety through product quality systems and testing. All Brickworks clay and concrete products are non-combustible and pass AS 1530.1, combustibility test for building materials.

#### PATHWAYS FOR NATIONAL CONSTRUCTION CODE COMPLIANCE FOR NON-COMBUSTIBLE MATERIALS

**BRICKWORKS**  
LIMITED

*All Brickworks clay and concrete products are non-combustible and pass AS1530.1 testing*





**Some competitors claim compliance through an exemption when their products cannot pass the non-combustibility test.** As the number of new products enter the market increases, many of these cannot pass the stringent non-combustibility test (AS1530.1) but instead claim compliance through an exemption in the NCC (Vol 1 C1.9 (e)). This exemption allows products that cannot pass AS1530.1 to be used where a non-combustible material is required. Brickworks supports the growing calls from consumers and industry participants for tighter controls and increased compliance in relation to the use of building products in construction projects.

Brickworks cladding products have all been tested and pass AS 1530.1, combustibility test for building materials. Our Terraçade Façade systems are made from fired clay tiles installed onto a railing system and hold a 100-year colourfast warranty. Inex Boards are made from low-carbon magnesium oxide and engineered cementitious composite. In addition to AS1530.1 compliance, they have passed AS5113 fire propagation testing and classification of external walls of buildings. Tests show that Inex boards do not contribute to the spread of fire and will protect the structure of the building.

Our lightweight products and cladding (including Terraçade, Pronto Panel and Inex Boards) have undergone extensive testing at CSIRO, University of Newcastle, and other NATA accredited laboratories, to ensure compliance with the National Construction Code and are certified non-combustible. Pronto Panel has attained CodeMark Certification and both Pronto Panels and Inex Boards are approved for all Bushfire Attack Levels.

#### EXCELLENCE IN FIRE RESISTANCE

“Clay bricks and concrete blockwork both have excellent fire resistance” Australian Government – Your Home Manual<sup>8</sup>

#### ENGAGING FOR BUILDING PRODUCTS COMPLIANCE STANDARDS REFORMS

Building failures across the country in recent times, caused by non-compliant materials and poor construction practices. Sadly, these recent events do not come as a surprise to us, with Brickworks having represented our concerns to state and federal government ministers.

Brickworks supports the growing calls from consumers and industry participants for tighter controls and increased compliance in relation to the use of building products in construction projects.



#### BRICKS: A DURABLE AND SAFE CHOICE FOR MULTI-STOREY DEVELOPMENTS

Bricks are highly resistant to fire damage because of the high firing temperatures during the manufacturing process. For this reason, some insurance companies reserve their lowest rates for brick homes.

Arc by Crown in Sydney NSW comprises of a pair of 26-storey mixed-use towers which demonstrate the craftsmanship and durability of bricks. Inspired by the heritage buildings in the area, 300,000 handcrafted Bowral Dry Pressed bricks in Hereford Bronze were used to complete the project.

### PRODUCT COMPLIANCE

Brickworks places the upmost importance on consumers health and safety. We undertake ongoing assessments of changes in building codes and legislation to ensure products are fit for purpose and compliant.

Our product approval process comprises testing programs to meet the requirements of the National Construction Code, Australian Standards and ensures products are fit for purpose. Testing programs are specifically designed to reflect product applications, and include testing such as mechanical, fire, structural, acoustic and installation.

All products are tested either at Brickworks NATA Accredited Laboratories, or at independent NATA Accredited Laboratories, to ensure they meet the relevant Australian Standards and the performance requirements of the National Construction Code. All products are accompanied by Technical Data Sheets, providing information on the product specifications, to ensure that all products are fit for purpose.

<sup>8</sup> Australian Government Your Home Manual, <http://www.yourhome.gov.au/materials/brickwork-and-blockwork>



Our manufacturing operations are managed in accordance with our internal Quality Management System, which aligns with ISO9001. Austral Bricks WA, Austral Precast and Austral Masonry hold ISO 9001 Quality Management Systems certification.

We have established defined and measurable quality objectives for product compliance, and maintain a reporting system on each manufacturing site. The Audit and Risk Committee have oversight of product safety with a strong focus on quality control. Quality results and performance are reported to the Managing Director fortnightly. Monthly customer satisfaction surveys are undertaken which provide valuable feedback and insight into consumer expectations regarding the quality of our products. Our staff attend industry events and training courses to ensure knowledge of product safety is maintained.





# RISK MANAGEMENT

## RISK MANAGEMENT

To ensure robust and effective risk management systems are in place and operating effectively, the Board, through the Audit and Risk Committee, determines the risk profile for the company, ensures that business initiatives are consistent with its risk appetite, reviews the controls and systems in place to continually mitigate risk, and oversees reporting and compliance requirements. A Risk Management Framework has been implemented, consistent with each element of the Australian Risk Management Standard AS/NZS3100:2018. Key elements of the framework cover business process, financial, human resources, information, property, environmental, health and safety and insurable risks.

Brickworks' Board has adopted a Risk Management Framework that identifies risk tolerance and risk appetite for the Group, and then considers how each identified risk is placed within that framework.

That framework involves assessment of the likelihood of an event occurring, the potential impact of each event, and the controls and processes in place to continually mitigate each risk.

Risk management is a priority for senior management. Details of risk management and the significant risks that may impact the achievement of the Group's business strategies and financial prospects are included in the Brickworks FY19 Annual Report and the Corporate Governance Statement which can be downloaded from [www.brickworks.com.au](http://www.brickworks.com.au) → About Us → Corporate Governance.

## PROCUREMENT - MODERN SLAVERY AND SUPPLY CHAIN

Brickworks is committed to working collaboratively with our partners and suppliers to ensure business is conducted in an honest and ethical manner. This includes identifying and addressing modern slavery and human rights risks throughout our business and supply chain.

New reporting frameworks and requirements to disclose risks of modern slavery in supply chains include the Federal Modern Slavery Act which came into effect in 2019 with initial reporting starting in 2020, and the Modern Slavery Act 2018 (NSW) which is expected to come into force at a future date. Brickworks has engaged consultants to review all proposed legislative requirements and provide updates for any proposed changes or harmonisation.

During FY20, Brickworks will engage experts in the field to undertake a review of current processes, and provide recommendations. This will help us work towards a risk robust assessment process, a Modern Slavery roadmap and reporting statement.

Our goal for FY20 is to form a sustainable supply chain working group, engaging stakeholders from across the business, to better understand the risks within our procurement categories and countries of supply. Members of the working group will help increase awareness of Modern Slavery risks and the legislative requirements across our business.

# GOVERNANCE

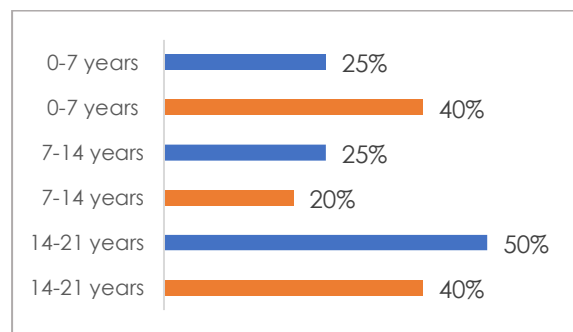
The Brickworks' Board is committed to developing and maintaining good corporate governance and recognises that this is best achieved through its people and their actions. The company's long-term future is best served by ensuring that its employees have the highest levels of honesty and integrity. These employees are retained and developed through fair remuneration, appropriate long-term incentives and equity participation in the company. It is also critical to the success of the company that an appropriate culture is nurtured and developed, starting from the Board itself. Our Governance Statement can be found on our website [www.brickworks.com.au](http://www.brickworks.com.au). The statement has been prepared in line with the principles of the ASX Corporate Governance Council's "Corporate Governance Principles and Recommendations (3rd Edition)".

Brickworks has policies and procedures in place that ensure the highest standards of corporate governance. We abide by all Australian laws and the requirements of regulatory authorities in each state.

## BOARD SUCCESSION PLANNING AND DIVERSITY

In FY19, the Board focussed on Board renewal. Brickworks is pleased to announce the appointment of Malcolm Bunday, as an independent non-executive Director to the Brickworks Board, with effect from 1 October 2019. This appointment restores the Board to 7 directors, which was reduced in 2018 when David Gilham retired from the Board.

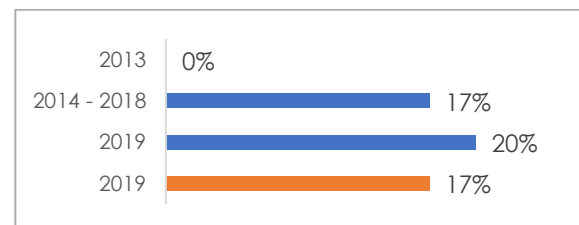
### Board Membership – Tenure of non-executive Directors (excluding Chairman)



■ Representation including the appointment of Malcolm Bunday

The commencement of Malcolm Bunday's tenure will result in a slight decrease in gender diversity in our board as the composition changes to one female and six males. Brickworks recognises the importance of gender diversity in a board, and has developed a target to increase female board membership to 28% by 2020. The Board is seeking to appoint an independent female non-executive director with property experience as a successor to Brendan Crotty when he retires. The Company has engaged an external recruitment company to assist with this process.

### Gender Diversity % of Female non-executive Directors



■ Representation including the appointment of Malcolm Bunday

## CODE OF CONDUCT

Brickworks staff are guided by the Brickworks Code of Conduct. The purpose of the code is to set standards of conduct expected of Brickworks employees. The Code applies to all directors, officers and employees of Brickworks Limited and its controlled entities.

The Code of Conduct is based on the Brickworks values. The Brickworks core values underpin the way in which we act and behave at Brickworks. They describe what's important to us, and guide our interactions with each other, our customers, suppliers, contractors and the community.

The Brickworks core values are:

- Care: Sustainably Safe
- Collaborate: Succeed Together
- Exceed: Passionately Play to Win
- Integrity: I Do What I Say
- Innovate: Everyone, Everywhere, Everyday
- Lead: Inspire People

Brickworks employees should be respectful, professional and act with honesty and integrity to maintain high ethical standards and uphold Brickworks reputation. High standards of conduct will serve to enhance Brickworks reputation for fair and responsible trading and encourage appropriate behaviour across the business.

## **ANTI-BRIBERY AND CORRUPTION AND WHISTLEBLOWER POLICIES**

The Anti-Bribery and Corruption, and Whistleblower Policies were introduced in May 2019. All staff are required to undertake annual on-line training to demonstrate their understanding of the policies. The Whistleblower Policy provides a mechanism which encourages concerns to be raised about misconduct or any improper state of affairs or behaviour that is inconsistent with the Group's culture, values or policies.

Be Honest @ Brickworks is an anonymous avenue for staff to raise concerns of suspected or actual misconduct. Staff are encouraged to make a report if they see or suspect something wrong such as; theft, fraud, dishonesty, harassment, unethical behaviour, workplace safety and environmental hazards or misconduct.

The Be Honest @ Brickworks reporting platform is easily accessible from the company's intranet page, and posters containing the contact details are located in all work centres. The platform is administered by Deloitte's Risk Advisory Service.

## **PUBLIC POLICY**

Brickworks Political Donations Policy prohibits the making of Political Donations at any time on behalf of the Brickworks Group or otherwise using funds of the Brickworks Group.

# Our FY2020 Targets

## OUR PEOPLE

- ▶ Launch values survey
- ▶ 30 staff to join mentoring program
- ▶ Develop targets for gender diversity
- ▶ 10% reduction in injury rates
- ▶ 10% staff trained in Mental Health First Aid
- ▶ 25% staff to undergo drug and alcohol testing
- ▶ 100% Heavy vehicle drivers to complete medical testing
- ▶ Implement the recommendations from the National Transport audit
- ▶ Increase female board membership to 28%



## ENVIRONMENT

- ▶ Implement Gas Efficiency Plans
- ▶ Investigate carbon targets
- ▶ Finalise TCFD plan and implement
- ▶ Develop library of technical properties of clay
- ▶ Implement production waste and recycling plans at all manufacturing facilities
- ▶ Identify further opportunities to reduce mains water usage
- ▶ Commence rollout of online software to support Environmental Management System
- ▶ Zero environmental fines



## COMMUNITY

- ▶ Implement Community Engagement Plans at relevant sites
- ▶ Continue ongoing support of the Children's Cancer Institute



## RESPONSIBLE BUSINESS

- ▶ Explore opportunities to further support affordable housing developments
- ▶ Strategic review of additional product disclosures
- ▶ Prepare and present the Environmental Social Governance (ESG) risks and opportunities paper, and five-year Sustainability Strategy
- ▶ Form a Sustainable Supply Chain Working Group to better understand the risks within our procurement categories and countries of supply, and work towards a robust risk assessment process, a Modern Slavery roadmap and reporting statement.



# DISCLOSURE APPROACH

*Our disclosure approach is based on the robust framework and reporting standard set out in the Global Reporting Initiative, to ensure our stakeholders are well informed of our material sustainability issues.*

## Stakeholder

# ENGAGEMENT

Stakeholder engagement is an important part of our materiality assessment process. Engaging with internal and external stakeholders supports our understanding of the company's most significant sustainability issues. Brickworks undertook a process of identifying our stakeholder groups by considering the individuals and entities that would be affected by, or interested in the company's operations, products and management. These stakeholder groups are set out in the following table.

### Brickworks Internal and External Stakeholders Groups

Stakeholder Group		Areas of Interest		Key methods of engagement	
Employees	Management Employees	Business performance HR	Corporate governance WHS	Employee Materiality Survey Newsletters Conferences	Team meetings Performance reviews
Customers	BKW Business Development Managers (customer perspectives) Architects Developers Customers	Price Quality Reliability Innovation Eco credentials Wellness Reputation	Ethical practices Care Disclosure Building waste Affordable housing	Customer satisfaction surveys Events (Double talk, international speaker, Continuous Professional Development presentations)	Newsletters Brochures Website Education Materiality survey (customer insights provided by Business Development Managers)
Investors	Investors Analysts Shareholders	Business performance Sustainability Environmental performance Climate related issues	Health and safety HR Regulatory compliance Risk management disclosure	AGM Annual Report Meetings ASX Updates	
Government	Local government State government Federal government	Compliance New and emerging legislation Carbon and energy Investing in new technology	Environmental performance WHS performance HR / EEO / Employment performance Planning issues	Meetings Training Audits and inspections Reporting	
Industry	Competitors Similar Industry/companies	Trends		Analysis of documents Gap analysis	
Community Groups	Local community group organisations Neighbours	Environmental performance Communications Local employment and economy	Disclosure	Group meetings Local events	One on One discussions Complaints management Newsletters Site tours
Sustainability organisations	World Business Council for Sustainable Development Sustainable Business Australia Supply Chain Sustainability School	Climate risk Materials use Social licence to operate		Survey Webinars Meetings Training	Newsletters Subscriptions



# MATERIALITY

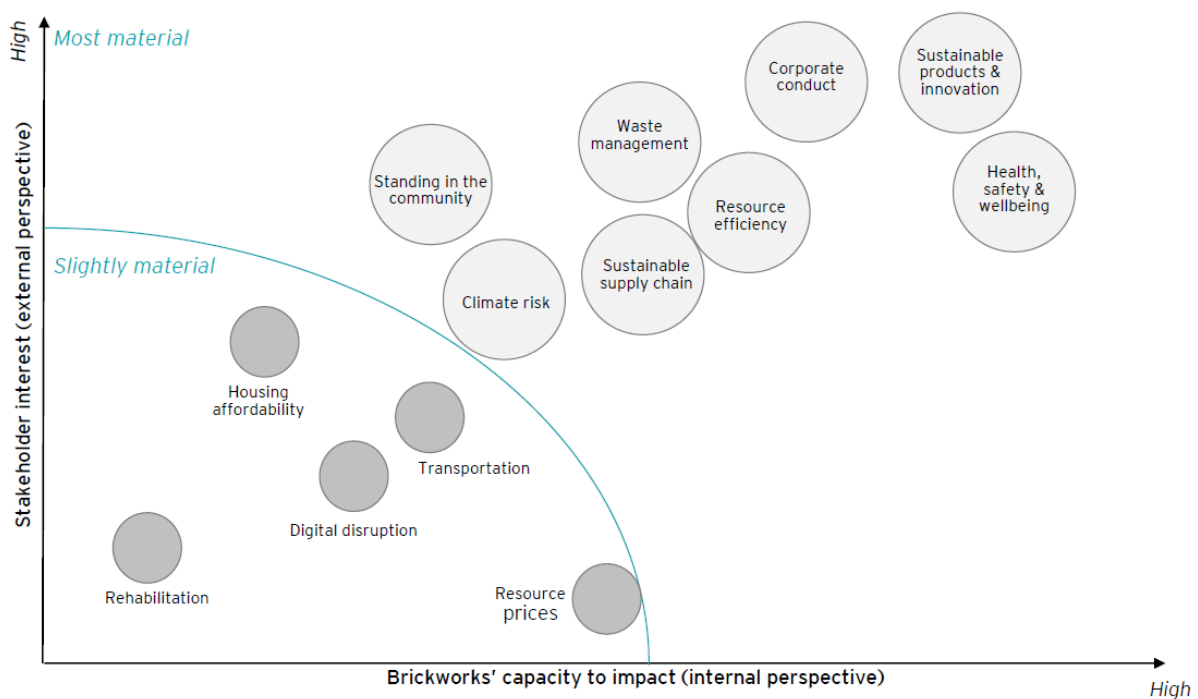
## Assessment Process

Brickworks engaged EY to assist in expanding its materiality assessment, which supports our understanding of the company's most significant sustainability issues, to enable better integration and alignment of sustainability in its business strategy. The assessment entailed the following materiality assessment process:

- Scanning the external and internal environment
- Engaging with internal and external stakeholders
- Prioritising the most material issues from a long list of potentially material issues
- Validating the list of issues through surveying a selection of external stakeholders and additional customer and investor feedback

Significant issues were rated according to Stakeholder Interest (Y axis) and Brickworks capacity to impact (X-axis). This approach is consistent with the expectations of the GRI Standards.

Information regarding the most material issues is included in the FY19 Brickworks Sustainability Report, and assessed against the GRI Standards, where possible.



# EY Assurance Statement

As part of our expanded disclosure, EY performed a Limited Assurance<sup>9</sup> engagement for metrics internally identified as significant risks, including:

- Lost time injury frequency rate (LTIFR)
- Total recordable injury frequency rate (TRIFR)
- Environmental fines
- Scope 1 and 2 greenhouse gas emissions and energy consumption



## Independent Limited Assurance Statement to the Management and Directors of Brickworks Limited

### Our Conclusion:

Ernst & Young ("EY", "we") was engaged by Brickworks Limited ("Brickworks") to undertake 'limited assurance' as defined by Australian Auditing Standards, hereafter referred to as a 'review', over selected sustainability performance data within the Sustainability Report for the year ended 31 July 2019. Based on our review, nothing came to our attention that caused us to believe that the selected sustainability data has not been prepared and presented fairly, in all material respects, in accordance with the criteria defined below.

### What our review covered

We carried out a review over selected sustainability performance data within the Sustainability Report for the year ended 31 July 2019.

#### Review Subject Matter

The Subject Matter for our limited assurance engagement included selected sustainability performance data, limited to those aspects listed below and for Brickworks' Australian operations only, for the year ended 31 July 2019:

- ▶ Total Scope 1 greenhouse gas (GHG) emissions (in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>-e))<sup>\*</sup>
- ▶ Total Scope 2 GHG emissions (tCO<sub>2</sub>-e)<sup>\*</sup>
- ▶ Total energy consumed (in petajoules (PJ))<sup>\*</sup>
- ▶ Total number and value ((in Australian dollars (AUD\$)) of significant environmental fines and penalties
- ▶ Lost Time Injury Frequency Rate (LTIFR)
- ▶ Recordable Injury Frequency Rate (RIFR)

<sup>\*</sup>Reported for the year ended 30 June 2019, to align with the reporting period for the National Greenhouse and Energy Reporting (NGER) scheme.

The Subject Matter did not include Management's forward-looking statements.

#### Criteria

In preparing the Sustainability Report, Brickworks applied the following criteria:

- ▶ Global Reporting Initiative (GRI) Standards
- ▶ Brickworks' own publicly disclosed criteria as established in the Sustainability Report.

### Key responsibilities

#### EY's responsibility and independence

Our responsibility is to express a conclusion on the selected sustainability performance data, based on our review.

We were also responsible for maintaining our independence and confirm that we have met the requirements of the APES 110 Code of Ethics for Professional Accountants and that we have the required competencies and experience to conduct this assurance engagement.

#### Brickworks' responsibility

Brickworks' management is responsible for selecting the Criteria, and for preparing and fairly presenting the Sustainability Report in accordance with that Criteria. This responsibility includes establishing and maintaining internal controls, adequate records and making estimates that are reasonable in the circumstances.

### Our approach to conducting the review

We conducted this review in accordance with the Australian Auditing and Assurance Standards Board Australian Standard on Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ('ASAE 3000') and Australian Standard on Assurance Engagements on Greenhouse Gas Statements ('ASAE 3410') and the terms of reference for this engagement as agreed with Brickworks.

### Summary of review procedures performed

A review consists of making enquiries, primarily of persons responsible for preparing the selected sustainability performance data and related information, and applying analytical and other review procedures.

Our procedures included:

- ▶ Conducting site visits and interviews with site and corporate personnel to understand the business and reporting processes
- ▶ Conducting interviews with key personnel to understand the process for collecting, collating, and reporting the selected sustainability performance data during the reporting period
- ▶ Checking that the calculation criteria has been appropriately applied in accordance with the methodologies outlined in Brickworks' Criteria
- ▶ Undertaking analytical review procedures to support the reasonableness of the data
- ▶ Identifying and testing assumptions supporting calculations
- ▶ Testing, on a sample basis, to underlying source information to check the accuracy of the data.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

### Limited Assurance

Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for a reasonable assurance engagement. Consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

While we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Further, our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

### Use of our Assurance Statement

We disclaim any assumption of responsibility for any reliance on this assurance report to any persons other than management and the Directors of Brickworks, or for any purpose other than that for which it was prepared.

Dr Matthew Bell  
Partner

5 September 2019

Ernst & Young  
Brisbane, Australia

<sup>9</sup> This year, the Limited Assurance was limited to Australian operations.

# APPENDIX

## *Global Reporting Initiative Index*

The FY19 Brickworks Sustainability report has been informed by the Core Global Reporting Initiative (GRI) Standards. Brickworks' disclosures to the Core GRI Indicators is available in an easily downloadable form at: [www.brickworks.com.au](http://www.brickworks.com.au) → News and Reports.



CONTACT DETAILS FOR QUESTIONS RELATING TO THE CONTENT OF THE REPORT

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