



SUSTAINABILITY REPORT

2021

BRICKWORKS

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Stoney Rise Wines Cellar Door
by Cumulus.Studio
Daniel Robertson Hawthorn in London
and Bowral Bricks in Bowral Blue

About this Report

This Sustainability Report is Brickworks Limited's (Brickworks) third stand-alone Sustainability Report and is intended to complement the Annual Report, providing expanded disclosure on non-financial performance, impacts and opportunities. It is informed by the Global Reporting Initiative (GRI) Standards, a leading independent environmental, social and governance reporting standard.

Brickworks' material sustainability issues were reviewed internally during FY21, expanding on the materiality review conducted in FY19, with the assistance of EY. The review included analysis of stakeholder feedback received over the last year and industry trends. Further information is available in the Stakeholder Engagement and Materiality Assessment Process sections of this report. This Sustainability Report provides detailed information on the issues that have been identified as most significant through the materiality review and validation process.

The boundary of the Sustainability Report covers operations where Brickworks Limited has operational control. During FY19 and FY20, Brickworks acquired North American businesses Glen-Gery, Sioux City and Redland Brick. During FY21, integration of these operations into Brickworks' Management Systems has been ongoing. This year's Sustainability Report includes key aspects of the North American annual business performance, covering safety, workplace profile, environmental compliance, natural gas and electricity use, collective bargaining statistics, company changes, partnerships, risk and governance.

The reporting period for most topics is 1 August 2020 to 31 July 2021, aligned with the Brickworks' financial year. An exception is energy and carbon data, where the reporting period is 1 July 2020 to 30 June 2021, aligned with the National Greenhouse and Energy Reporting Scheme (NGERS). The workforce demographic data for Australia is taken from the WGEA report which is based on 31 March 2021, however the total workforce figure is at 31 July 2021. Details of fundraising efforts for the Children's Cancer Institute are for the 2020 calendar year.

As part of Brickworks' expanded disclosure, a Limited Assurance review was performed in accordance with the International Standard on Assurance Engagements (ISAE) 3000 for metrics internally identified as significant risks, for both the Australian and North American businesses, 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 (Australia only)
- ▶ Natural gas and electricity (North America only)

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



Fish Lane Town Square
Bowral Bricks in Capitol Red &
Nubrik clay pavers in Custom Colour

A message from the Managing Director

At Brickworks, we understand our long-term responsibilities, and the impact and influence we have on the environment, our customers, employees, communities and shareholders. We take great pride in manufacturing our products in a sustainable way, creating sustainable developments and beautiful products that last forever. We integrate sustainability and innovation into product design, resulting in greater energy and resource efficiency over the operational lifetime of a building.

Responding to COVID-19

The health and wellbeing of employees and customers is of the upmost importance to the company. Brickworks has been prepared since 2014, with fully equipped biological kits in place at all operational sites. Brickworks has monitored the coronavirus disease (COVID-19) since January 2020, acting with caution and following stringent health advice. Brickworks implemented a COVID-19 business continuity plan to minimise the chance of COVID-19 spreading throughout the business.

Continued focus on safety

Continual improvement in health and safety is a key requirement and underpinned by the Brickworks Health and Safety Management System. Safety performance continues to improve, with a 21.0% improvement in injury rates in Australia, and a 12.7% improvement overall. Brickworks is focusing on integrating the success of the Australian health and safety management system into the North American business. A clear safety roadmap for this rollout has been established which will support reduced injury rates.

Advancing our inclusive culture

Brickworks recognises that sustaining a strong culture, driven by the diversity and inclusion of our people, is critical to our long-term success. For that reason, I lead the Diversity Council, setting our strategic approach and overseeing our Diversity targets towards our stretch target of 35% female senior executives in Australia by 2025. During FY21, we continued our focus on increasing female senior executive representation, which increased in Australia from 27.3% to 28.1%.

Delivering a more climate resilient world

As enablers of safe, resilient and sustainable buildings, at Brickworks, we see a strong future for bricks, masonry, rooftiles and precast. Our bricks and concrete products are manufactured to provide resilience. They are durable, fire-proof, contain thermal mass for energy efficient design, excellent acoustic properties and no indoor air emissions (VOCs); and our clay bricks hold a 100-year guarantee.

During FY21, we released our Brickworks Sustainable Home Guide, setting out a pathway to creating a sustainable home using Brickworks sustainable products. By 2025, we will double the volume of products sold in Australia that hold leading sustainable qualities, supported by continued innovation in sustainable products.

Reinforcing our commitment to transparency, we are incrementally adopting the TCFD recommendations, such as undertaking climate scenario analysis, identifying risks and responses. During FY22, we expect to make a public TCFD Statement.

Our approach to a low carbon future

Brickworks has long understood the radical carbon emission reductions possible through manufacturing excellence and has a long-term strategic focus in driving our global kiln refurbishment program to improve energy efficiency beyond international benchmarks. This is underpinned by our stretch target for a 10% increase in gas efficiency at Austral Brick plants by 2030. During FY21, our approach to a low carbon future was set out in our Low Emission Technology Statement.

Driving sustainability performance

We are on track to meet our sustainability targets within our “Build for Living: Towards 2025” strategy (see page 8), as we aim to ensure a long-term sustainable future for our business and a positive impact on the world around us.

During FY21, significant annual progress was made against our targets in many areas. We invested \$3.25M in emission abatement, exceeding our 2025 target of \$2M. Our recycled material use increased by 61% to account for 12.5% recycled content in raw materials in Australia. Focus will continue to drive targets further during FY22.

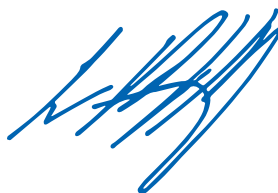
Expanding our scale in North America

On 2 August 2021, Brickworks completed the acquisition of certain assets of Southfield Corporation, including Illinois Brick Company (“IBC”).

IBC is the largest independently owned and operated brick distributor in the U.S., with 17 showrooms and distribution yards, all located in Illinois and Indiana.

Building Products North America now has significant scale, including more than 800 employees, 10 brick plants, 1 manufactured stone plant, and 27 company owned retail outlets.

I would like to thank everyone working across the Brickworks Group for their dedication and hard work, during what has been a trying year for all businesses. I am incredibly proud of our continued improvements in safety and our employee's day-to-day demonstration of living our corporate values. The launch of our new sustainability strategy provides us a pathway of continued sustainability achievement and I am excited about the journey ahead.

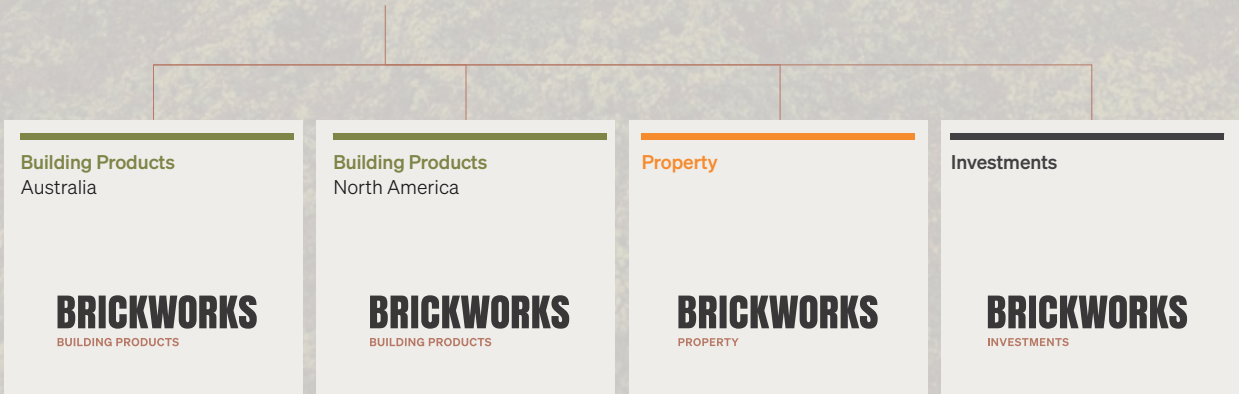


Lindsay Partridge AM
Managing Director



BRICKWORKS

LIMITED



About us

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

Brickworks is one of the world's leading providers of building products, employing 1,160 employees across its Australian operations (permanent and part time employees, excluding casuals) and 801 employees in North America.

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 several acquisitions in North America, there are now four divisions within the Brickworks Group structure:

- ▶ Building Products Australia
- ▶ Building Products North America
- ▶ Property
- ▶ Investments

This report covers the key operating divisions of Building Products Australia and Building Products North America. The Property division consists primarily of a 50% interest in a Joint Venture Industrial Property Trust. An overview of the sustainability achievements from Goodman Brickworks Joint Venture Trust is provided in this report.

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 and North America. As of 31 July 2021, Brickworks has 39 manufacturing sites and 57 quarries, comprising:

- 12** Brick plants (Australia)
- 10** Brick plants (North America)
- 2** Roof tile plants (Australia)
- 1** Timber batten plant (Australia)
- 10** Masonry plants (Australia)
- 1** Stone plant (North America)
- 2** Precast plants (Australia)
- 1** Cement terminal (JV) (Australia)
- 35** Quarries (Australia)
- 22** Quarries (North America)

In addition, the Building Products Group has approximately 75 Design Studios, Displays and Masonry Supply Centres across major capital cities in Australia and North America, complemented by an extensive reseller network.

For FY21, Brickworks' total revenue was \$890 million (AUD). This included Building Products Australia revenue of \$687 million, across four major divisions – Austral Bricks, Bristle Roofing, Austral Masonry and Austral Precast.

Backed by **BRICKWORKS**

Local expertise. Global quality. Brickworks Building Products are one of Australia's biggest building material producers. With heritage going all the way back to one of Australia's founding brick producers, we're proud of our reputation for design, innovation and sustainability.

BRICKWORKS

AUSTRALIA

 **australbricks**

 **australmasonry**

 **australprecast**

 **southern cross**
cement

 **bristiler roofing**

 **BOWRAL BRICKS**

DANIEL ROBERTSON

N U B R I K

GB Masonry

URBANSTONE

Terraçade


CAPITAL BATTENS

NORTH AMERICA

 **Glen-Gery**

Sioux City Brick
Since 1913

Lawrenceville
BRICK

Cushwa
BRICK

EXCLUSIVE DISTRIBUTOR

La Escandella
ROOFING THE WORLD

S.ANSELMO
vivere la differenza

 **la paloma**
cerámicas

 **CERAMICHE**
KEOPE





Organisational

Changes

Building Products Australia

Austral Masonry

Austral Masonry Prospect, NSW, closed in November 2020, to be replaced with Austral Masonry Oakdale, NSW, a \$75M state-of-the-art facility.

The Oakdale site is currently in the commissioning stage and due to open in the first half of FY22. The new facility contains a 240kW rooftop solar PV system and a closed loop water recycling system, for the capture, treatment and reuse of process water. The site also comprises a new Design Studio which includes a 113kW rooftop solar PV system.

Austral Bricks

Construction of the new \$130M Horsley Park Plant 2 facility is well underway, with commissioning due to commence in FY23. This facility, with a capacity to manufacture 130 million bricks per year, will be the most advanced brick plant in the world, with best in its class fuel efficiency and setting a new standard for brick manufacturing.

Building Products North America

Glen-Gery, Redland Brick and Sioux City

Building Products North America is progressing its Focused Capital Expenditure Program, with upgrade works completed at Iberia, Hanley and Mid-Atlantic. The program includes the transition from 16 plants to 10.

North America's first Design Studio was successfully opened in Philadelphia in August 2020. Additional Design Centres in New York City and Baltimore are due to open in October 2021.

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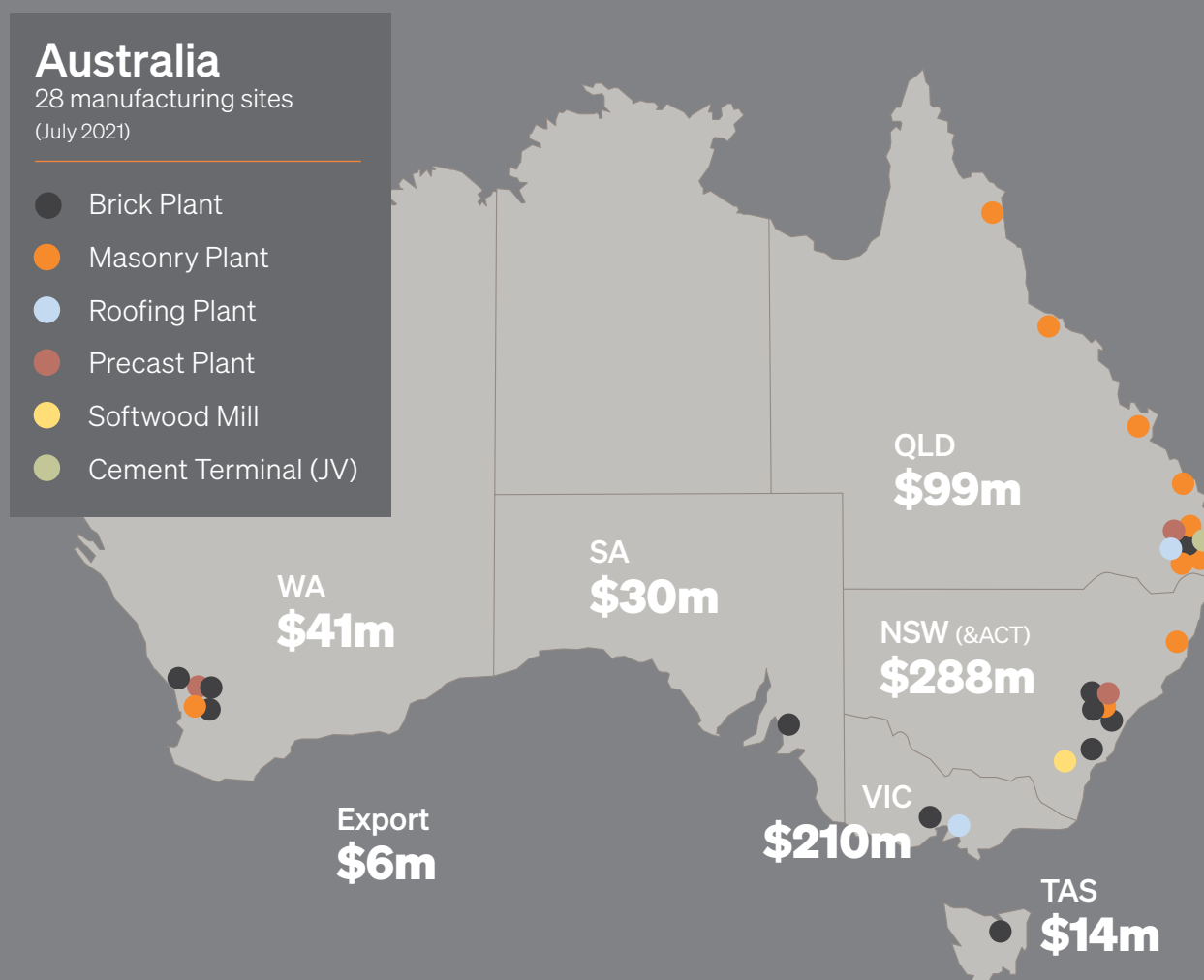
Brickworks

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 North America: Building Products Australia, Building Products North America, Property and Investments.

EARNINGS BEFORE INTEREST AND TAXES BY DIVISION	Investments: \$97m	Building Products (Aus): \$44m
	Property: \$253m	Building Products (US): \$9m

BUILDING PRODUCTS AUSTRALIA – \$687m revenue (FY21)



NUMBER OF
FACTORIES



39

NUMBER OF
RETAIL OUTLETS



75+

GROUP
REVENUE AUD



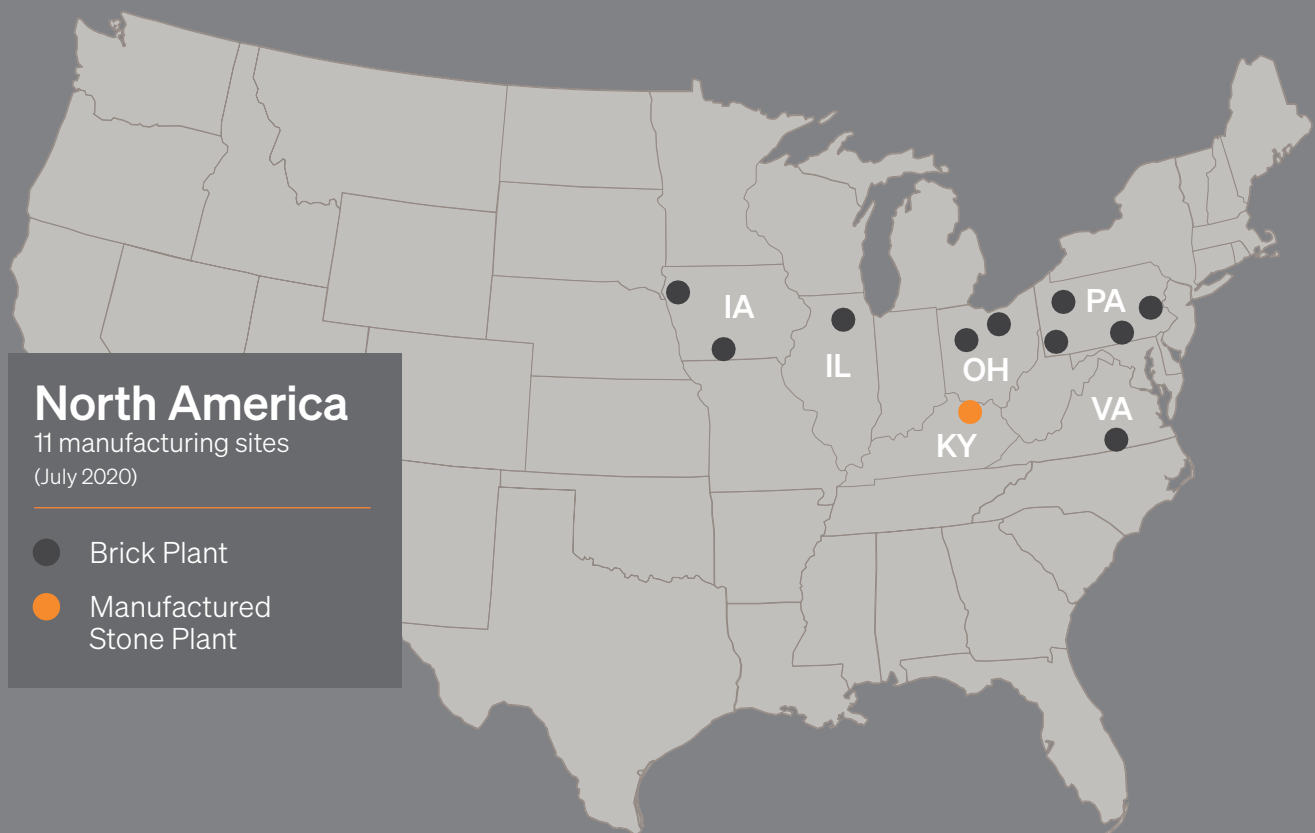
\$890m

NUMBER OF
EMPLOYEES



1961

BUILDING PRODUCTS NORTH AMERICA – AU\$202m revenue (FY21)





Park Orchards, Victoria
Daniel Robertson Hawthorn in London

Our business

We create beautiful products
that last forever



TOWARDS 2025

Significant annual progress against our 2025 targets

	Target	Our Progress	Status
	Thermal Design We will provide leading research on passive solar thermal design, enabling reduced lifetime energy use.	Release of new thermal research: Best Building Products for higher NatHERs Ratings.	✓✓
	Life Cycle Education We will support design tools, guidance, and information to incorporate life cycle thinking into building design.	Provided 42 continuous professional development sessions, educating 2,085 attendees.	✓✓
	Sustainable Products By 2025 we will double our volume of products sold in Australia that hold leading sustainable qualities.	21% increase in Carbon Neutral brick sales against previous year, launched second Climate Active offering.	✓✓
	Supply Chain Continuing to reduce supply chain risks.	Modern Slavery Roadmap completed.	✓✓
	Governance Business Ethics and Whistle-blower Programs.	Governance programs formalised. Continued training.	✓✓✓
	Safety Continue reductions in injury rates.	Injury rates reduced by 21% in Australia and 13% in North America. Clear safety roadmap for U.S. business.	✓✓
	Engagement Existing target of 100 community engagement activities annually.	120 community engagement activities, exceeding our target of 100.	✓✓✓
	Community Support Supporting charities like the Children's Cancer Institute.	\$196,028 collected for Children's Cancer institute in 2020. CCI Engagement Plan developed for COVID safe charity events.	✓
	Diversity and Inclusion Stretch target: 35% female senior executives. Develop and implement a Diversity and Inclusion Strategy.	28.1% female senior executive in Australia, development of our Diversity and Inclusion Strategy.	✓✓
	Carbon Invest in the transition to the hydrogen fuel economy.	Launched Hydrogen Feasibility Project with Murdoch University.	✓✓
	Water Reduce potable water use in water stressed areas.	8% less mains water usage in Australia v FY20.	✓✓
	Rehabilitation Drive progressive rehabilitation.	25,527m ² land rehabilitated in Australia.	✓✓✓
	Circular Economy Year on year increase in recycled material use.	61% increase in recycled material use, 12.5% recycled content in raw materials in Australia.	✓✓✓
	Emission Control Over \$2 million investment in emission abatement.	\$3.25M invested in emission abatement.	✓✓✓
	Energy Efficiency Stretch target: 10% increase in gas efficiency at Austral Bricks plant by 2030.	Total gas efficiency at Austral Bricks plant has improved by 3.5% and natural gas efficiency has improved by 7.4% since 2018.	✓✓

KEY: ✓✓✓ Achieved ✓✓ Materially Progressed ✓ Progressed



Encore Apartments
GB Veneer Split
Face in Limestone



Wellington Square, Western Australia
UrbanStone Bespoke Granite Blocks

Environment

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

Environmental

Performance

Environmental Management System

Brickworks Building Products Australia monitors its environmental performance and compliance in accordance with its Environmental Management System (EMS), aligned with ISO14001:2004, utilised across the company.

During FY20, an external audit of the EMS was completed by PwC to review the implementation processes and controls of environmental-related components of the Safety, Health and Environmental Management System (SHEMS) across Brickworks Australia sites. PwC identified notable strengths and one low risk finding, which was closed out during FY21.

Manufacturing and raw material sites across Australia have regular internal and external audits. Any issues reported as either a hazard or an incident are rectified in a timely manner. During FY21, 23 external site audits were undertaken.

Hazard and incident reporting are undertaken in Australia in accordance with the 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 and issues of material concern are reported to the Board monthly.

During the last two years, core components of the EMS were established within an online platform to assist in maintaining and auditing compliance. During FY21, manufacturing and quarry sites in Australia uploaded licence conditions, including monitoring and reporting requirements, to the module. These sites also prepared Standard Operating Procedures for their significant risks and provided training to relevant personnel.

Environmental hazard, incident and complaint reporting forms and registers were established online for all Australian sites in the second half of FY21. Continuous improvement to the system and training will continue during FY22.

Brickworks Building Products North America monitors its environmental performance and compliance to meet the requirements of each authorising entity. A key focus for FY21 was the development and integration of an EMS aligned with the ISO14001 Environmental Management System framework across North American operations, which is now 60% implemented.

Compliance¹

Brickworks treats all non-compliance instances with the utmost importance. Details of incidents, notices and complaints are raised at the weekly General Managers' meeting, attended by the Managing Director. Each non-compliance incident is investigated and tracked to ensure corrective actions are undertaken within deadlines.

Brickworks Compliance Statistics	FY21		FY20	
	Aust.	U.S.	Aust.	U.S.
Prosecutions	0	0	0	0
Penalty Notices	0	2	0	0
Reportable Incidents	12	1	26	4
Total Incidents	35	1	47	4

¹ Reported environmental fines and penalties include those received and paid during the reporting year (ending 31 July). Penalties received regarding property notices are excluded.



Park Orchards, Victoria
Daniel Robertson
Hawthorn in London

Incident reporting procedures and training are a central part of the EMS, raising awareness and identifying corrective and preventative actions. Seven of the 12 Australian reportable incidents related to water discharge at Austral Bricks sites. To address these incidents, Automatic Treatment Basins are being installed at German Church and Ford Road Quarries, Qld and Horsley Park Quarry, NSW.

The North American business received two penalty notices during FY21. Pittsburgh Plant Quarry received a penalty notice for water discharge exceeding the aluminium limit in March 2020. A water sample was mistakenly submitted as a dry weather discharge, with aluminium analysed to be slightly over the limit. A wet weather discharge does not require aluminium to be analysed. The incident was administrative in nature and thus designated as low significance by the State Regulator who issued a \$1,000 (USD) penalty notice in December 2020. A second penalty notice was issued in June 2021 for a Hanley Plant Quarry water discharge that exceeded the manganese permitted limit. Corrective actions were immediately instituted under guidance from the Pennsylvania State Agency and the penalty was reduced from \$2,600 to \$1,500 (USD). The FY22 target remains at zero environmental fines and continued risk reduction.

Air Environmental Program

Brickworks is committed to minimising its impact on the environment and complies with environmental law and community standards as they evolve. Brickworks' ongoing Air Environmental Program identifies investment plans for emissions abatement technology across Australian sites.

All brick factories hold licences issued by the state environmental regulator, and are required to meet emissions limits that the regulator deems acceptable to the environment and human health. To monitor compliance with emissions limits, qualified air monitoring consultants are engaged to test air emissions for parameters specified in licences. Should an exceedance of the

emissions limits occur, the matter is reported in line with licence or regulatory requirements. An investigation and corrective actions are undertaken in accordance with Brickworks' EMS.

Brickworks other building products divisions generally have no specific air emissions limits within licences, however, emissions are limited to the provisions of state and local laws.

Investments are made into upgrading kilns, plant control systems and emission control technologies. Limestone scrubbers will be installed at the Austral Bricks Horsley Park brick manufacturing facilities. The staged rollout program commenced in FY20, with a scrubber installed at Plant 23.

The Air Environmental Program will continue identifying investments in leading environmental initiatives. During FY19-FY20, over \$2.7M (AUD) was invested in emissions abatement scrubber equipment installed at Horsley Park Plant 23. Future investments in environmental initiatives, as part of the Air Environmental Program, will be considered in relation to capital expenditure, technical projects and stakeholder collaboration.

\$2.9M (AUD) was spent on Hydrogen Fluoride pollution control equipment for air emissions in Plant 22 in FY21. This investment is expected to deliver reductions in emissions at the source. An additional \$149,000 (AUD) was spent on pollution control equipment for air emissions in Australia during FY21. By 2026, over \$2M (AUD) additional investment in emissions abatement is scheduled.

\$1.0M (USD) has been approved to begin upgrades on the Glen-Gery Pittsburgh Plant kiln pollution control equipment in FY22. The proposed upgrades are intended to improve the general condition, reliability, and overall operation of the existing pollution control device. The proposed upgrades are currently scheduled to begin in the second quarter of FY22.

Most of Brickworks' large Australian 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 emissions estimation technique manuals. The latest NPI emissions data is displayed on Brickworks' website and can be downloaded by searching "Austral Brick" at www.npi.gov.au/npi-data/latest-data.

During FY20, all plants in North America commenced data acquisition for reporting to the Toxics Release Inventory (TRI). The TRI is a resource for learning about toxic chemical releases and pollution prevention activities reported by industrial and federal



EMISSION CONTROL

Over \$2 million investment
in emission abatement

facilities within the U.S. TRI data supports informed decision-making by communities, government agencies, companies, and others. The latest TRI emission data can be downloaded from www.epa.gov/toxics-release-inventory-tri-program and Brickworks' website www.brickworks.com.au/sustainability/.

Water Environmental Program

The Water Environmental Program identifies investments in leading environmental initiatives across Australia. Brickworks closely monitors its water use and discharge, investing in water capture systems to ensure the quality of water discharge through appropriate treatment systems.

Brickworks complies with stringent Australian environmental regulations to ensure that activities, in particular raw material quarrying, do not endanger local bodies of surface water and groundwater. Brickworks ensures the quality of discharged process water by using settling ponds and pH neutralisation systems, where required. Water and sediment management training by a highly experienced environmental hydrology consultant was completed across the Australian business by all quarry managers, and over \$186,000 (AUD) was spent on pollution control equipment for water quality in Australia during FY21.

The Water Environmental Program has identified the opportunity to upgrade our water control infrastructure, including installation

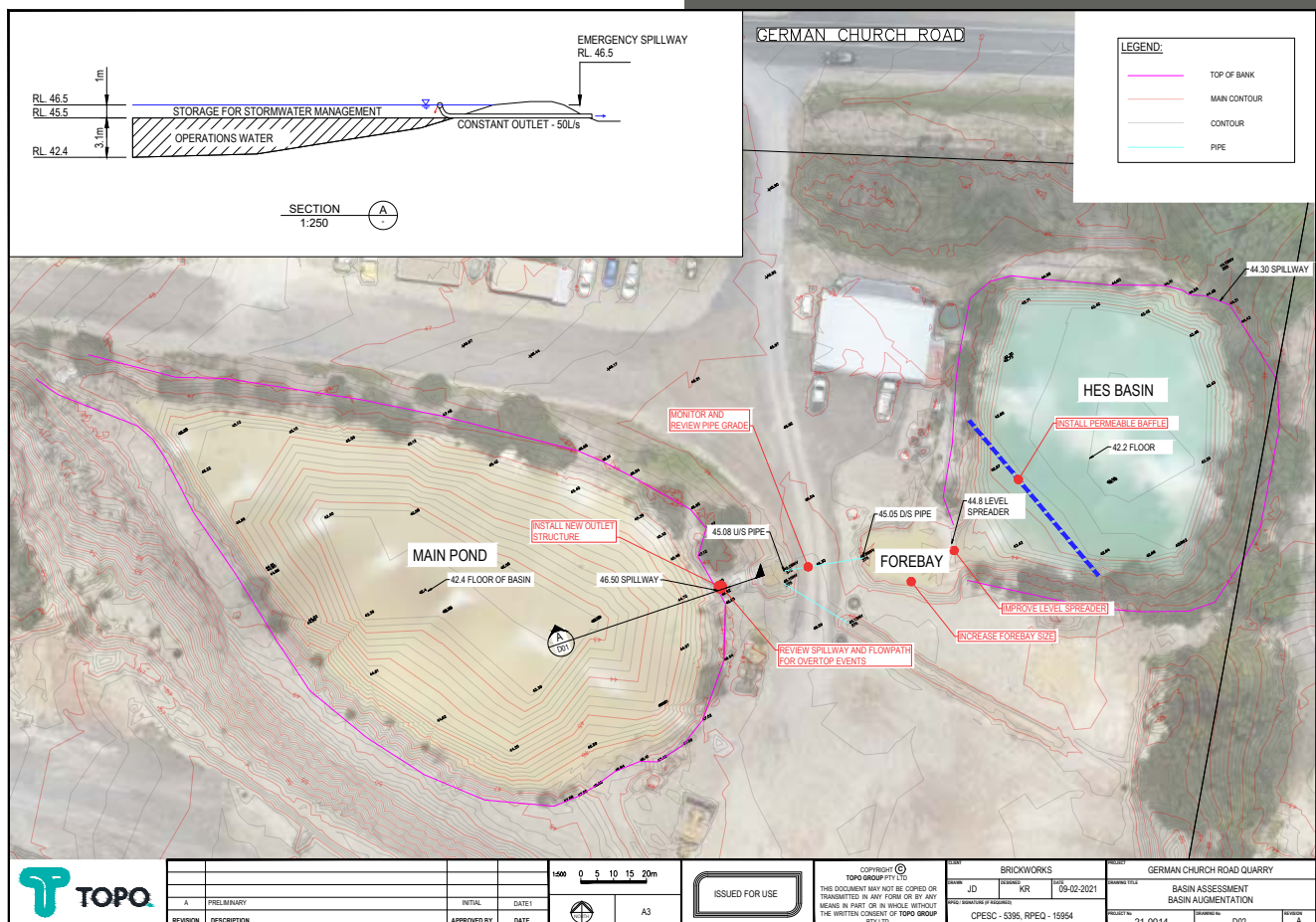
of automatic treatment basins at three sites across NSW and Qld, and installation of a customised first flush and water recycling system at our Austral Masonry site in Hemmant, Qld. This customised system was retrofitted to the existing infrastructure to ensure pH affected waters are captured and recycled back into our process.

Brickworks Building Products North America will continue to integrate an EMS and develop environmental programs.

German Church Quarry, Qld

Automatic treatment basins installation

Automatic Treatment basins operate on a continuous process rather than the batch treatment process of traditional sediment basins. This allows treatment throughout a rainfall event, rather than reliance on basin capacities to capture the rainfall before treatment. The Automatic Treatment basin also operates in a smaller footprint, allowing the retention of water for onsite dust suppression and reduces the reliance on labour for managing water during rainfall events.



Energy and Carbon

Brickworks commitment to reducing energy use and carbon emissions is driven by *Our Approach to a Low Carbon Future, Low Emission Technology Statement*.

Low Emission Technology Focus Areas

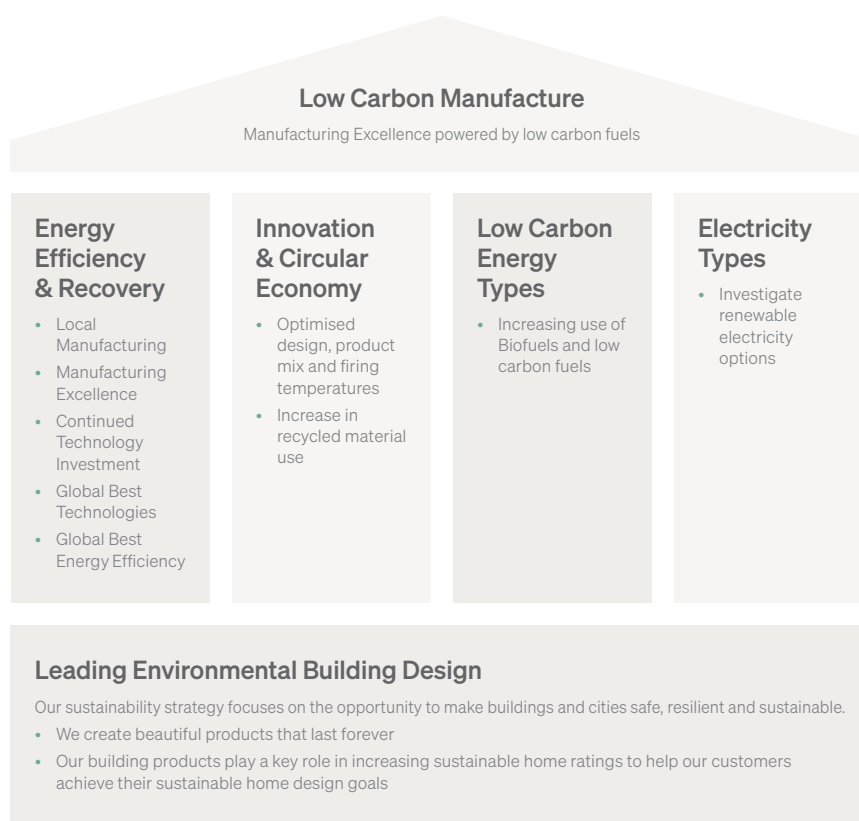
During FY21, our approach to a low carbon future was set out in a *Low Emission Technology Statement*, which can be downloaded from www.brickworks.com.au/sustainability.

Energy

In FY21, Brickworks Building Products Australia's (BBP) total energy usage was 4.1PJ, a 6% reduction from 4.4PJ the previous year.²

Energy intensity (energy consumption vs revenue) was 6TJ per million dollars of revenue across BBP Australia, a 6.3% decrease, reflecting fluctuations in revenue between FY20 and FY21.

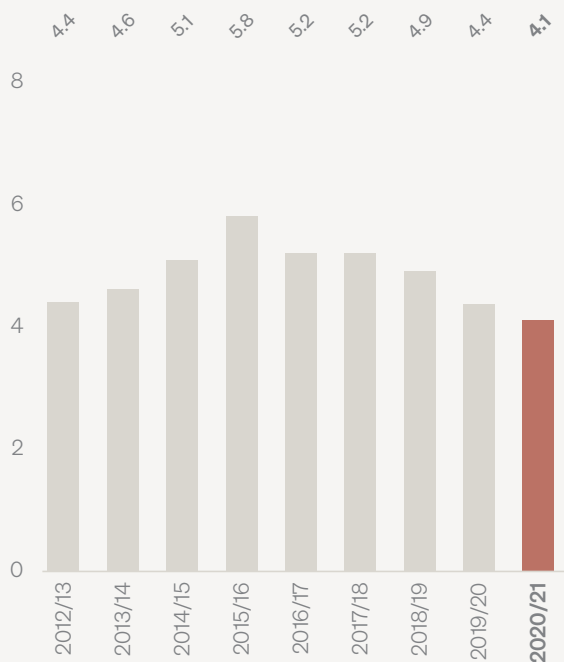
The majority (74%, 3.1 PJ) of the company's Australian energy requirements comes from natural gas, largely used at Austral Bricks' manufacturing facilities. Gas efficiency is measured at a factory level and results are reported to the Managing Director weekly.



2 Certain comparative information was amended in this Sustainability Report to conform to the current year presentation. Immaterial amendment to FY20 energy and carbon figures, consistent with NGERS reporting requirements; and revised FY20 revenue for BBP due to an updated accounting policy.

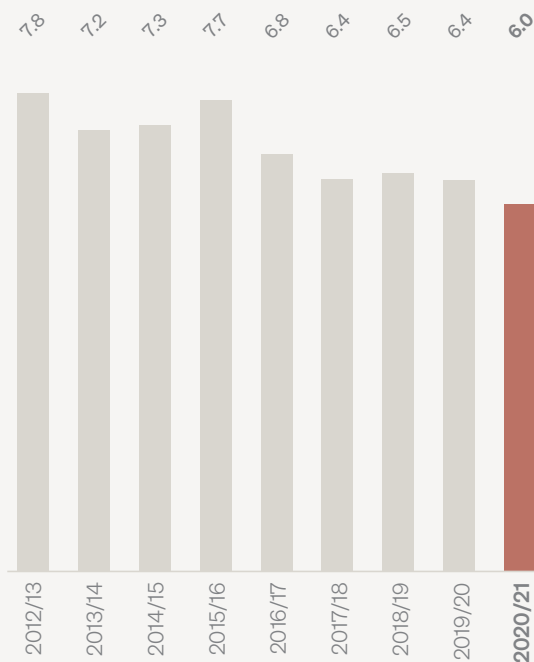
BBP Australia Total Energy Consumption

(PJ)³



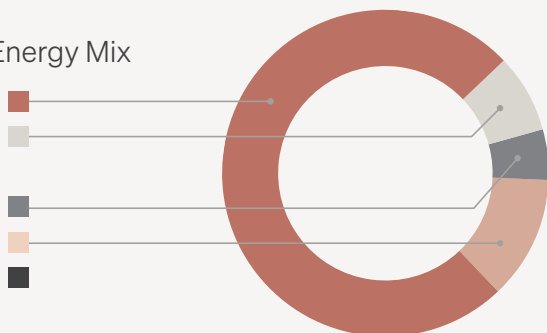
BBP Australia Energy Intensity

(TJ/\$M Revenue)



BBP Australia 2021 Energy Mix

Natural Gas	74%
Electricity	8%
Liquid fossil fuels	5%
Biofuel	13%
Coal	0%

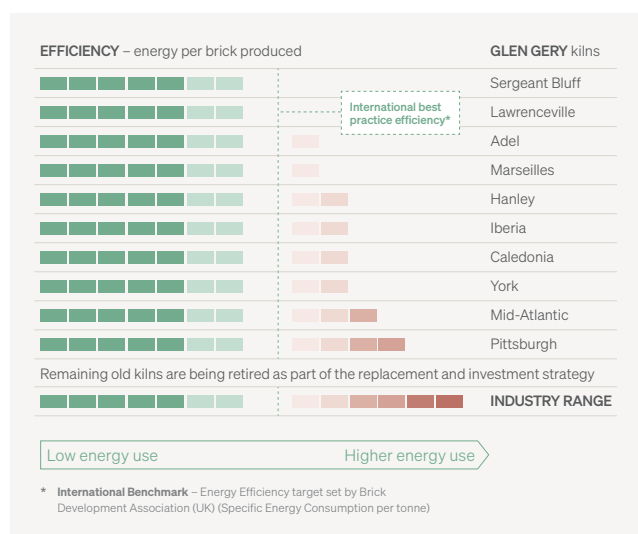


In FY21, alternative biofuels made up 13% of Brickworks' Australian energy mix, down from 14% in FY20. Biofuel sources include landfill gas and sawdust. Austral Bricks Horsley Park Plant 21 and 23 both continue to substitute natural gas with landfill gas, sourced from neighbouring landfills. Sawdust is the primary fuel used to fire the kiln at Austral Bricks Longford, TAS, and is acquired from various Tasmanian sawmills.

³ Total energy consumption is for Australian operations only. Energy consumption associated with recently acquired North American operations will continue to be monitored and reported, if material to the group.

Brickworks Building Products – North American Natural Gas and Electricity Usage

During FY21, 10 clay brick factories owned by Brickworks were in operation in North America, all fuelled by natural gas. Consumption of natural gas in Brickworks Building Products North American business was 1.8PJ in FY21, up from the 1.5PJ used in FY20. Electricity usage in FY21 was 53GWh. In FY22, Brickworks will collect and report on North American total energy use.



Efficiency Upgrades

Shoemakersville

The North American Technical Services Team won the 2021 Environment and Sustainability Award for a sustainable renovation of the office. The works included lighting upgrades to reduce energy usage and well-planned recycling of e-waste and other waste materials.

Ongoing Energy Efficiency

Energy efficiency is a focal point, managed using audits, regular maintenance and upgrades. Heat recovery systems are used in all Australian brick manufacturing facilities. During FY20, gas efficiency opportunities were reviewed for high gas-using sites and a centralised online gas efficiency KPI trend report was established. During FY21, the KPI trend reporting will trigger additional energy efficiency actions to maintain efficiency.

Investing in Energy Efficiency Towards 2030

Since its inception, Brickworks Building Products has invested in the latest kiln, equipment and manufacturing technologies to improve productivity, product quality and energy efficiency.

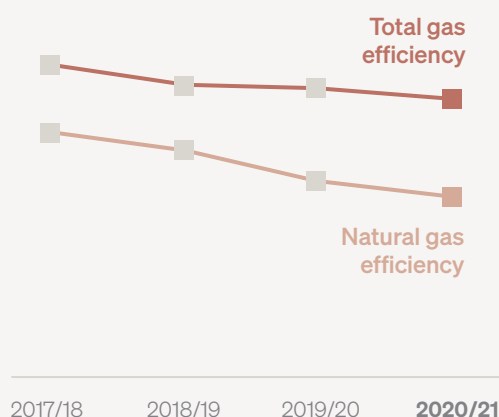
FY18 marked the start of a strategic 10-year investment vision to drive energy efficiency across Australia. By 2030, major plant upgrades are expected to improve total gas efficiency across Austral Bricks Australia by stretch target 10%, based on FY18 levels.

During FY19, the Austral Bricks Horsley Park Plant 22 kiln was shut down in preparation for an upgrade to a state of the art brick manufacturing facility. Plant 22 is expected to commence commissioning in FY23. The graph below depicts Austral Bricks Gas efficiency trend. Total Gas efficiency (including landfill gas at Horsley Park and sawdust at Longford) has improved by 3.5% since FY18. Natural gas efficiency has improved by 7.4% since FY18.

Brickworks is planning for investments into the latest manufacturing technologies in the North American business. Upgrades will provide improvements in productivity, product quality and energy efficiency. Improvements in kiln gas efficiency across North America will be tracked and reported annually.

Austral Bricks Gas Efficiency

(GJ/'000 Standard Brick Equivalent)



ENERGY EFFICIENCY

Stretch target:

10% increase in gas efficiency at Austral Bricks plant by 2030

Baseline FY18

Horsley Park, NSW, Plant 22 upgrade

Efficiencies through leading manufacturing

Austral Bricks Horsley Park Plant 22 received Development Approval to upgrade the site into a state-of-the-art brick manufacturing facility.

At the heart of the new Plant 22 operation is a JC Steele, 120 extruder, a world first, exclusively built for Brickworks. The new kiln will push the limits of brick production efficiency. It includes automatic gas burners and a convective heat exchange system, linked to a computer supervision system. With best in its class fuel efficiency, product quality, the new Plant 22 operation will be a technical revolution that will set a new standard for brick manufacturing.



Plant 22 kiln
State-of-the-art brick making facility

Austral Masonry Oakdale, NSW

New plant sustainability considerations

Solar PV systems are considered part of the design stage of all new and significantly upgraded Brickworks manufacturing plant.

During FY21, the Brickworks Property JV installed a 240kW system on the roof of the Austral Masonry Oakdale factory and 113kW on the Oakdale Design Studio.



Austral Masonry Oakdale

Biofuels

The company's Alternative Fuels Program has seen Brickworks Australia achieve 13% energy composition of biofuels in FY21. Biofuels include landfill gas utilised at Austral Bricks Horsley Park, NSW, Plant 21 and Plant 23, and sawdust and Austral Bricks Longford, Tasmania.

Electricity Efficiency

Brickworks drives efficiency improvements by monitoring electricity use, conducting audits and regular maintenance and upgrades.

Vehicle and Logistics Efficiency

Brickworks continuously modernises its trucks after five years to provide up to date safety features for the community and public and improved fuel efficiency. In FY21, three trucks were replaced with Volvo Euro V. In NSW, Volvo provided fuel efficiency training to drivers.

Energy Security

Brickworks undertakes energy management activities as business-as-usual, including weekly senior management energy efficiency reviews and annual identification of energy management opportunities. Brickworks proactively engages in energy policy reform through its membership with the Energy Users Association of Australia and the Major Energy Users, advocating for affordability and reliability during the energy decarbonisation transition. Brickworks supports calls to decarbonise the gas network as a way forward to assist Brickworks in reducing its scope 1 emissions from the consumption of natural gas.

Natural Gas Strategy

Brickworks is a wholesale gas market participant in each of the Short-Term Trading Markets in Sydney, Brisbane and Adelaide and the Declared Wholesale Gas Market in Victoria. Transitioning to wholesale gas arrangements has allowed Brickworks to control sourcing and manage its gas needs. Gas consumption is monitored in real-time for Austral Brick



plants located on the east coast, improving Brickworks' capability to forecast daily gas consumption, identify kiln and dryer issues, assess kiln gas efficiency across different products, and report land-fill gas supply volumes. Wholesale gas arrangements have allowed Brickworks to manage its gas costs better and improve its energy efficiency monitoring.

Carbon (Australia)

Australian greenhouse gas emissions are reported and audited for the Australian 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, for the reporting period 1 July 2020 to 30 June 2021. In FY21, emissions were 192,117 tCO₂-e (Scope 1) and 70,827 tCO₂-e (Scope 2), a 5.9% decrease on the previous year.

Carbon intensity is 6.3% lower than the previous year, attributable to improvements in gas efficiency.

Carbon emissions have followed a general downward trend, with a 45% decrease compared to the base year 2005/06⁴ (Scope 1 and 2). The decrease is attributed to efficiencies gained from alternate fuels, manufacturing consolidation, equipment upgrades and operational improvements. Brickworks will explore further carbon management strategies, greenhouse gas metrics and setting targets during FY22 as part of the Taskforce on Climate-related Financial Disclosures (TCFD) review.

Brickworks' greenhouse gas emissions and energy data is publicly available on the Clean Energy Regulators website www.cleanenergyregulator.com.au.

A copy of the Limited Assurance report for energy and carbon data is contained within the Appendix 1.

New Berrima, NSW, and Cardup, WA

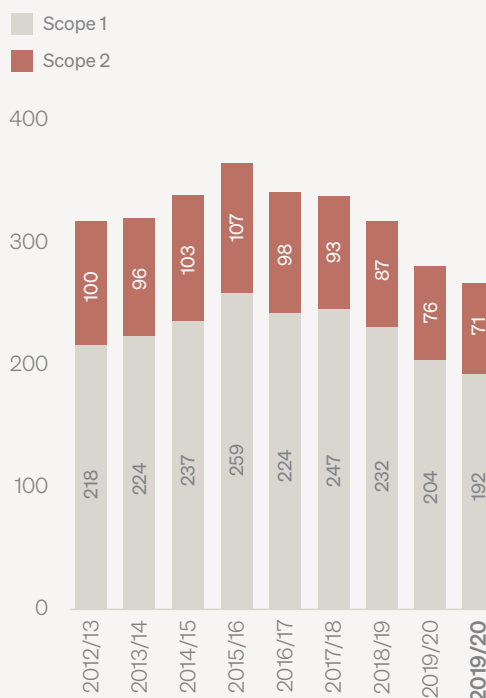
Planned efficiency upgrades

Austral Bricks, NSW, received Planning Approval in May 2021 for a major investment in new brick manufacturing plant at New Berrima. The \$50M (AUD) upgrade is expected to replace the aging plant currently in operation at Bowral, NSW, with a new energy efficient operation.

Austral Bricks, WA, applied for Development Approval for a factory upgrade, set to bring many environmental benefits, including a new and highly efficient, natural gas fired kiln and bag house scrubber.

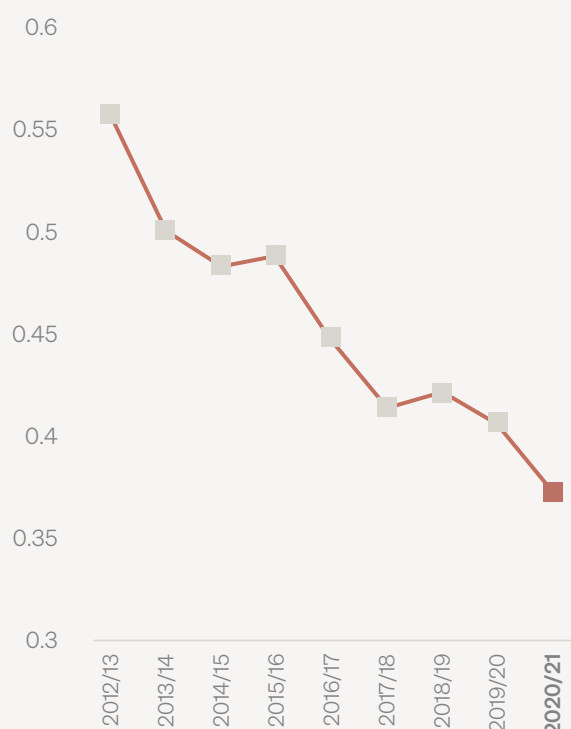
BBP Australia Total Carbon Emissions

(Carbon Emissions (ktCO₂-e))



BBP Australia Carbon Intensity

(ktCO₂-e / \$million revenue)



⁴ Certain comparative information was amended in this Sustainability report to conform to the current year presentation. Historic emissions prior to FY14 were based on Austral Bricks only, now includes all Brickworks Building Products Australia.



Factory tour of Cardup
Tour with representatives from
Murdoch University, ATCO, Austral
Bricks and Brickworks

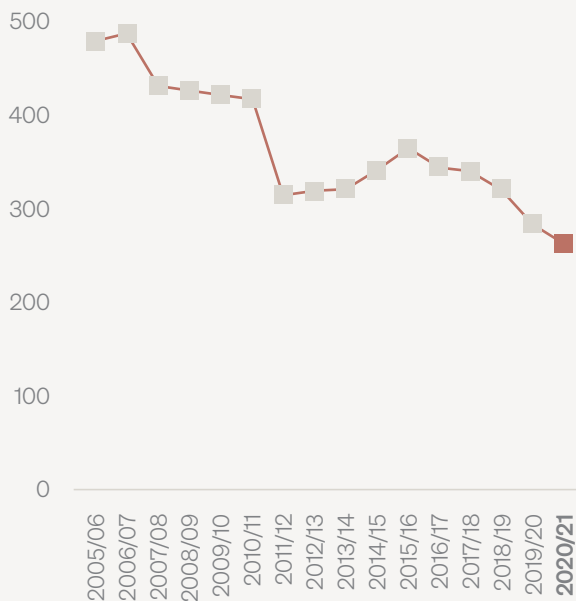
Launch of Hydrogen Feasibility Study

Brickworks kicked off its Hydrogen Feasibility Project in December 2020, inviting representatives from Murdoch University's Environmental Engineering Team and ATCO to a site tour of Austral Bricks Cardup, WA.



**Oracle Platinum
Homes, Queensland**
Bristle Roofing Planum
Slate and Integrated Solar Tile

Building Products Australia Carbon Emissions since 2005⁵ (ktCO₂-e)



National Greenhouse and Energy Reporting Data from FY10.

Carbon (North America)

Alongside Brickworks goal to report carbon informed by the GRI Standards, a carbon emissions inventory for North America will be built by FY22, to enable a full estimate of carbon emissions. Although Brickworks' North American operations are not required to report carbon emissions to the U.S. regulator, this information will supplement ongoing carbon reporting for the Brickworks group.

Natural gas followed by electricity are the predominant energy and carbon emissions sources for the North American operations. Carbon emissions from natural gas and electricity consumption were 109 tCO₂^e during FY21.

Renewable Energy and Biogas

Brickworks has long-since used biogas and sawdust for renewable energy generation. The Alternative Fuels Program saw Brickworks Australia achieve 13% energy use composition of biofuels in FY21.

Austral Bricks Horsley Park, NSW, Plant 21 has used landfill gas since 2013, and Plant 23 since 2014. The combustion of landfill gas emits 10 times less carbon than natural gas. Horsley Park used 228,156 GJ of landfill gas throughout the year, offsetting approximately 11,000 tonnes of carbon, equivalent to the energy used in 1,200 homes for one year.

Sawdust is the main fuel source at Austral Bricks Longford, Tas. The site used 13,158 tonnes or 136,852 GJ of sawdust throughout the year. While the use of sawdust is less energy efficient than natural gas, its renewable component means that net carbon emissions from the combustion of sawdust is 40 times lower

⁵ Certain comparative information was amended in this Sustainability report to conform to the current year presentation. Historic emissions prior to FY14 were based on Austral Bricks only, now includes all Brickworks Building Products Australia.



than natural gas, offsetting 6,800 tonnes of carbon, equivalent to removing approximately 1,000 cars from the road each year.

Hydrogen is expected to play a key role in the decarbonisation of sectors, such as the replacement of natural gas. Renewable hydrogen, produced through electrolysis from water using renewable electricity, can provide industry with emission-free energy. As a large gas user, this fuel may help Brickworks to meet its greenhouse gas emissions reduction targets.

Brickworks is investing in the transition to a hydrogen fuel economy through desktop and lab-scale trials, in partnership with Murdoch University. The purpose of this investment is to understand the use of hydrogen in the manufacturing of clay bricks.

Understanding Carbon Risks and Opportunities

Brickworks recognises the tangible business benefits of disclosure of, and action on, climate change-related risks. Greenhouse gas emissions from Brickworks' Australian operations are on a downward trend. In FY21, our emissions decreased 39.9%, compared to the base year 2005/06, reflecting a step change in manufacturing efficiencies. The use of biofuels was 13% in Australia for FY21.

Brickworks is aligning its greenhouse gas reduction strategy with the recognised standard of the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, including risk management disclosures, metrics and targets. The TCFD recommendations provide a disclosure framework supported by investors and regulators. During FY20, a plan was finalised to meet the recommendations on the TCFD and approved by the Brickworks Board and Audit and Risk Committee.

CARBON

Invest in the transition to the hydrogen fuel economy



We are incrementally adopting the TCFD recommendations, such as undertaking climate scenario analysis, identifying risks and responses. Climate scenario analysis utilises three scenarios to ensure portfolio stress testing aligns with the TCFD guidelines. Climate scenarios include:

- ▶ Sustainability scenario, aligning with the Paris Agreement's aim to limit global temperature rise well below 2 degrees above pre-industrial levels.
- ▶ Security first scenario, with global temperature rise of 2–3°C
- ▶ Fossil-fuelled growth scenario, with global temperature rise >4°C

Transition risks were identified as potentially most material, and are the primary focus, with physical risks to follow. Transition risks include changes to energy markets, carbon prices, policies, technology and consumer preferences. Following climate scenario analysis and identification of risks, we are outlining responses and strategies internally. During FY22, we expect to make a public TCFD Statement.

Through this process, long term carbon management strategies are being explored. During FY21, our approach to a low carbon future was set out in a Low Emission Technology Statement. This technology statement and strategy is underpinned by the

overarching target to implement energy efficiency opportunities through a global kiln replacement strategy and exploration of opportunities to further increase low carbon fuels and renewable electricity.

During FY21, the Brickworks Sustainable Home Guide was prepared, setting out a pathway to creating a sustainable home using Brickworks sustainable products. The Brickworks Sustainable Home Guide follows principles for sustainable home design, based on leading standards such as Green Star Homes and LEED for Homes by U.S. Green Building Council.

At Brickworks, we see a strong future for bricks, masonry, roof tiles and precast. They are critical enablers of the achievement of the UN Sustainable Development Goal 11, “Make cities and human settlements inclusive, safe, resilient and sustainable” and, supported by continued customer demand, present a strong opportunity to transition to a low-carbon, circular economy. Our bricks and concrete products are manufactured to provide resilience. They are durable, fire-proof, contain thermal mass for energy efficient design, excellent acoustic properties and no indoor air emissions (VOCs); and our clay bricks hold a 100-year guarantee.

Brickworks approach to TCFD Recommendations

	Completed	FY21 Focus Areas	FY22 Focus Areas
GOVERNANCE	<ul style="list-style-type: none"> Establish TCFD Working Group Formalise Board responsibilities and processes regarding climate risk Audit and Risk Committee (ARC) oversight of climate-related risks and opportunities 	<ul style="list-style-type: none"> ARC review of material climate risk and opportunities Formalise management responsibilities and processes regarding climate risk 	<ul style="list-style-type: none"> ARC annual review of material climate risk and opportunities
STRATEGY		<ul style="list-style-type: none"> Undertake materiality assessment Identify climate-related risks and develop scenarios and appropriate scenario assumptions Undertake scenario analysis and identify potential impacts and opportunities Formalise integration of climate-related risk assessment into strategy, financial and business planning 	<ul style="list-style-type: none"> Report outcomes of scenario analysis Describe strategies to improve the organisation's resilience to climate-related scenarios Integrate scenario analysis and climate risk management into strategy, financial and business planning
RISK MANAGEMENT	<ul style="list-style-type: none"> Incorporate climate risk into risk assessments processes 	<ul style="list-style-type: none"> Undertake climate-related risk assessments 	
METRICS AND TARGETS	<ul style="list-style-type: none"> Disclose Australian energy and carbon performance and trends Initiate development of North American energy and carbon measurement and reporting Develop energy efficiency target 	<ul style="list-style-type: none"> Review existing metrics, measurement and monitoring methods, and develop any addition required Develop additional targets Implement energy efficiency target (ongoing) 	<ul style="list-style-type: none"> Disclose performance against relevant metrics and targets, and the related risks Provide historic trends and performance against metrics based on available production data Disclose performance against relevant metrics and targets, and the related risks Implement additional targets Establish target review cycle

Resources

Waste and Water

Waste

Brickworks is progressing towards a circular economy by closing the loop, thus minimising production waste and reusing and recovering resources in the value chain. Opportunities for the reuse of waste are a key focus area for the brick and concrete businesses to decrease material costs, increase resource efficiency and drive a circular economy. Brickworks' 2025 target is for a year-on-year increase in recycled material use.

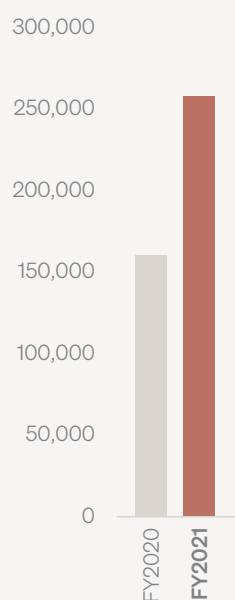
Measurement of recycled material use requires careful quantification of received materials against standardised definitions and procedures. During FY21, improved measurement procedures have enabled Brickworks to better quantify recycled content use.

Recycled Content

Measured recycled content of Australian building products was 61% higher than the previous year. A total of 256,940 tonnes of recycled material was used in place of raw materials, such as clay and cement. This is approximately 12.5% of Australian building products total production by weight. A further 13,159 tonnes of sawdust was used in place of natural gas.

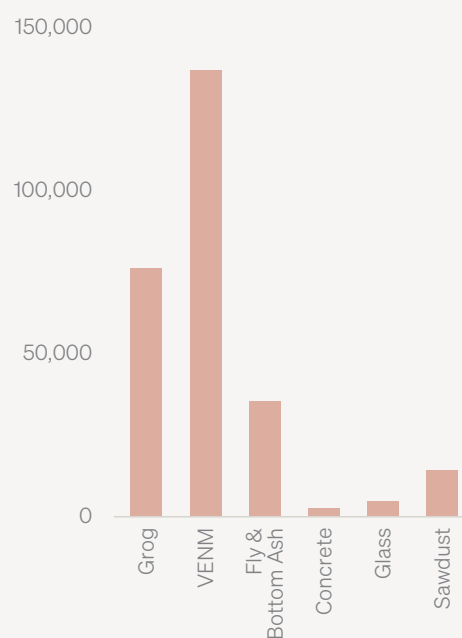
Recycled content of Building Products Australia

(Recycled content, tonnes)



Recycled materials used in FY21 Building Products Australia

(Recycled material, tonnes)





Virgin Excavated Natural Materials

During FY21, 143,469 tonnes of recycled clay material Virgin Excavated Natural Materials (VENM) was recycled into bricks, 51% increase on the previous year's 94,718t usage. This equates to approximately 15% of the clay requirements at Rochedale, Qld and 25% of the requirements at Horsley Park, NSW.

Sawdust

Natural gas is substituted with sawdust, a waste product sourced from multiple Tasmanian sawmills. Austral Bricks Longford, TAS uses sawdust as the main kiln fuel. In FY21, 13,159 tonnes of sawdust were used, approximately 90% of the site's kiln fuel requirements and a 2% increase on the previous year.

Fly Ash and Bottom Ash

Fly ash and bottom ash are used as cement substitutes at five of Brickworks cement product facilities. 35,503 t of ash product was used in FY21, a 29% decrease on the previous year. The decrease was attributable to the closure of Austral Masonry Prospect, NSW. Ash usage is expected to increase following the commissioning of the new Austral Masonry Oakdale, NSW.

Further investigations are underway for ash products derived from waste to energy incineration.

Glass

In FY21, 3,427 tonnes of recycled glass were used, compared to 13,539 tonnes in the previous year. The decrease was attributable to the closure of Austral Masonry Prospect, NSW. Glass usage is expected to increase following the commissioning of Austral Masonry Oakdale, NSW. Successful commercialisation of recycled glass products is also under development at other masonry facilities.

Grog

Grog is a term used in clay brickmaking to describe fired and unfired production waste. 100% of grog produced at our Australian and North American brick factories is returned to the raw material mix and used as a substitute for quarried material. 73,067 tonnes of grog was reused in the product mix in Australia during FY21.

Minimising the generation of production waste

Austral Bricks Bowral, NSW, won the 2021 Brickworks Environmental Innovation Award for developing a new product made from waste bricks which would have previously been returned to the raw material mix. The new product has a recycled look.

Reuse of contaminated soil

Brickworks celebrated the efforts of the Environmental and Quarry Supervisor at Austral Bricks Wollert, Vic, by awarding them the 2021 Sustainability Champion Award. They were recognised for successfully using 8,000 tonnes of contaminated (tyre fire) soil as an EPA approved substitute for clay.

Recycled Concrete

The Bristle Roofing team has developed a procedure to return production waste into the raw material mix, by crushing and recycling production waste. This initiative reduces raw material requirements necessary to manufacture concrete roof tiles, diverting waste from landfill. Dandenong, Vic, recycled 1,474 tonnes of production waste over FY21, an 8% increase on the previous year.

Waste Management

Brickworks is committed to minimising the amount of waste sent to landfill from its manufacturing facilities. In addition to the reuse of production waste, sites are provided with recycling bins to enable source separation of recyclable wastes, including metals, cardboard, oil, concrete, batteries, ink cartridges, paper and comingled waste streams.

Reclaimed product packaging

Capital Battens were joint winners of the 2021 Brickworks Environmental Innovation Award for collecting wooden packaging from customers and reusing as packaging. The initiative has saved customer waste disposal costs and packaging costs for Capital Battens.

Waste Costs

A National Quality Initiative has been implemented across all divisions, examining production waste data tracked across the last four years. Production waste consists of waste, reparations and downgrades. During FY21, Australian manufacturing facilities continued to implement waste reduction plans. Improved monitoring and management have led to a 5.3% reduction in waste, reparations and downgrades on the previous year.

Hazardous Waste

Brickworks is committed to ensuring the safe handling and disposal of hazardous waste. Brickworks activities generate minimal hazardous waste, such as batteries, globes, hydrocarbons, used cylinders and small quantities of spent chemicals. Sites are provided with the appropriate facilities and services to ensure that hazardous waste is disposed of in accordance with waste legislation.

Hazardous waste management is captured within the Environmental Management System, with waste management requirements included in the monthly environmental inspection checklist for each operational site.

CIRCULAR ECONOMY

Year on year increase
in recycled material use



Source Separating Waste



Water

Fresh water is a limited and often restricted resource across all states of Australia and North America, and is critical to Brickworks’ production process.

Approach

Brickworks’ 2025 target is to reduce potable water usage in water stressed areas.

Water resource management is most important in water stressed areas. The World Resources Institute (WRI) ranks water stress, drought risk and riverine flood risk in the Aqueduct Water Risk Atlas. During FY21, Brickworks’ Australian and North American factory and quarry locations were mapped onto the WRI Aqueduct Water Risk Atlas.

The majority of our Australian and North American sites are located in low to medium-low risk areas, with only one operation located in the high water-risk area.

Water risk area	L	L-M	M-H	H	EH
Risk score	0-1	1-2	2-3	3-4	4-5
Sites in area	39%	51%	9%	1%	0%

Potable water use is monitored and reported to management monthly through the national operations reporting system.

Innovative alternative to steam

Switching steam for an accelerant at our Austral Masonry Cairns site, Qld has allowed us to decommission the site’s boiler, resulting in a 250kL per month water saving.



WATER

Reduced potable water use in water stressed areas



Coochin Creek Rehabilitation

The use of non-potable water is prioritised at Brickworks quarrying and manufacturing facilities, with runoff and bore water the major water supplies. Recycled water, including runoff, is captured and reused on-site for activities such as dust suppression. Mains (potable) water is used when other options are unavailable. Potable water savings are driven through Brickworks' Environmental Water Program, which identifies and tracks key projects through site specific management plans.

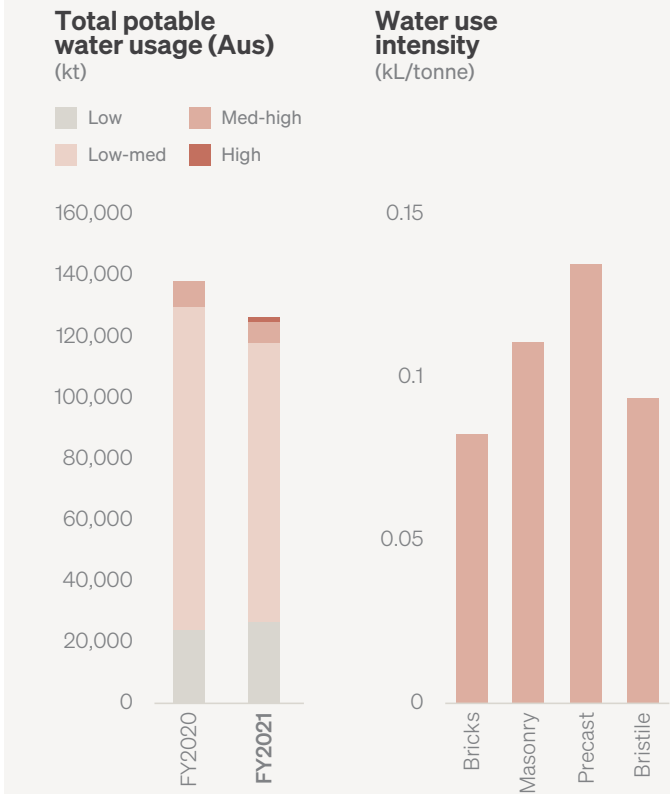
Performance

Mains water usage is collected on a monthly basis, and reported quarterly to the management team.

Projects to reduce potable mains water have been identified, with eight projects delivering reductions in potable water use during FY21. Water reduction initiatives included rainwater tank installations for our medium-high risk sites, and water meter installation to detect leaks.

During FY21, 126 ML of potable mains water use was recorded at sites in Australia, an 8% decrease compared to the previous year. This decrease includes a 9% reduction in potable water usage in our medium-high risk sites.

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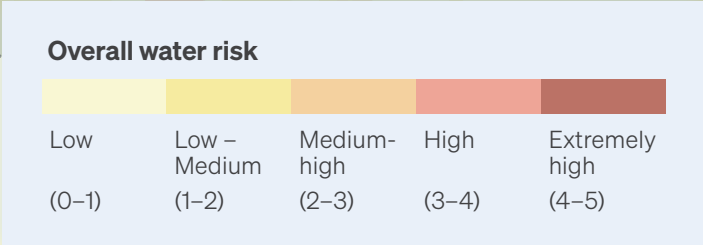
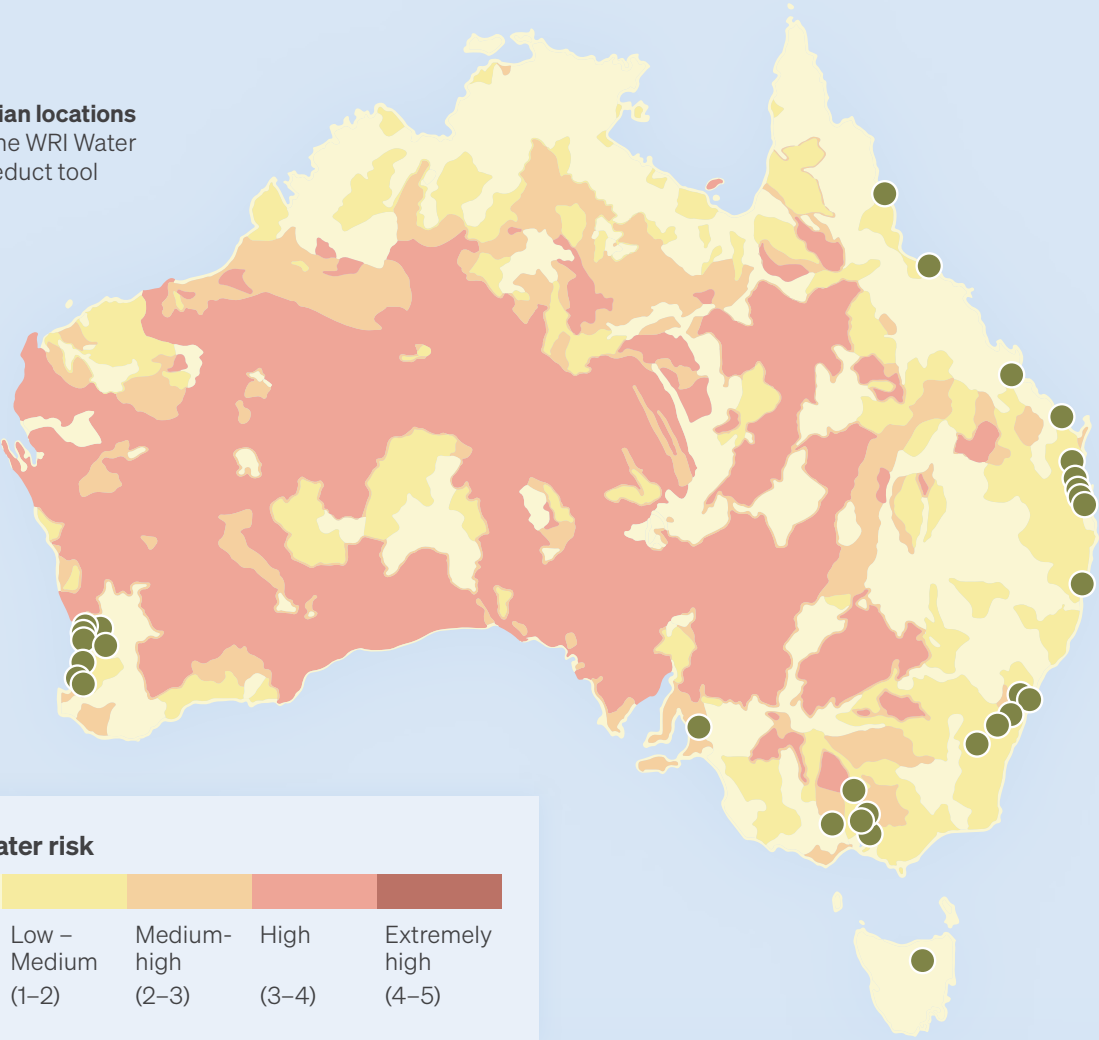
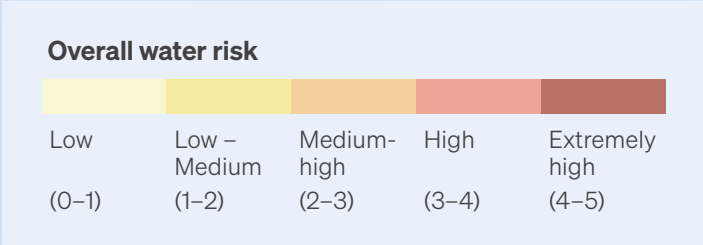
Brickworks recently acquired the rights to a hard rock quarry located in the wheatbelt region of Western Australia, within a high-risk water area. During FY21, the site used 13kL of potable water, representing 0.01% of the total potable water use.

Water intensity was measured for the Australian operations during FY21 to enable improved year on year comparison. Potable water use intensity for FY21 was 0.13kL of potable water per tonne of product.

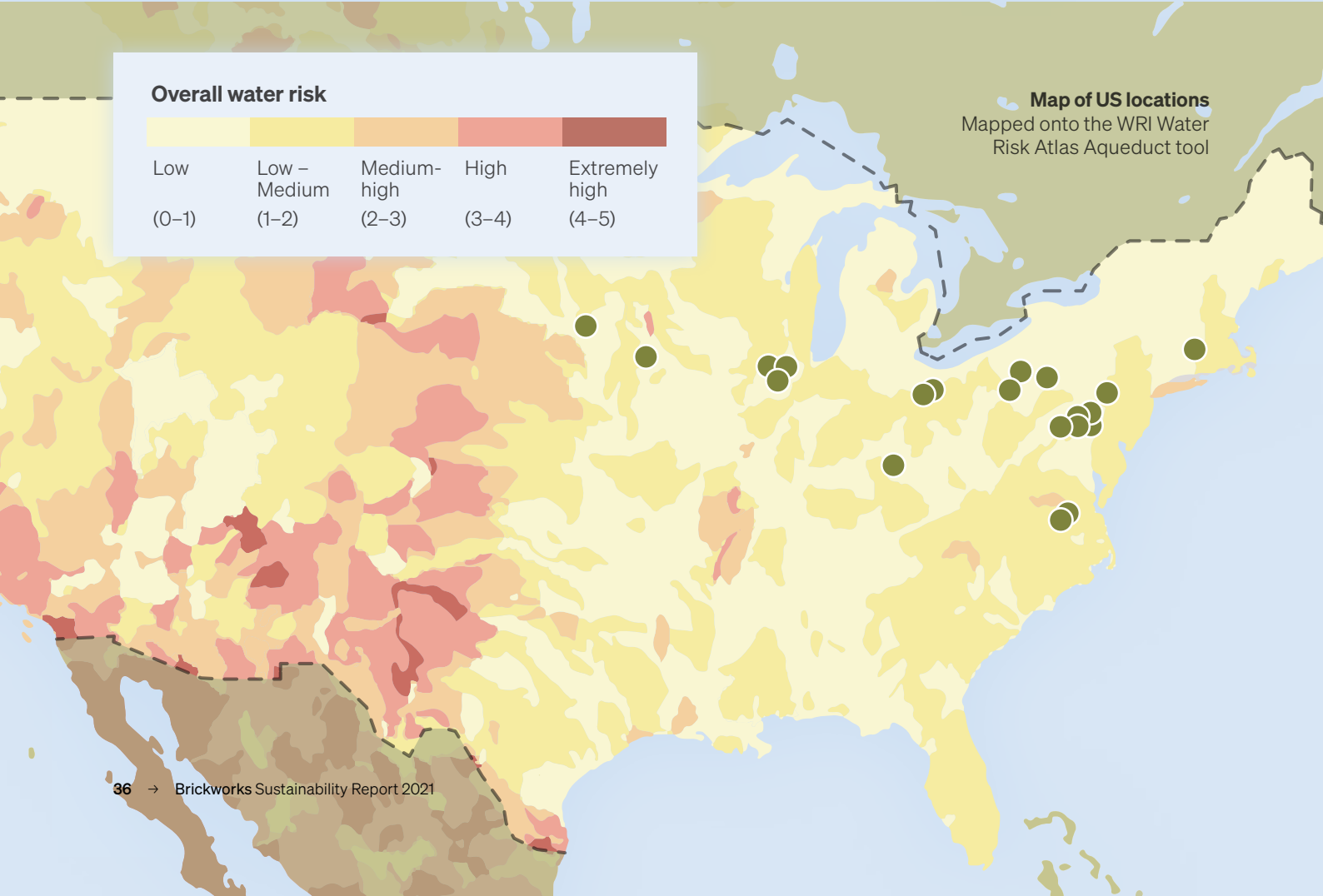
Rainwater tanks

Austral Bricks Golden Grove, SA plant is located within the WRI medium-high water risk area. The site identified excess quarry sump water as a non-potable water source and has purchased rainwater tanks. The project is expected to show a significant reduction in mains water usage in FY22.

Map of Australian locations
 Mapped onto the WRI Water
 Risk Atlas Aqueduct tool



Map of US locations
 Mapped onto the WRI Water
 Risk Atlas Aqueduct tool





Progressive Rehabilitation

Progressive rehabilitation is a key strategy for minimising environmental risk, end-of-life closure costs and achieving increased efficiency by reducing double handling of rehabilitation materials.

Progressive rehabilitation of 25,527m² was completed at sites across Australia during FY21. Progressive rehabilitation is driven across the business by adding available land reviews to annual rehabilitation planning.

Coochin Creek Rehabilitation

Austral Masonry completed the final stages of rehabilitation of the Coochin Creek Sand Quarry in Beerwah, Qld. The former extractive industry site underwent extensive rehabilitation of the 12.4 hectares of disturbed areas including reprofiling, construction of an engineered inlet to control the ingress of flood waters onto the site, seeding and revegetating exposed areas. Once the previously seeded areas showed good vegetation coverage, the rehabilitation was accepted by Department of Environment and Science in October 2020 and the site has since been sold.



REHABILITATION

Drive progressive rehabilitation

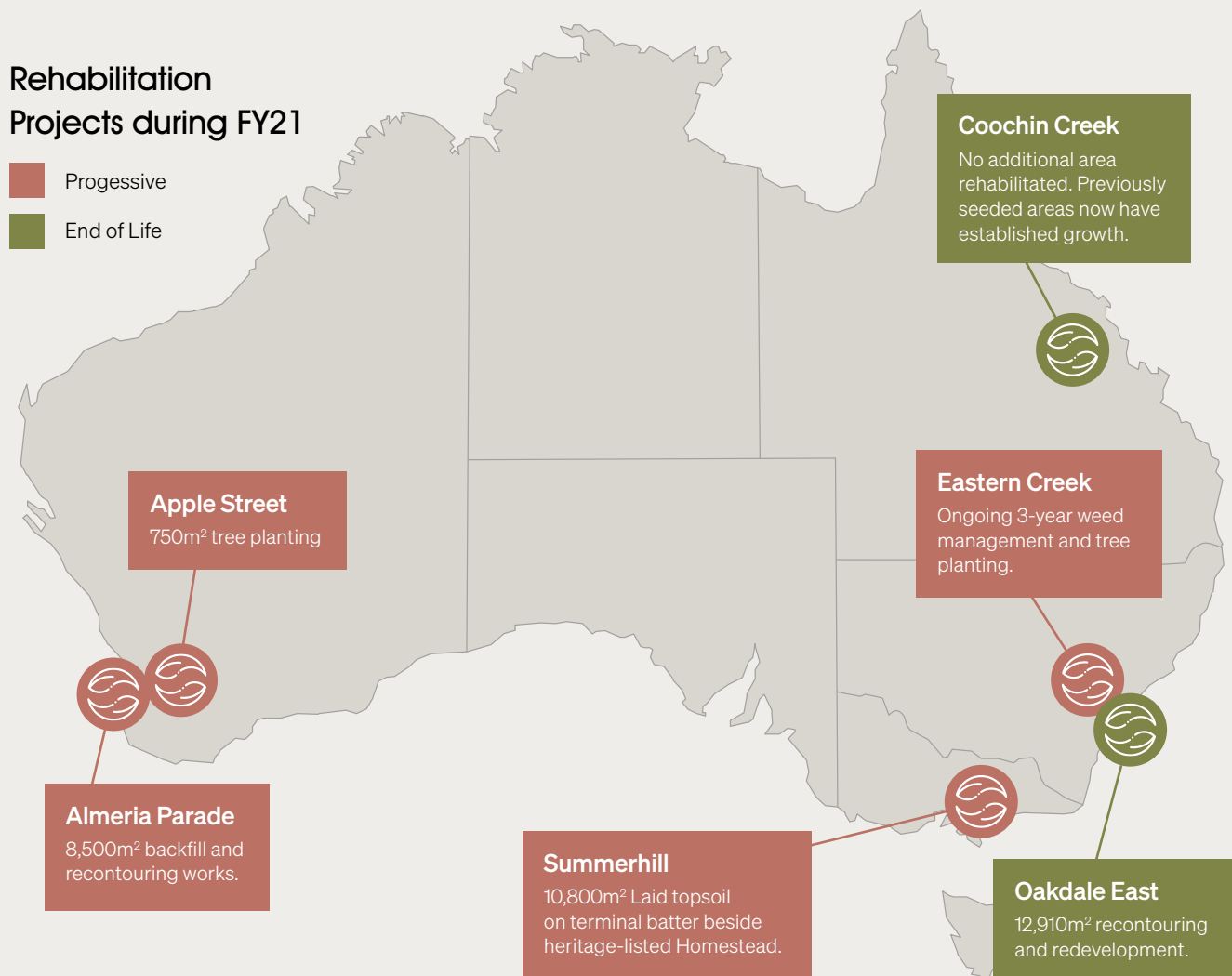
National Tree Planting Day

Austral Bricks, WA, held a family tree planting day at Apple Street Clay Pit on National Tree Planting Day 2021. The fun event involved fresh air, socialising and light refreshments while planting 1,600 native plants over an area of 750m².



Rehabilitation Projects during FY21

- Progressive
- End of Life







Our people and community

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

Our Global Workforce

COVID-19 Response

Brickworks has monitored the coronavirus disease (COVID-19) since January 2020, acting with caution and following stringent health advice. Brickworks implemented a COVID-19 business continuity plan to minimise the chance of COVID-19 spreading throughout the business. A set of regularly updated COVID-19 Guidelines are published on the Brickworks website, for both customers and employees.

The health and wellbeing of employees and customers is of the upmost importance to the company. Brickworks has been prepared since 2014, with fully equipped biological kits in place at all operational sites. The following initiatives are in place in Australia throughout the duration of the pandemic:

- ▶ A national central store was established for COVID-19 personal protective equipment (PPE) supplies, ensuring a constant supply across Brickworks
- ▶ National doctor network with Occupational Physician adviser to Brickworks
- ▶ Deep cleaning between shifts
- ▶ Activity register of pandemic related absences and single point of triage
- ▶ Temperature testing all people (including customers) at all sites
- ▶ Unwell workers, contractors and customers with fevers are not permitted on-site
- ▶ Brickworks hygiene program
- ▶ Sanitation caddies and PPE provided at all workstations
- ▶ Limitation of company travel
- ▶ Providing alternative arrangements to ensure that employees are not travelling to and from work using public transport

- ▶ Regular communications to all staff through emails, providing the latest health advice with a focus on mental health and personal wellbeing
- ▶ Leaders are empowered to have regular check ins with their teams, checking on wellbeing and connectiveness
- ▶ IT infrastructure and an upgrade to video communications enabling a quick transition for staff to work from home
- ▶ Compliance with Government Guidelines
- ▶ Regular General Manager COVID-19 meetings
- ▶ Daily World Health Organisation (WHO) situation reports
- ▶ Information training assigned to all Brickworks personnel through the E-Learning platform
- ▶ Innovation communications throughout Brickworks networking best practice initiatives being implemented
- ▶ Training reports to ensure assigned training is completed
- ▶ Physical separation of work teams
- ▶ Individual flexibility to help staff who have caring responsibilities, especially during home schooling
- ▶ Networking with the Manufacturing Australia group of companies to share learnings and best practice.

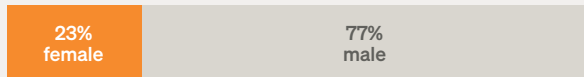
Remote working in response to COVID-19 has been effective across the business. A survey was sent to employees following the remote working experience, with positive feedback. Business planning and scenario modelling tools have been developed to support decision making.

COVID-19 has changed the way that Brickworks does business; accelerating digital sales and marketing, offering contact-free sample deliveries, virtual colour consultations, and the business does not currently accept cash payments.

Our workplace AUSTRALIA



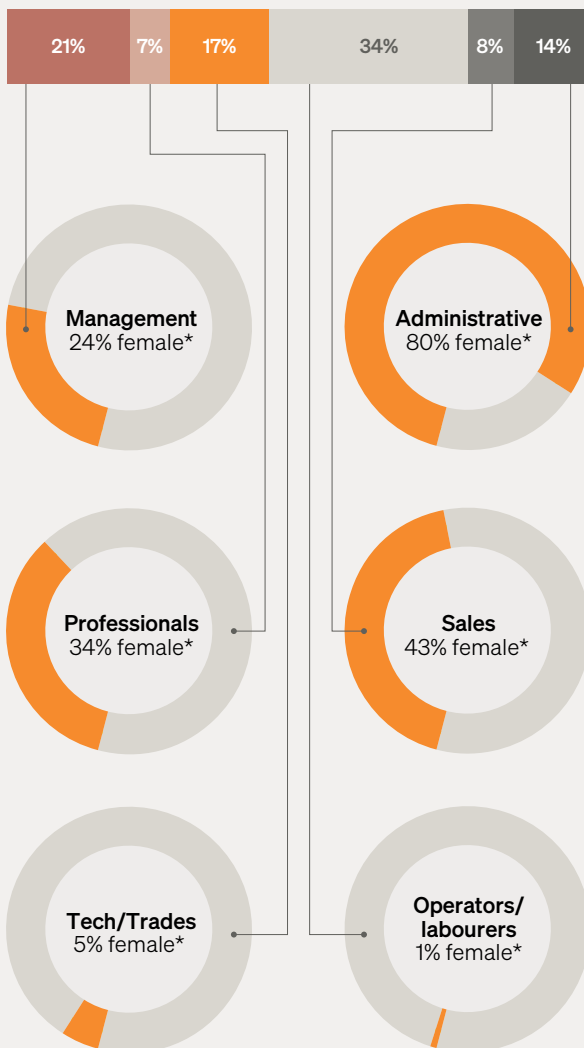
Brickworks workplace: gender diversity overall



Brickworks workplace: Senior Executive gender diversity



Brickworks workplace: employee categories*



Note: Female % is a fraction of each profile type.

* from WGEA data 2021



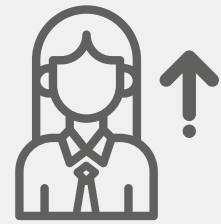
1160
Total
workforce



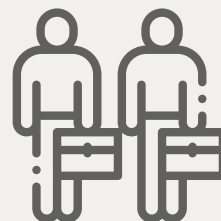
43.4
Average age
of employees



23%
Female
employees
(up from 21% in FY20)



28%
Female senior
executives
(up from 27% in FY20)



32.8%
Employees aged
50 and over



9.4
Average years
of service



COVID-19 Rapid Antigen Testing
Oakdale, New South Wales

Further COVID-19 Response Australia

During FY21, implementation of COVID-19 responses continued to develop to ensure the continued health and well-being of employees and customers.

Recognising the important role of vaccinations, Brickworks implemented Vaccination Leave provisions, to allow employees time for obtaining vaccinations. Rapid Antigen Testing was trialled and implemented at NSW facilities during the NSW Government lockdown period from July 2021, providing an additional level of screening and identification.

During FY21, there were no positive COVID-19 cases on Australian Brickworks sites.

Further COVID-19 Response North America

In North America, COVID-19 has affected staff, with 606 staff absences recording 122 positive employee COVID-19 cases. The government ordered temporary shutdowns to five facilities at the start of the pandemic, resulting in 400 employees laid off and 150 employees working from home. Policies, procedures and guidelines are in place to minimise the spread of COVID-19 and the impact on the business.

Culture and Engagement

Brickworks recognises that sustaining a strong culture, driven by the diversity of our people, is critical to our long-term success. During FY21, we continued our focus on the integration

of the 'WE ARE BRICKWORKS' Values and Behaviours. These values and behaviours drive organisational unity and focus, by providing a simple way for employees to understand what the organisation stands for, and how success is achieved at Brickworks.

Brickworks values are firmly embedded in our practices, such as recruitment, onboarding, performance management, promotion and talent development.

Employee Retention

The strong commitment and positive engagement of our employees remains a key focus through our employee value proposition and multiple benefits offered to permanent employees; including paid parental leave, support for further education and employee share schemes.

Employee Turnover	Aus. FY20	Aus. FY21*	North America FY20	North America FY21*
Voluntary	13%	13%	19%	32%
Total	27%	17%	30%	42%

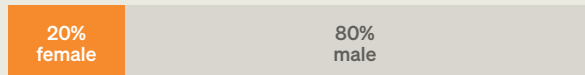
Brickworks Australia FY21 employee voluntary turnover (resignations and retirement) was 13%, with a total turnover of 17%, an improvement of 10% on the previous year. Turnover is reviewed on a regular basis, along with exit interviews and pulse surveys to help us understand focus areas that will improve employee retention and engagement.

Our workplace

NORTH AMERICA



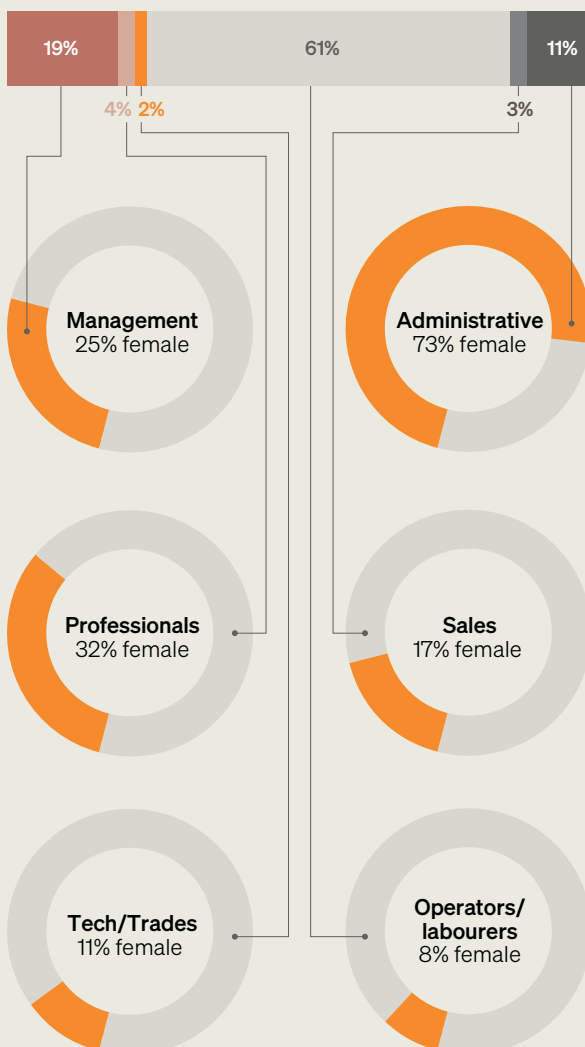
Brickworks workplace: gender diversity overall



Brickworks workplace: Senior Executive gender diversity



Brickworks workplace: employee categories



Note: Female % is a fraction of each profile type.



801
Total
workforce



45.5
Average age
of employees



20%
Female
employees
(up from 17% in FY20)



23%
Female senior
executives
(up from 15% in FY20)



43.3%
Employees aged
50 and over



11.7
Average years
of service

Brickworks North America employee voluntary turnover was 32%, with a total turnover of 42%, 12% higher than the previous year. The increase in voluntary turnover is a result of the worker shortage crisis in the United States. During the recovery from the COVID-19 pandemic, the demand for labour has exceeded the supply; especially within the lower skilled labourer positions. 80% of the voluntary turnover occurred in the general labourer/operators positions in the plant. Brickworks North America has reviewed opportunities for automation to reduce manual labour requirements, and reviewed remuneration structures to drive attraction and retention, including the use of incentives to drive productivity. The benefits of working at Brickworks North America are described within the website <https://www.glengery.com/careers>.

Talent Pipelines

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

Following the success of the Australian Graduate Program, North America launched its Graduate Program, The Brew Crew, designed to encourage company awareness, support professional and personal skill development, and promote organisational engagement. The first cohort are 10 emerging professionals, under the age of 25, who will be provided networking, mentoring, and learning opportunities focused on the business and their careers.

Brickworks has continued to develop its talent pipeline entry points by launching the Cadet Program. This is a structured pathway which provides foundational level industry experience for those undertaking their undergraduate degree. Those who are identified as having leadership potential can apply to the Graduate Program upon completion of their studies.

Brickworks has embedded Mentoring Programs since 2018 and FY21 saw the successful launch of an internally managed program. The program allows participants to develop mentoring skills and continues Brickworks commitment to developing a culture of mentorship and growth.

Diversity and Inclusion

Brickworks is committed to creating a diverse and inclusive culture, where all employees are treated with dignity and respect, valued for their contributions and diverse backgrounds, experiences and perspectives. By valuing diversity and inclusion, Brickworks will:

- ▶ Deliver improved customer service, business performance and strengthen corporate reputation
- ▶ Gain competitive advantage by understanding and reflecting customers and local communities
- ▶ Engage employees by providing an open, fair and diverse work environment.

Driving a Learning Culture

Brickworks is committed to creating a strong Learning Culture. All managers and employees are encouraged to undertake two hours of learning every week and further their professional development by accessing a learning allowance. Structured development programs are made accessible to meet business and individual learning requirements. During FY21, Brickworks conducted a pilot program that provided learners with direct access to online training, encouraging employees to develop at their own pace, with targeted learning to suit their individual needs.

Brickworks is committed to ensuring equal opportunities, eliminating all forms of discrimination, harassment, bullying and victimisation in the workplace. A revised Diversity and Equal Opportunity Policy was launched in FY21 with a stronger focus on sexual harassment. Training and education was provided on the revised policy, along with Bystander Training for Executives, to be rolled out across the business in FY22. The board is notified of complaints and non-compliances against the policy including incidence of sexist or sexualised behaviour. In FY21 the Diversity Council, led by the Managing Director, conducted a baseline Inclusion and Diversity survey, which has informed the Brickworks Diversity and Inclusion Strategy. The Strategy consists of 6 pillars:

- 1) Create a more gender-balanced workforce at all levels
- 2) Engage and empower everyone in the business
- 3) Increase opportunities for flexible working
- 4) Increase leader accountability for diversity and inclusion
- 5) Improve leader capability to address inappropriate behaviours and encourage psychological safety
- 6) Support hiring and retention of under-represented groups.

Collective Bargaining Agreements

A total of 77% of wages employees in Australia are covered by a collective bargaining agreement and 48% of agreements are union based. There has been a shift over the last few years of employees seeking non-union agreements with the Company.

Brickworks North America has 4 non-union plants and 7 union plants. During FY21, one collective bargaining agreement was successfully negotiated and executed at the Hanley Plant.

There are 465 labour employees in the North American plants. Of those, 72% are union based employees covered by collective bargaining agreements. The remaining employees are not covered by any type of agreement.

Brickworks Equal Opportunity Policy prevents unlawful discrimination, including a person's industrial activity, union



membership and political beliefs. Brickworks supports and advocates for Freedom of Association.

Percentage of Employees Covered by Collective Bargaining Agreements

	Australia ¹	North America ²
Collective Bargaining Agreement	77%	72%
No Agreement	23%	28%

Composition of Collective Bargaining Agreements

	Australia ¹	North America ²
Union Based	48%	100%
Non-Union Based	52%	0%

1 Wages Employees Australia

2 Labour Employees North America

Compliance

A number of Fairwork conciliations have resulted in settlements, with no fines or non-monetary sanctions received in FY21.

Women in international assignments

The North American business promoted Lara Robertson to Vice President Design and Distributor Sales in August 2020. Lara joined the North American business from Brickworks Australia in August 2019 as Director, Design and Business Development. Lara has added oversight of the distributor sales teams, supporting more than 700 customers nationwide and driving sales by leveraging the Glen-Gery design and business development efforts.

In August 2021, Anna Lewin-Tzannes will join Glen-Gery as New York Design Studio Manager from Brickworks Australia. Anna will work closely with the Business Development and Sales teams to drive the specification and sale of Brickworks products from the global flagship Design Studio on Fifth Avenue. Anna will be responsible for ensuring the New York Design Studio is a world-class event destination and hub for the design industry.

Assignments abroad provide employees with the opportunity to develop their knowledge of the brick industry around the globe, increase cultural literacy and broaden perspectives.

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. Continual improvement in health and safety is a key requirement and underpinned by Brickworks Health and Safety Management System. The system clearly defines roles, responsibilities, accountabilities and targets and is aligned to ISO 45001.

The welfare of people on Brickworks sites continues to be paramount during the COVID-19 pandemic. Brickworks was prepared in 2014 to deal with biological threats, with systems and equipment in place. Response to the COVID-19 threat was swift and effective and remains a major focus.

Our 2025 strategy target is for continued reductions in injury rates.

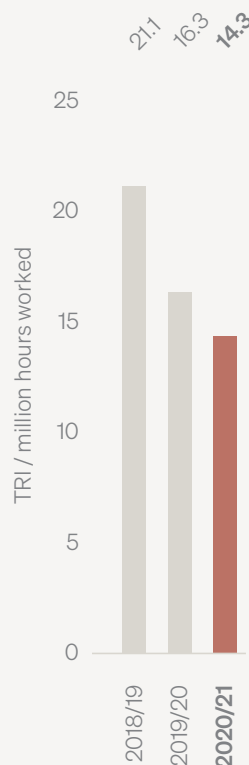
Performance (Group)

Brickworks consolidated total recordable injury rate has improved year on year since the acquisition of the North American operation in December 2018.

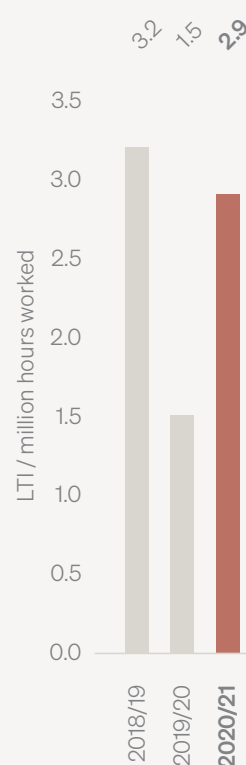
Brickworks consolidated lost time injury rate increased over the last year, attributable to declined performance of the North American operations. A roadmap for improvement is described in further detail below.

Brickworks

Total Recordable Injury Frequency Rate (TRIFR)



Lost Time Injury Frequency Rate (LTIFR)



SAFETY

Continued reduction in injury rates

Performance (Australia)

Australia's safety performance continues to improve, with the lost time injury frequency rate remaining in line with the previous year's results at 0.4, and the total recordable injury frequency rate for FY21 at 9.3, a 21% decrease from FY20.

Brickworks is moving its health and safety focus to the 'Presence of Safety', using lead indicators to drive health and safety outcomes. Our framework uses lead indicators, targets and management accountability to improve organisational safety practices, which has resulted in lower recordable injury rates.

Respirable Dust and Silica

Brickworks has implemented strict controls against the risk of respirable dusts and fibres. Worker health monitoring is compliant with government regulations. A rigorous program of static and worker exposure monitoring is ongoing at all Brickworks sites, conducted by two qualified in-house occupational hygienists. The occupational hygienists have

WHS Cloud Based Software

The Brickworks Safety, Health and Environmental Management System (SHEMS) has been proven effective in identifying and reducing risks, injuries and incidents in the workplace.

However, the system's implementation and application remained isolated at a plant level. Paper forms were confined to filing cabinets or scanned copies on local computers, making it difficult to manage health and safety performance.

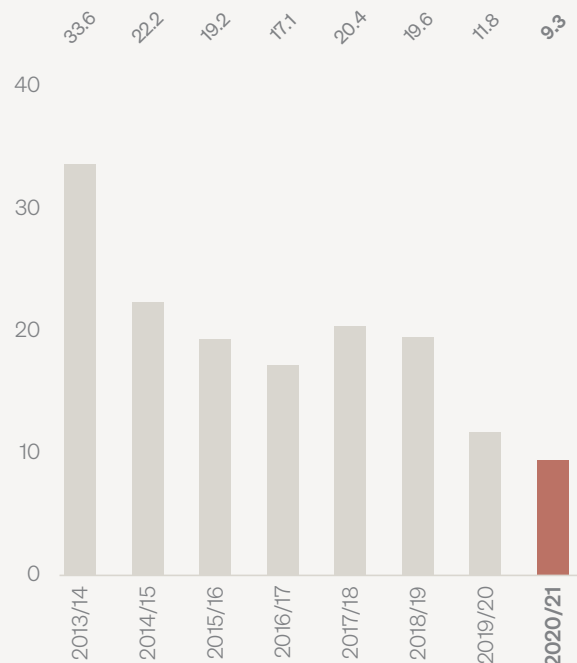
The SHEMS system has been digitised to three-dimensional online modules, using a cloud based WHS software platform that increases functionality, such as attaching pictures, assigning actions, creating email notifications, and ensuring all required form fields are completed.

Centralised, online information allows knowledge sharing of health and safety management issues between plants in Australia and North America. The online dataset can be manipulated into detailed reports, accessed by senior managers on any smart device. As the dataset grows, any identified shortcomings of the system are reduced, ensuring a continuous improvement cycle.

This transparency has improved safety management, by providing the analytical tools that assist managers to reduce risks and improve the welfare of employees and others at Brickworks.

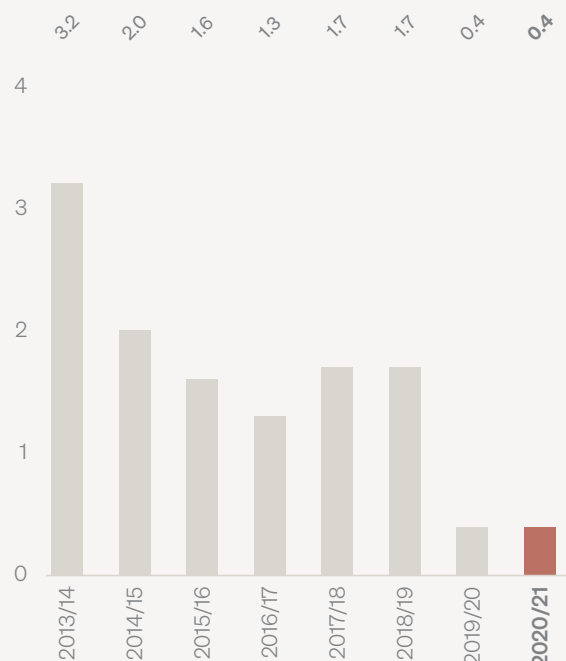
Total Recordable Injury Frequency Rate (Australia)

(TRI/million hrs worked)



Lost Time Injury Frequency Rate (Australia)

(LTI/million hrs worked)



developed a core competency, with a focus on respirable dust, fibre and noise programs. The focus on silica dust controls includes the purchase of specialised respirator fit testing equipment to ensure effective worker respiratory protection.

Key Highlights FY2021

- ▶ No employee or contractor fatalities recorded FY21
- ▶ Continued reduction in employee recordable injuries FY21
- ▶ Brickworks prepared for biological threats since 2014
- ▶ Computerisation of health and safety management systems
- ▶ Brickworks core competence – Silica and hygiene management

Performance (North America)⁴

While the total recordable injury frequency rate for FY21 decreased by 13% on the previous year, the lost time injury frequency rate increased by 79%.

Improvement in health and safety is a key requirement and Brickworks is focusing on integrating the success of the Australian health and safety management system into the North American business.

A clear safety roadmap has been established to rollout the management system, which is aligned to ISO 45001, and clearly defines roles, responsibilities, accountabilities and targets. The safety roadmap will support reduced injury rates. A team of people are focused on the integration, and progress is reported monthly to the Brickworks Board of Directors. To support the rollout the North American safety team has been expanded to include three new members. To further embed a strong culture of safety, the Health and Safety Director made personal site visits to emphasise safety controls and behaviours.

Significant progress was achieved on the safety roadmap during FY21. Rollout of key elements of the Health and Safety Management System was implemented, including the implementation of the Safety Committee program, Incident Reporting, Investigation and Record-keeping Program and a Fit-For-Work Physiotherapy injury management program.

The team also successfully migrated worksite inspections to the Donesafe online software module and an audit and assessment program was launched to assess compliance with the Occupational Health and Safety Act (OHSA) requirements.

Behavioural safety training for employees and managers is being investigated for implementation in FY22. 'Safety blitz' events were completed to conduct annual compliance training and celebrate positive safety behaviours.

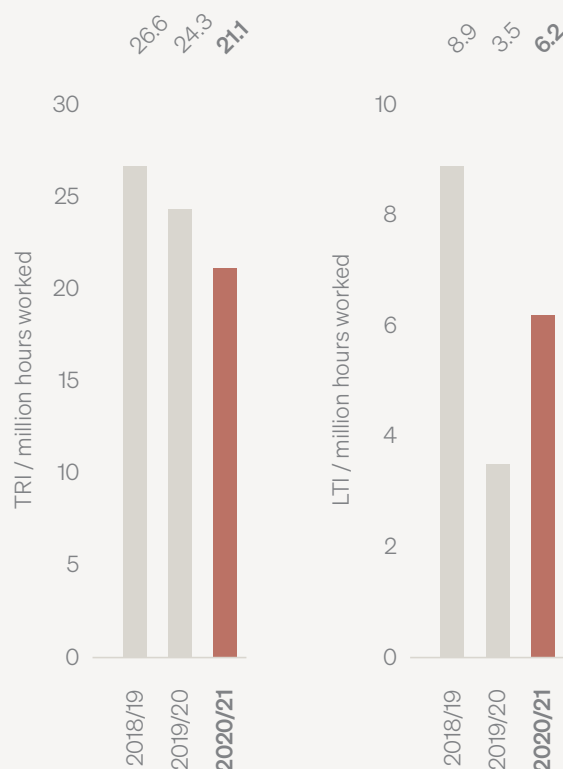
Safety Award

The safety team at Austral Masonry won Brickworks' 2021 Safety Award for their dust free alternative to sweeping, reducing workers' exposure to silica. The team trialed a vacuum unit at the Hemmant site, Qld. The unit is a fully enclosed pressurised cabin, supplied with HEPA filtered air, and a skirting system around the front brushes to better contain dust, compared to traditional sweepers. The unit produced good results inside the factory shed and out in the yard. The unit is a great alternative to sweeping as it protects workers from respirable dust and reduces fugitive dust emissions.

Brickworks North America

Total Recordable Injury Frequency Rate (TRIFR)⁶

Lost Time Injury Frequency Rate (LTIFR)⁷



⁶ Certain comparative information was amended in this Sustainability report to conform to the current year presentation. FY19 and FY20 TRIFR and LTIFR re-audited.

⁷ FY19 reporting period for North America is 1 Dec 2018 to 31 Jul 2019, consistent with acquisition date.



Key Highlights

- ▶ No employee or contractor fatalities recorded FY21
- ▶ Continued focus on harmonising Brickworks Australia's successful Health and Safety management systems into North America to reduce injury rates
- ▶ Clear safety roadmap and management accountability and targets
- ▶ Significant progress was achieved on the safety roadmap during FY21
- ▶ Scoping management and employee behavioral safety training
- ▶ Launched audit and assessment program

Respirable Dust and Silica

A third-party contractor was engaged to conduct silica monitoring for all plant locations and provide recommendations to reduce silica exposure.

OSHA Voluntary Protection Program

The OSHA VPP (Voluntary Protection Program) recertification took place in July 2021 at the Mid-Atlantic Plant, North America. The recertification was conducted by two OSHA Compliance Specialists and one Special Government Employee (SGE) and included employee and leadership interviews, plant-wide inspections, employee presentations, and an in-depth review of documentation. There were no 90-day action items identified.

Community Engagement

Maintaining positive relationships with stakeholders is paramount to business success. Brickworks is embedded in local communities where the business operates, with many employees living in the local area. With a reliance on local goods, services, markets and natural resources, developing mutually beneficial relationships helps business and communities.

Brickworks has strong attendance at community forums, such as consultation for development applications and community group meetings. Company representatives maintain strong relationships with legislative and regulatory authorities and are involved with industry groups to promote issues, such as sustainable building products.

Brickworks has developed community engagement plans at relevant sites, identifying the socio-political context, community concerns and expectations and when and how to engage. In FY21, we completed 120 community activities, exceeding our target of 100 events. Engagement activities included stakeholder meetings, site visits, investigating and resolving complaints, donations and other forms of support for community members and projects. These events help us strengthen and maintain community relationships.

Recognition of improved relations

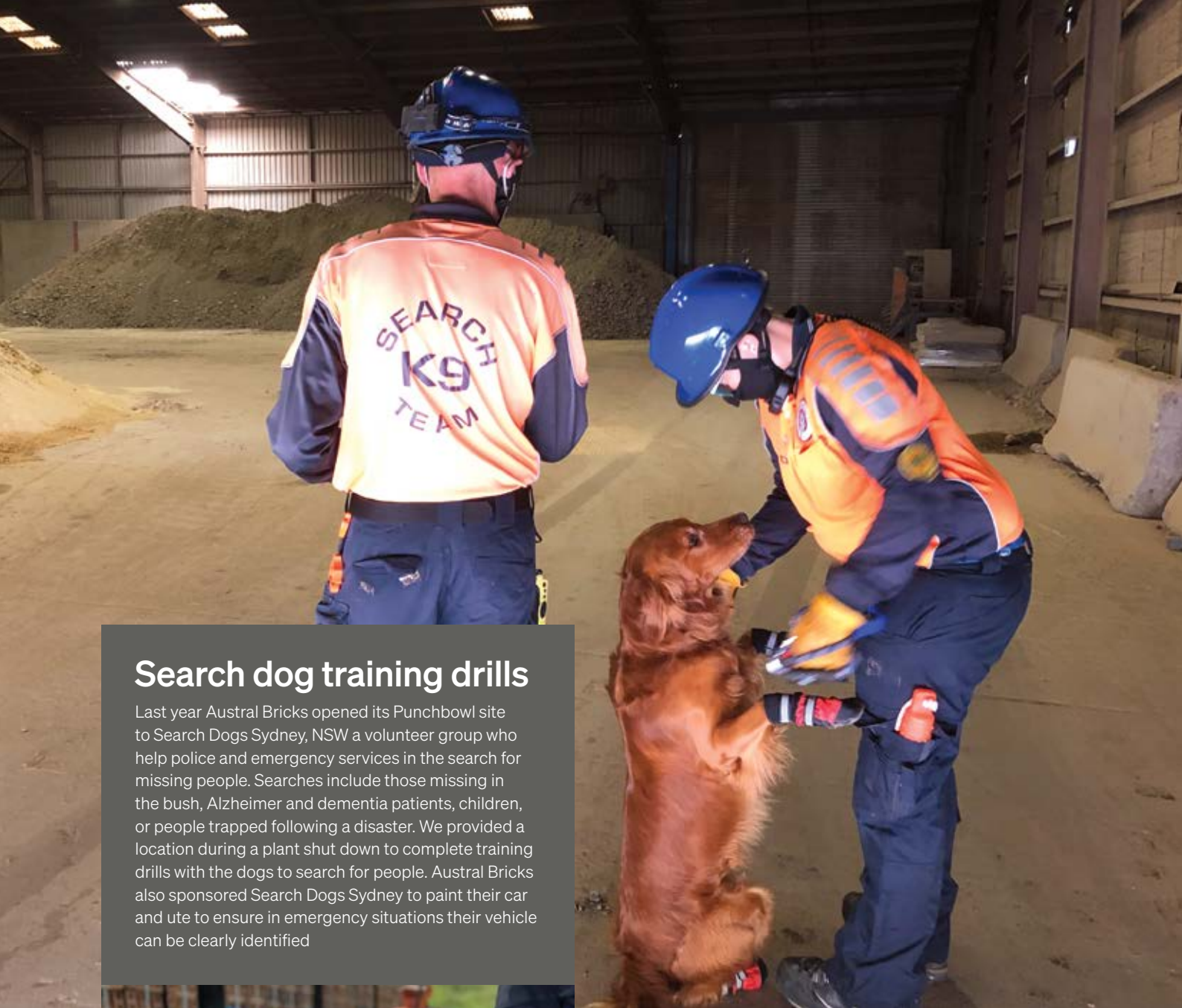
The Glen-Gery Plant in Sergeant Bluff, Iowa was recognised by City Officials for its improvement in operations, communications, and community spirit. Since the acquisition of Sioux City Brick in 2019, the City Administrator, Aaron Lincoln has witnessed, *“a heightened level of communication for the needs of the City and Brickyard... and above all an intense dedication to supporting the community.”*

Mr. Lincoln said, *“with Glen-Gery at the helm, the local brickyard has become the business we had hoped. One that is diligent to address environmental concerns, insistent on regular communications and relationships with City staff, and dedicated to improving the local plant and in giving back to the community.”*



ENGAGEMENT

100 Community activities each year



Search dog training drills

Last year Austral Bricks opened its Punchbowl site to Search Dogs Sydney, NSW a volunteer group who help police and emergency services in the search for missing people. Searches include those missing in the bush, Alzheimer and dementia patients, children, or people trapped following a disaster. We provided a location during a plant shut down to complete training drills with the dogs to search for people. Austral Bricks also sponsored Search Dogs Sydney to paint their car and ute to ensure in emergency situations their vehicle can be clearly identified



Threatened species education at schools

Many public schools in Sydney, NSW do not have access to educational programs covering conservation. The impact of children being able to see and emotionally connect to live animals cannot be underestimated. These experiences not only educate, but inspire children to contribute to conservation now and into the future.

Austral Bricks and Austral Precast sponsored six primary schools (approximately 600 children) to participate in the Feathered Friends educational show. The feedback was incredible, and we look forward to continuing to sponsor similar programs.

Community Support

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

Children's 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 \$4 million dollars, comprising of direct and indirect sources of revenue, including corporate and staff donations, state fundraising, sponsorships and supporting CCI events.

The reporting period for the CCI partnership is the 2020 calendar year and the team at Brickworks raised \$196,028, helping CCI move closer to achieving the vision of curing all children with cancer.

Brickworks staff offer their time and efforts to drive a range of fundraising activities for CCI, including the Diamond Ball and Build for a Cure initiative. Fundraising efforts were significantly impacted, with most events cancelled due to COVID-19 restrictions. The Brickworks Charity Committee implemented the 2021 CCI Engagement Plan to enable suitable fundraising activities to occur during the COVID-19 pandemic.



Macquarie University, New South Wales
UrbanStone in 4 colours in shot blast finish



COMMUNITY SUPPORT

Supporting charities like
Children's Cancer Institute

Re-building after bushfires: We're here to help

Australian Bushfire Support Campaign Supporting Bushfire Victims

The Wooroloo Bushfire started on 1 February 2021 while Perth, WA was under a COVID-19 lockdown. The devastating fire destroyed 86 homes and displaced hundreds of local residents.

For the second year, Brickworks Building Products offered to help bushfire victims rebuild their homes. For any home built with Austral Bricks, Brickworks' Building Products will replace all bricks, free of charge, including delivery. For homes constructed from other building materials, Brickworks will assist in the re-build, with 50% off all materials in the Brickworks Building Products portfolio. This initiative is available to bushfire victims for two years. For Terms and Conditions see our website www.brickworks.com.au/bushfire-relief.

During FY21, 73,320 bricks worth \$61,517 were donated to nine households affected by bushfire.



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. 2020 saw the Brickworks staff contribute an amazing \$58,448 through the Casual Friday program



Servite College WA
UrbanStone Bespoke Pavers



Wellington Square, Western Australia
UrbanStone Bespoke Granite Blocks

Responsible Business

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

Innovation and Sustainable Products

Approach to Sustainable Products – Strategy and Targets

Brickworks is one of the world's leading manufacturers of quality building products. Our purpose has sustainability at our core – to create beautiful products that last forever. The built environment is the fabric of our cities and our lives and Brickworks' products form part of this ever-changing fabric. Our sustainability strategy focuses on the opportunity to make buildings and cities safe, resilient and sustainable. Our central sustainability commitment is to drive leading environmental building design through thermal design, lifecycle education and providing sustainable products.



THERMAL DESIGN

We will provide leading research on passive solar thermal design, enabling reduced lifetime energy use.



LIFE CYCLE EDUCATION

We will support design tools, guidance and information to incorporate life cycle thinking into building design.



SUSTAINABLE PRODUCTS

By 2025, we will double our volume of products sold in Australia that hold leading sustainable qualities.

Sustainable Buildings are Resilient

At Brickworks, we see a strong future for bricks, masonry, roof tiles and precast. They are critical enablers of the achievement of the UN Sustainable Development Goal 11, "Make cities and human settlements inclusive, safe, resilient and sustainable" and, supported by continued demand, presents a strong opportunity to transition to a low-carbon, circular economy.



Make cities and human settlements inclusive, safe, resilient and stable

Our bricks and concrete products are manufactured to provide resilience. They are durable, fire-proof, contain thermal mass for energy efficient design, excellent acoustic properties and no indoor air emissions (VOCs); and our clay bricks hold a 100-year guarantee.

Innovative Sustainable Solutions

Today, the world is changing more rapidly than ever before. Architects, builders and customers are increasingly working to address the challenges associated with developing sustainable buildings, reusing waste products, reducing carbon emissions and developing smart, resilient cities.

Brickworks' product development process is customer driven, responding to consumer preferences. Our deep manufacturing capabilities and product knowledge combine with strong architects, builders and customer relationships to identify and optimise new product development.

Following a strong demand for recycled bricks, we responded by launching Bowral Remastered, combining circular economy improvements reusing bricks previously considered as waste, and Austral Bricks leading quality standards.

Circular Economy

Currently 12.5% of raw materials used to manufacture Brickworks Australia products are recycled, including recycled clay from Australian infrastructure projects, fly ash and by-products. To meet customer expectations, Brickworks is investigating sustainable product labels for products that contain a high percentage of recycled material.

Lower Carbon Products

Brickworks' commitment to manufacturing excellence means our products are produced in some of the world's leading energy efficient kilns. In addition, Brickworks continues to make incremental improvements to our clay bricks through ongoing research to increase the core percentage volume to make clay bricks weigh less. Development of new core patterns will reduce the amount of clay, the energy needed to fire the bricks, the fuel required for delivery and will make the bricks lighter for bricklayers.

The addition of reclaimed or recycled materials into our clay bricks has lowered the energy demand during manufacture, reduced product weight and minimised the amount of virgin raw materials required. Substitution of cementitious materials in our concrete products minimises the amount of virgin raw materials and embodied carbon.

Providing Lower Carbon GreenStar Precast Panels

Austral Precast utilises material substitution to provide GreenStar rated concrete.

Lower Carbon Roof Tile Research and Development

Bristle Roofing partnered with Swinburne University of Technology in Melbourne, Vic, to optimise the mix design of concrete roof tiles with a focus on reducing cement requirements.

Lightweight Bricks

Increased Void

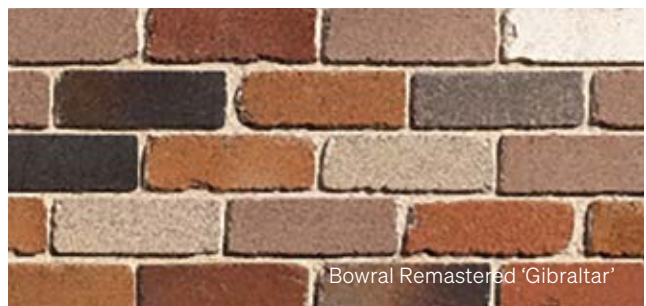
High void bricks manufactured in Queensland have reduced raw material requirements by 11% and energy requirements by 15%. Trials are underway at Austral Bricks Wollert, VIC and Golden Grove, SA with good initial success.



Tonic Design

Cedar Creek House

The completely off-grid C House has sourced The Urban One Silver, Grecian Gold and Bowral Chillingham White bricks from Brickworks. This selection of neutral toned bricks complements the natural aesthetics of place, while providing a structure that withstands bushfires, provides thermal mass for capturing solar heat in winter, insulation for deflecting summer heat and natural ventilation for passive cooling of the home in summer.



Bowral Remastered 'Gibraltar'

Bowral Remastered

Recycled fired waste

During FY21, Austral Bricks launched 'Bowral Remastered', made from bricks previously considered as waste. Drawing inspiration from the elegant streetscapes of Sydney's beautiful and historic suburbs, Bowral Remastered provides the colours and textures that are often created by exposing existing brick structures. Distressed forms and blended colours provide a finish similar to recycled bricks, but with the guarantee of no contaminants, greater strength and clarity around embodied energy.



Austral Precast
Double Wall

Biogas and Biomass Fired Products

In addition to Brickworks' expanding range of carbon neutral bricks, we continue to develop lower embodied carbon products. During FY21 we expanded our Sculptured Sands range, producing multi-hued soft colours, part fired with biogas from our Horsley Park Plant 21 facility in NSW, reducing embodied carbon. Many products from our Horsley Park Plant 23, NSW are part fired by biogas.

All products from our Longford plant, TAS including the Daniel Robertson range, are fired by biomass with the kiln's main fuel source being sawdust.

Providing Carbon Neutral for Masonry Products

An Environmental Product Declaration (EPD) is underway for masonry produced at Gympie, Qld with the goal to obtain Climate Active certification for the Aura Block, manufactured with high recycled concrete and low cement. The data collection is in progress and will provide Brickworks with a complete understanding of the carbon footprint of these products.

Diversified Facades Options

Glen-Gery Wall System

Glen-Gery Wall Systems powerfully extend the options of designers, architects and builders by providing products and solutions beyond the brick. Glen-Gery systems have been developed to overcome antiquated limitations of space, time and budget while simplifying installation. Systems include Thin Tech, Tru-Brix, Precast and Tilt-up and Terraçade Façade System.



Terraçade Façade Design System

Terraçade retains its Ecospecifier Verification to qualify its leading position as a façade system that is worthy to be used in green building projects. www.ecospecifier.com.au/products.

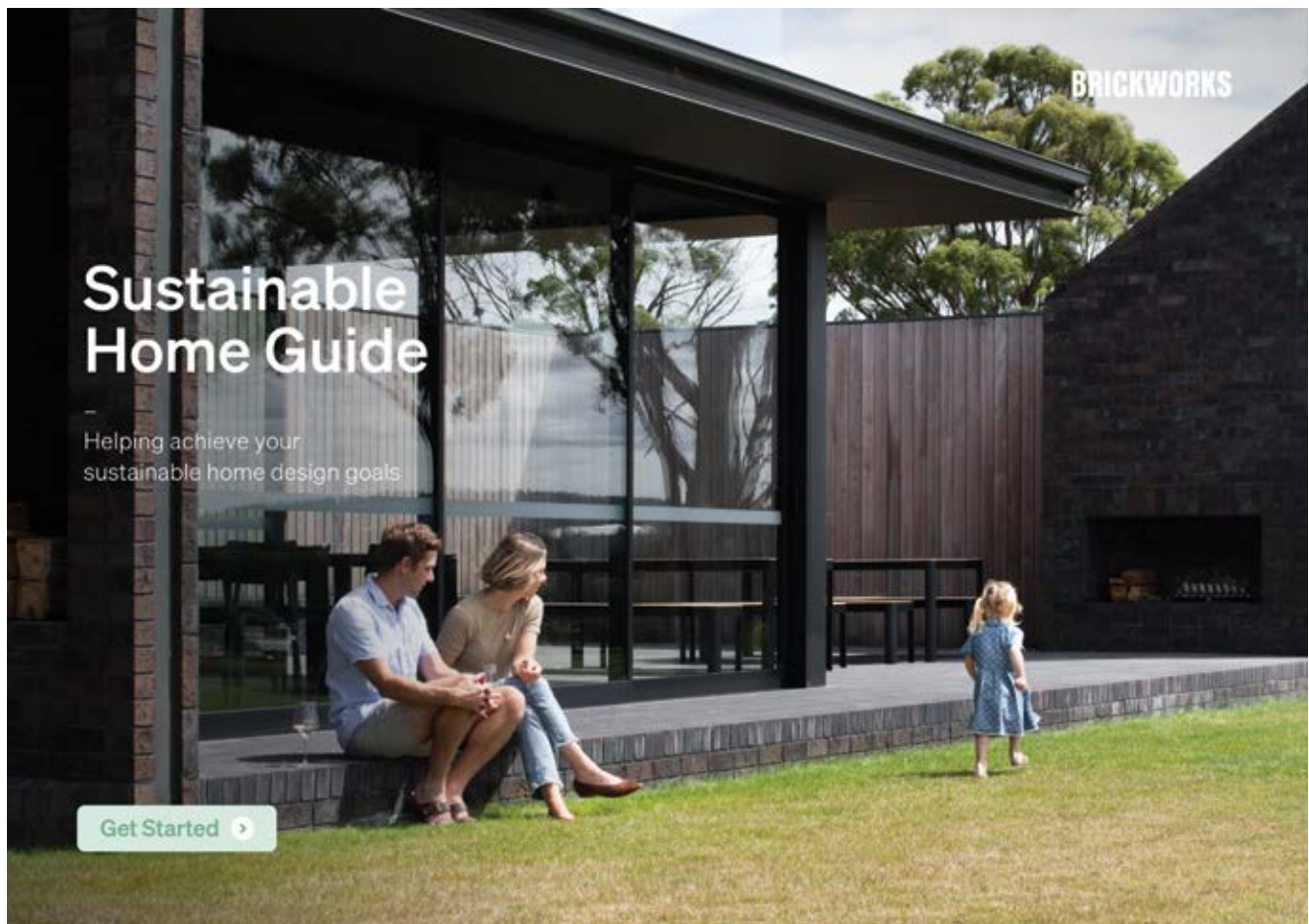
Tracking revenue of products with sustainable attributes

During FY22, we will investigate, align and audit products against Sustainable Accounting Standards Board (SASB) Standards. Our Sustainable Home Guide is the first step in this journey, to understanding how our products contribute to GreenStar Homes and LEED. The Sustainable Home Guide is available for download from the Brickworks website.

Sculptured Sands

—
Locally made,
part fired by biogas,
reducing embodied carbon





Performance Against Targets

SUSTAINABLE PRODUCTS

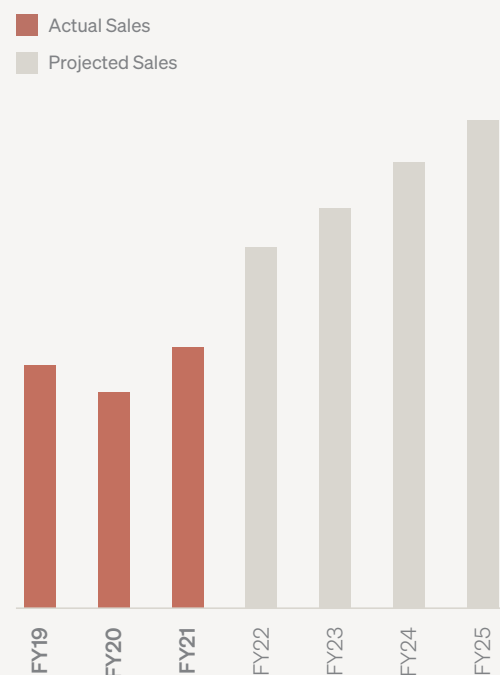
By 2025, we will double our volume of products sold in Australia that hold leading sustainable qualities.

By 2025, we will double the volume of products sold in Australia that hold leading sustainable qualities. This increase will be achieved by expanding the range of sustainable products. Brickworks' most significant range of sustainable products consists of carbon neutral bricks manufactured in Tasmania, sold throughout Australia, New Zealand, Korea and Japan.

Brickworks has extended its carbon neutral offer, launching a second Climate Active product in August 2021. A carbon neutral calculator was developed with the assistance of Energetics to calculate life cycle emissions (cradle to grave) for all Brickworks Australian made clay bricks and pavers. This expansion will provide a step change in products sold in Australia that hold leading sustainable qualities during FY22, making significant progress towards our 2025 goal.

Despite disruption caused by COVID-19, FY21 carbon neutral sales improved 7.4% compared to the FY19 baseline and 21% improvement on the previous year.

Volume of Sustainable Product Sales FY19 to FY21 and Projected Sales to FY25 (Sales Volume)



Expanded Carbon Neutral range to drive sustainable product volumes

The new Climate Active certification enables any brick made in Australia to be carbon neutral, providing a platform to meet the 2025 target to 'double the volume of products sold in Australia that hold leading sustainable qualities'. The focus will be to reward leading environmental design with complementary carbon offsets for carbon neutral bricks on selected projects.

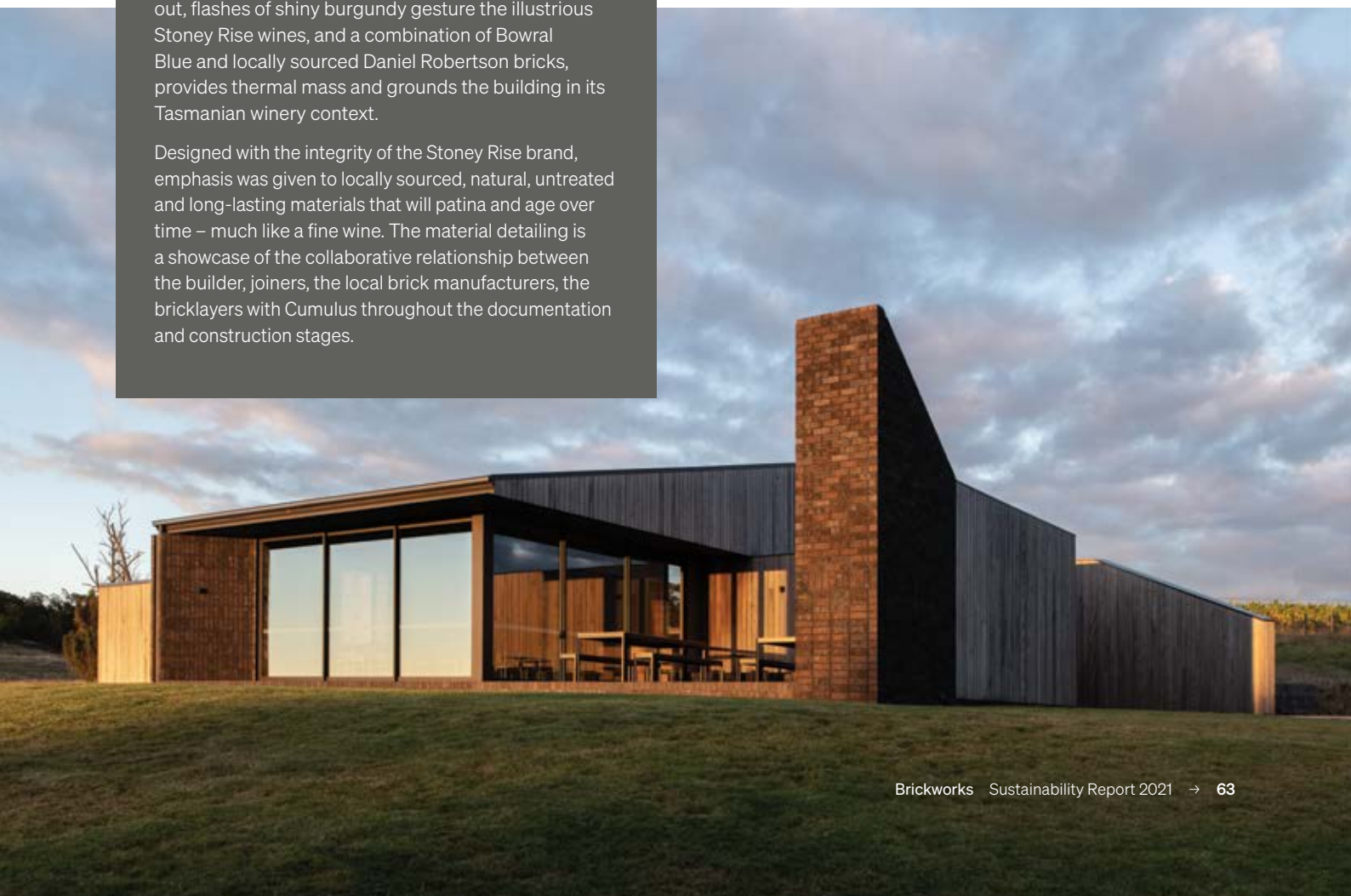
Stoney Rise Winery – Cumulus

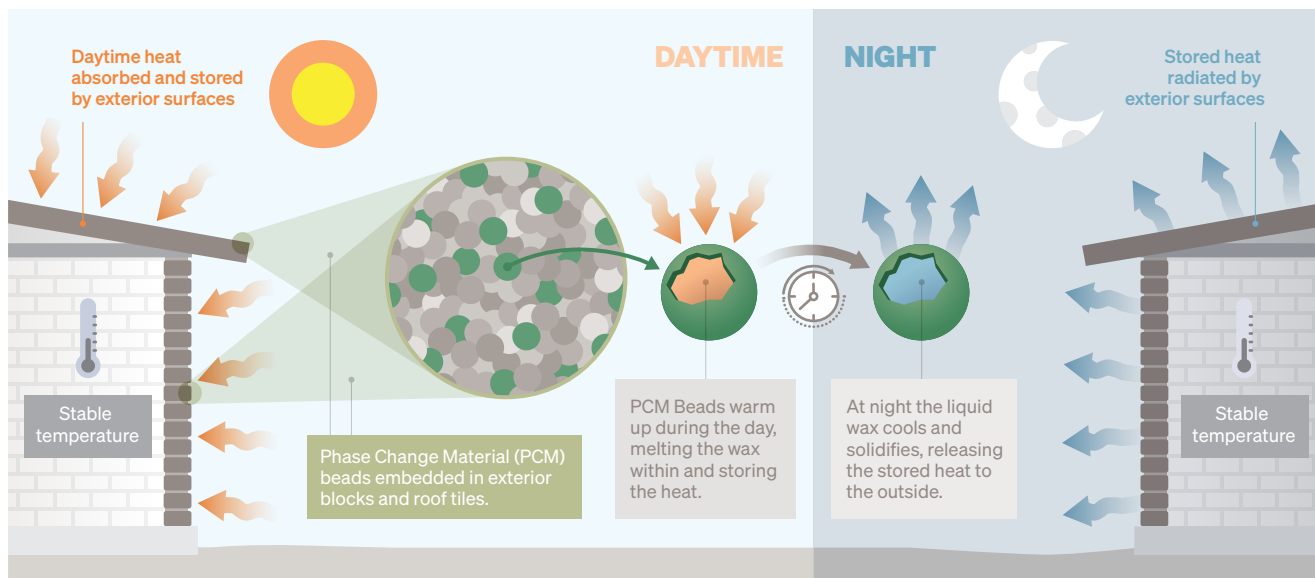
Daniel Robertson Carbon Neutral Bricks

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, VIC and Golden Grove, SA with good initial success.

Renewable spotted gum timber wraps from the inside out, flashes of shiny burgundy gesture the illustrious Stoney Rise wines, and a combination of Bowral Blue and locally sourced Daniel Robertson bricks, provides thermal mass and grounds the building in its Tasmanian winery context.

Designed with the integrity of the Stoney Rise brand, emphasis was given to locally sourced, natural, untreated and long-lasting materials that will patina and age over time – much like a fine wine. The material detailing is a showcase of the collaborative relationship between the builder, joiners, the local brick manufacturers, the bricklayers with Cumulus throughout the documentation and construction stages.





Thermal Design, Resilience and Life Cycle Education



THERMAL DESIGN

We will provide leading research on passive solar thermal design, enabling reduced lifetime energy use.

New Thermal Research

Brickworks provides leading research on thermal design enabling reduced lifetime energy use. During FY21, we released new thermal Research: Best Building Products for Higher NatHERS Ratings, based on independent research from the University of Newcastle. This research highlights that bricks and brick veneer enable higher ratings in the National House Energy Rating Scheme (NatHERS) than lightweight, increasing GreenStar Home ratings.

Life Cycle Education



LIFE CYCLE EDUCATION

We will support design tools, guidance and information to incorporate life cycle thinking into building design.

Longer Term Sustainable Product Innovation: Phase Change Material Project

During FY21, Brickworks and research partner Western Sydney University investigated innovation to improve the thermal performance of building products with Heat Storage Phase Change Materials (PCMs).

PCMs are materials capable of storing and releasing energy based on the temperature of the environment in which they are situated. PCMs possess the ability to change their state, solid to liquid and liquid to solid, with a certain temperature range. These materials absorb energy during the heating process as phase change takes place, and this energy can be transferred to the environment in the phase change range during a reverse cooling process.

Brickworks Australia hosted 42 Continuous Professional Development (CPD's) and seminars, with a total of 2085 attendees during FY21. Brickworks North America hosted 41 seminars and training sessions. Brickworks CPDs and seminars cover a range of topics, including Energy Efficiency and Code Compliance, Sustainable Design in Clay Masonry and Non-combustible Façades.

Other relevant events undertaken throughout the year included:

- ▶ Parlour Webinar – Melbourne Design Week
- ▶ This webinar was an alternative materials exhibition exploring ways of making through collaboration with nature and utilising waste products.
- ▶ Architects Declare Speaker Series Event – Hobart Design Studio
- ▶ Sustainable Brick Making for Sustainable Brick Building Tour
- ▶ This tour of our Launceston Plant was followed by two projects built with bricks featuring Daniel Robertson Carbon Neutral brick range.
- ▶ Enduring Design workshop – Austral Bricks Rochedale

Strategic Partnerships

To master global challenges, our society needs innovations based on sustainable building solutions more than ever before. Brickworks collaborates across the construction value chain to promote leading environmental building design. Strategic partnerships include the Green Building Council of Australia.

Brickworks partners with numerous industry bodies including:

- ▶ Gender Equity in Architecture through ongoing partnership with Parlour. A space to speak bringing together research, informed opinion and resources, generating debate and discussion, expanding the spaces for women in Australian architecture.
- ▶ Nightingale Housing through sponsorships. Nightingale Housing is a not-for-profit organisation that provides apartments that are socially, financially and environmentally sustainable. Nightingale believes that homes should be built for people, not profit. Brickworks is pleased to be a preferred supplier to Nightingale and has arrangements in place to provide carbon neutral bricks for upcoming projects.
- ▶ The Australian Exhibition for Venice Architecture Biennale. The work titled Inbetween presents a series of architectural projects and processes that represent Indigenous and First Nations peoples and cultures.
- ▶ Staff representing the industry via UDIA Diversity and Inclusion Committee.
- ▶ Enduring design education via Robin Boyd Foundation.



Goodman Brickworks Property Trust

Sustainability

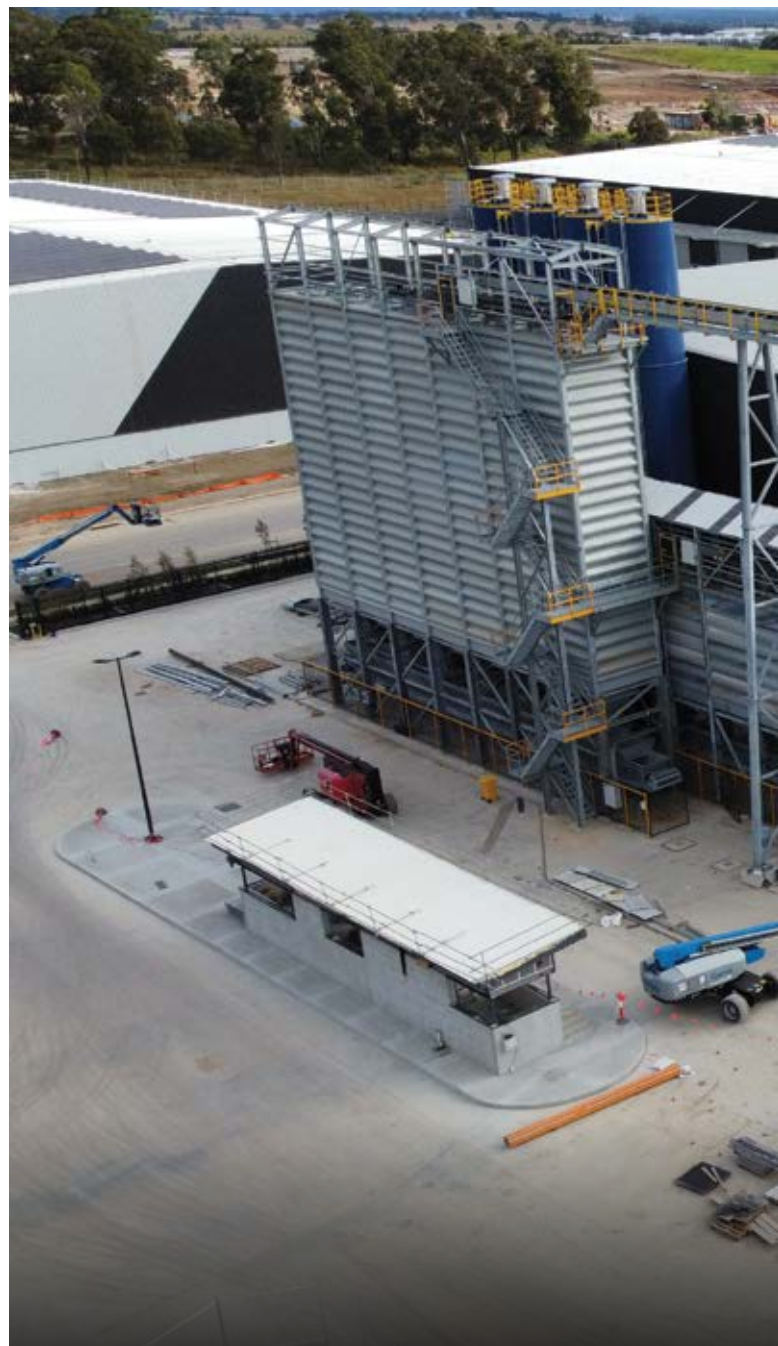
Goodman has implemented its 2030 sustainability strategy which covers all of its partnerships around the world, including the Goodman Brickworks Joint Venture (JV) and its operations at the Oakdale Industrial Estate, NSW.

The Oakdale Industrial Estate is Sydney's next generation industrial estate. It is an established industrial precinct, ideally located within western Sydney's logistics hub of Eastern Creek, Kemps Creek and Horsley Park. Set over 440 hectares, the estate offers a huge number of development opportunities for brand new, purpose-built warehouse, distribution and logistics facilities from 4,000 m².

Goodman's 2030 sustainability strategy includes several specific environmental, social and governance targets, including the ambition to have carbon neutral operations by 2025, using 100% renewable energy and targeting 400MW of solar PV installed globally by 2025.

Highlights for the Oakdale Industrial Estate include:

- ▶ Sustainable design initiatives incorporated into the developments including:
 - ▶ LED lighting
 - ▶ Solar PV
 - ▶ Translucent roof sheeting
 - ▶ Energy and water monitoring
 - ▶ Drought tolerant landscaping
 - ▶ Rainwater harvesting with smart irrigation systems
 - ▶ Water Sensitive Urban Design
- ▶ 5 Star GreenStar Design & As Built v1.2 rating for Building 1A
- ▶ 5 Star GreenStar Performance rating for Building 2B
- ▶ 4 Star GreenStar Performance rating for Building 1C
- ▶ Approximately 4MW of solar PV installed across the estate including the 1.7MW system on Building 5A, leased to DHL



- ▶ An onsite café at Oakdale Central, providing a convenient food and beverage option for staff and visitors
- ▶ The precinct is centrally located with good access to the M7 and M4 Motorways
- ▶ Assessment of energy and water efficiency measures are underway across the stabilised buildings at Oakdale
- ▶ Strategic partnership with DHL on sustainability measures, including smart building technology and embodied carbon reduction measures.

Goodman has committed to verifying, offsetting and reducing the embodied carbon in its new developments globally. A large component of the embodied carbon footprint in new buildings is concrete and steel, representing 80–90%.

Further to initiatives that Austral Precast is undertaking, Goodman is investigating additional measures that could lead to further carbon reductions, including refining panel size, thickness, mix design, reinforcement, and material supply chain.

Brickworks Sustainable Products Strategy

The Brickworks Sustainable Products Strategy incorporates crucial market insights from partnerships such as the GM/BKW JV.



Green Star Rating

During FY20, Site 1A Oakdale South achieved GBCA's 5 Star Green Star rating for Design & As Built.

During FY21, Site 5 obtained a 5 Star Green Star rating and Site 6 obtained a 4 Star Green Star rating for Performance.



Risk Management

To ensure robust and effective risk management systems are in place and operating effectively, the Board, through the Audit and Risk Committee (ARC), determines the risk profile for the company. It 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.

Risk Management

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, climate, 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 FY21 Annual Report and the Corporate Governance Statement which can be downloaded from www.brickworks.com.au/investors/group-overview#corporate-governance.

Procurement – Modern Slavery and Supply Chain

Brickworks is committed to respecting and supporting the dignity, well-being and human rights of employees and the supply chain. Brickworks is committed to working collaboratively with its 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 the business and supply chain.

SUPPLY CHAIN

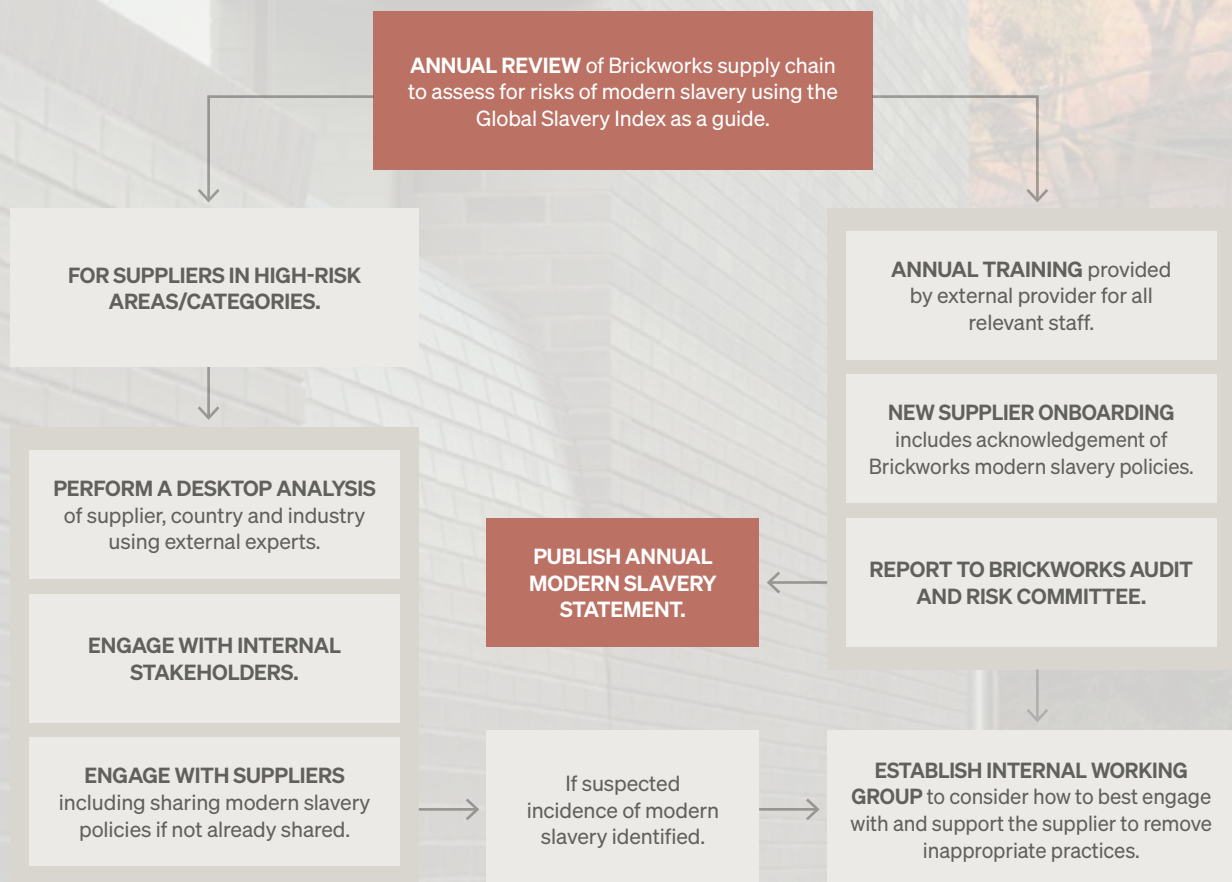
Reduce supply chain risk



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. Brickworks' first Modern Slavery Statement for the FY20 reporting is available on Brickworks website. The report will be updated on an annual basis.

During FY21, Brickworks engaged experts to assist with further development of its modern slavery management program. An online training module was developed and provided to employees in both Australia and overseas. Risk assessments of major Tier-1 suppliers was undertaken, and these suppliers were engaged via an online survey that included sharing Brickworks modern slavery policies. Targeted reviews were conducted on suppliers, including some Tier-2 suppliers in high-risk geographies. These suppliers will be engaged by a mail out highlighting Brickworks' modern slavery policy, and the intention to work collaboratively with the supply chain to identify and eradicate any instances of modern slavery.

Modern Slavery Framework



Governance

The Brickworks' Board is committed to developing and maintaining good corporate governance and the company 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. A Governance Statement can be found on Brickworks' website 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 (4th Edition)".

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

Board Succession Planning and Diversity

In FY20, the Board focussed on gender diversity and Board renewal. Malcolm Bunday was appointed as an independent non-executive Director to the Brickworks Board, with effect from 1 October 2019, and Robyn Stubbs was appointed an independent non-executive Director on 1 January 2020.

Brickworks recognises the importance of gender diversity in a board. Following the appointment of Malcolm and Robyn, and the retirement of Brendan Crotty in November 2020, the Board comprises seven directors, including two female directors. This increases female representation to 29%. Brickworks goal is to have not less than 30% of its directors of each gender by 2025.

Board Independence

The Brickworks Board currently consists of four independent members and three non-independent members.

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, which underpin the way in which the team acts and behaves at Brickworks. They describe what's important to us, and guide interactions with colleagues, 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

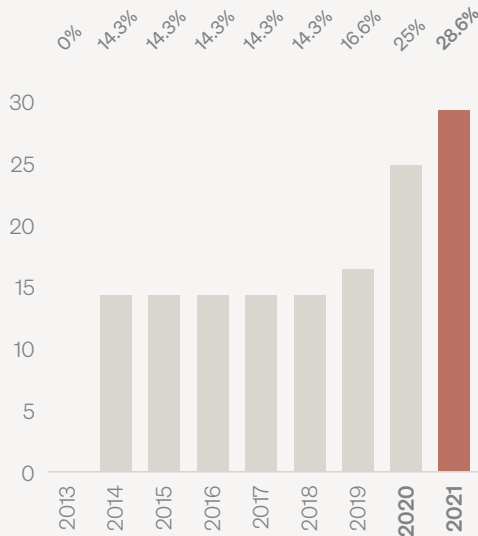
Board Membership

Tenure of Directors



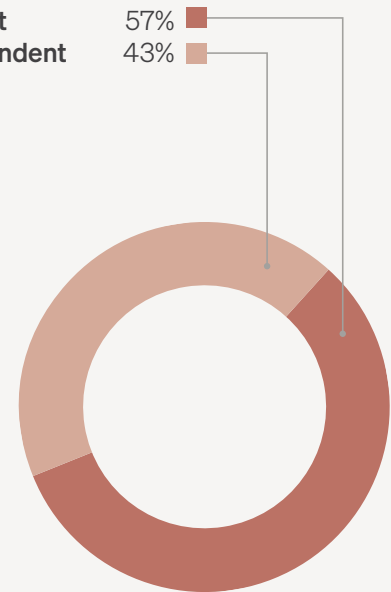
Gender Diversity

% of Female Directors



Board Independence

Independent
Non-Independent



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.

All staff are required to undertake annual training on the Code of Conduct through an on-line learning platform. Staff completion of the module is tracked and reported internally.

Anti-Bribery and Corruption and Whistleblower Policies

The Anti-Bribery and Corruption, and Whistle-blower Policies were introduced in May 2019. All staff are required to undertake annual on-line training to demonstrate their understanding of the policies. The Whistle-blower 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 24/7 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.

Brickworks aims to improve its performance in business ethics management to align with best practice, with a strategic target to formalise Business Ethics and Whistle-blower programs.

GOVERNANCE

Business Ethics and Whistleblower Programs



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. No political donations were made during FY21.



A photograph of a modern outdoor pool area. In the foreground, there's a long, narrow pool with clear water. To the right of the pool is a low, wide concrete wall made of large, light-colored rectangular blocks. Behind the wall, there are various plants, including tall bamboo-like trees and some leafy green plants. The sky is blue with some clouds. The overall scene is bright and sunny.

Sustainability Disclosure

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.

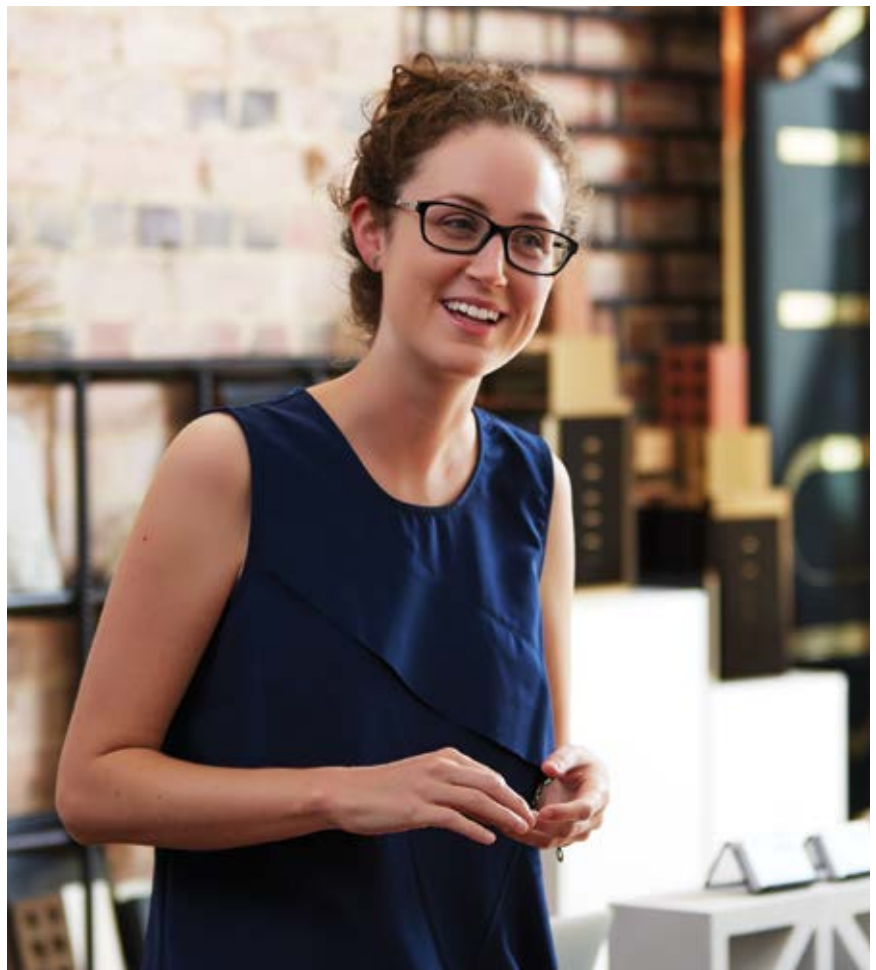
La Scala, Queensland
GB masonry Honed in Porcelain

Stakeholder

Engagement

Stakeholder engagement is an important part of Brickworks' materiality assessment process. Engaging with internal and external stakeholders supports the company's understanding of the most significant sustainability issues.

During FY21, Brickworks undertook a process of identifying 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	<ul style="list-style-type: none"> Management Employees 	<ul style="list-style-type: none"> Business performance HR 	<ul style="list-style-type: none"> Corporate governance WHS 	<ul style="list-style-type: none"> Employee Materiality Survey Newsletters Conferences 	<ul style="list-style-type: none"> Team meetings Performance reviews Sustainability Strategy
Customers	<ul style="list-style-type: none"> BKW Business Development Managers (customer perspectives) Architects Developers Customers 	<ul style="list-style-type: none"> Price Quality Reliability Innovation Eco credentials Wellness Reputation 	<ul style="list-style-type: none"> Ethical practices Care Disclosure Building waste Affordable housing 	<ul style="list-style-type: none"> Customer satisfaction surveys Events (Double talk, international speaker, Continuous Professional Development presentations), Newsletters Brochures 	<ul style="list-style-type: none"> Website Education Materiality survey (customer insights provided by Business Development Managers) Sustainability Strategy
Investors	<ul style="list-style-type: none"> Investors Analysts Shareholders 	<ul style="list-style-type: none"> Business performance Sustainability Environmental performance Climate related issues 	<ul style="list-style-type: none"> Health and safety HR Regulatory compliance Risk management disclosure 	<ul style="list-style-type: none"> AGM Annual Report Meetings ASX Updates 	<ul style="list-style-type: none"> Sustainability Strategy
Government	<ul style="list-style-type: none"> Local government State government Federal government 	<ul style="list-style-type: none"> Compliance New and emerging legislation Carbon and energy Investing in new technology 	<ul style="list-style-type: none"> Environmental performance WHS performance HR / EEO / Employment performance Planning issues 	<ul style="list-style-type: none"> Meetings Training Audits and inspections Reporting 	<ul style="list-style-type: none"> Sustainability Strategy
Industry	<ul style="list-style-type: none"> Competitors Similar Industry/ companies 	<ul style="list-style-type: none"> Trends 		<ul style="list-style-type: none"> Analysis of documents Gap analysis 	<ul style="list-style-type: none"> Sustainability Strategy
Community Groups	<ul style="list-style-type: none"> Local community group organisations Neighbours 	<ul style="list-style-type: none"> Communications Local employment and economy 	<ul style="list-style-type: none"> Environmental performance Disclosure 	<ul style="list-style-type: none"> Group meetings Local events 	<ul style="list-style-type: none"> One on One discussions, Complaints management Newsletters Site tours
Sustainability organisations	<ul style="list-style-type: none"> World Business Council for Sustainable Development Sustainable Business Australia Supply Chain Sustainability School 	<ul style="list-style-type: none"> Climate risk Materials use Social licence to operate 		<ul style="list-style-type: none"> Survey Webinars Meetings Training 	<ul style="list-style-type: none"> Newsletters Subscriptions Sustainability Strategy

Materiality Assessment Process

During FY21, Brickworks conducted a refreshed materiality assessment to support the full assessment undertaken by EY in 2019. The recent review helps Brickworks to understand the most significant sustainability issues for its business and stakeholders.

The following four step assessment process was applied to:

- ▶ Scan a range of information sources to identify a list of relevant issues. This entailed assessment of industry standards and regulations, media and public disclosures as well as peer benchmarking.
- ▶ Engage with internal and external stakeholders, including customers, investors and the industry, to determine what stakeholders regarded as being the most important sustainability issues and themes for Brickworks.
- ▶ Prioritise and rank the most material issues identified, including analysis of impacts on the business, stakeholders and the future.
- ▶ Validate and prioritise the list of issues with selected stakeholders through interviews with customer representatives, industry ESG experts, investors and the community.

Engagement with stakeholder groups identified the key themes that are most important to them and to Brickworks as:

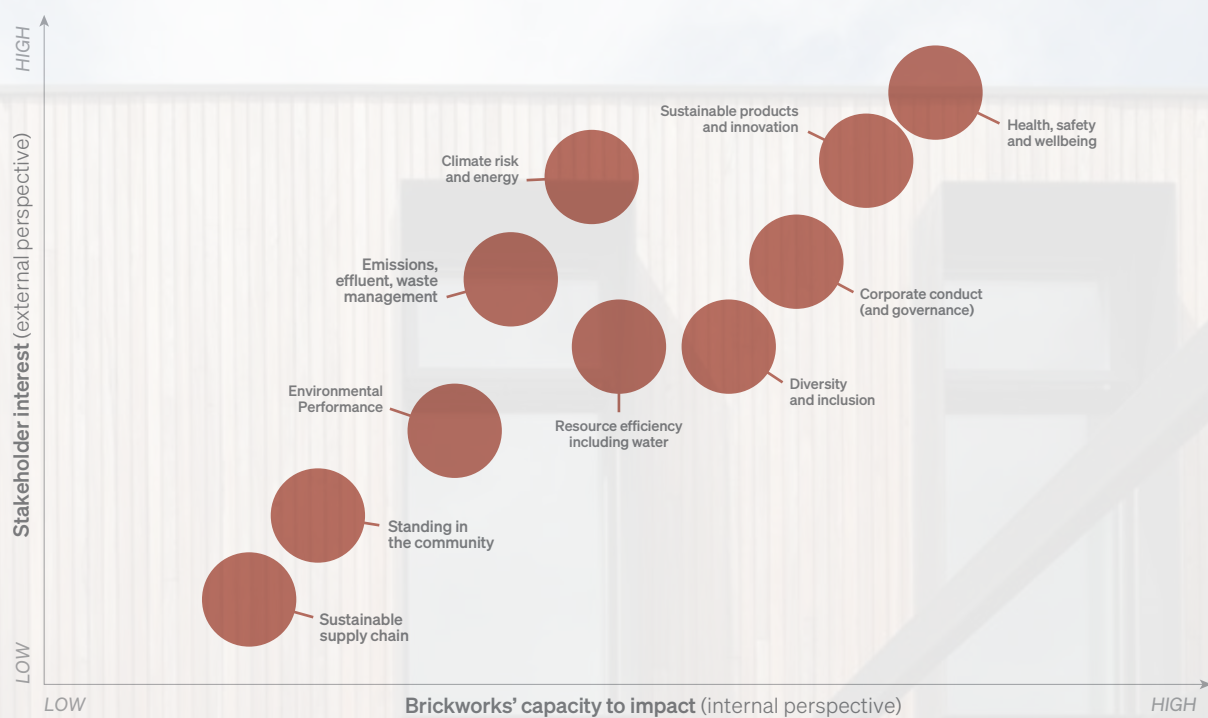
- ▶ Investors: climate risk, safety, labour standards, transparency.
- ▶ Customers: delivery times, communications, pricing, quality, customer service.
- ▶ Property industry: sustainable innovation, environmental credentials of products, net zero buildings, materials innovation, supply chain traceability.

A Materiality Matrix provides an overview of how significant issues were prioritised and ranked according to the two dimensions recommended by the Global Reporting Initiative (GRI) Standards; interest stakeholders have in the issue (y-axis), and the impact Brickworks has on the issue (x-axis):

Brickworks consulted with selected internal and external stakeholders to validate the issues identified during stakeholder engagement. Brickworks' most material sustainability issues were validated as:

- ▶ Health, Safety and Wellbeing
- ▶ Sustainable Products and Innovation
- ▶ Corporate Conduct
- ▶ Resource Efficiency
- ▶ Diversity and Inclusion
- ▶ Climate Risk and Energy
- ▶ Emissions, Effluent and Waste Management
- ▶ Environmental Performance
- ▶ Standing in the Community
- ▶ Sustainable Supply Chain

Material Risks Identified in FY21 Materiality Assessment





Servite College
UrbanStone Bespoke Pavers

Appendices



Appendix 1: Auditor Assurance Statement

As part of Brickworks' disclosure, auditor Carbon Intelligence performed a Limited Assurance engagement on selected key data

Independent Limited Assurance Statement (FY21) to the Management and Directors of Brickworks Limited



Our Conclusion:

Carbon Intelligence Pty Ltd ('Carbon Intel', 'we') was engaged by Brickworks Limited ('Brickworks') to undertake 'limited assurance' as defined by Australian Auditing Standards (hereafter referred to as a 'review' or the 'engagement'), over selected sustainability performance data within Brickworks Sustainability Report for the year ended 31 July 2021. Based on our review and evidence obtained, 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.

Scope of our Engagement

We conducted a review over selected sustainability performance data within the Sustainability Report for the year ended 31 July 2021.

Engagement Subject Matter

The Subject Matter for our limited assurance engagement included selected sustainability performance data, limited to those aspects listed below, for the year ended 31 July 2021:

Australian Operations

- Total Scope 1 greenhouse gas (GHG) emissions (in tonnes of carbon dioxide equivalent (tCO₂-e)) *
- Total Scope 2 GHG emissions (tCO₂-e) *
- Total energy consumed (in petajoules (PJ)) *
- Total number and cost (in Australian dollars (AUD\$)) of significant environmental fines and penalties
- Lost Time Injury Frequency Rate (LTIFR)
- Total Recordable Injury Frequency Rate (TRIFR)

*Reported for the year ended 30 June 2021, to align with the reporting period for the *National Greenhouse and Energy Reporting (NGER)* scheme.

US Operations

- Total natural gas consumed (in petajoules (PJ)) *
- Total electricity consumed (in MWh) *
- Total number and cost (in US dollars (US\$)) of significant environmental fines and penalties
- Lost Time Injury Frequency Rate (LTIFR) ^
- Total Recordable Injury Frequency Rate (TRIFR) ^

*Reported for the year ended 30 June 2021, to align with Australian Operations.

^ US safety data (LTIFR & TRIFR) was also re-audited for FY19 & FY20.

The Subject Matter is historical information and does 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.

Our Responsibilities

Our responsibility is to express a conclusion on the selected sustainability performance data, based on our review and the evidence provided by Brickworks. We were also responsible for following the assurance standards, 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' Responsibilities

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, making estimates that are reasonable in the circumstances, and providing the evidence required to support the engagement subject matter.

Our Approach to Conducting the Engagement

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

Summary of Assurance Procedures Performed

Our review consisted of obtaining the engagement subject matter, making enquiries of persons responsible for preparing the selected sustainability performance data, and applying detailed testing, analytical and other review procedures.

Our procedures included:

- Planning the engagement, assessing the risks of misstatement, and designing assurance procedures
- Conducting site reviews and interviews with site and corporate personnel to understand the business, data management systems, and reporting processes
- Conducting interviews with key personnel to understand the process for collecting, collating, calculating, and reporting the selected sustainability performance data
- Checking that the calculation criteria have been appropriately applied in accordance with the methodologies outlined in Brickworks' Criteria
- Undertaking detailed testing and analytical review procedures to support the reasonableness of the data
- Identifying and testing assumptions, source data, and methodologies 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. Furthermore, our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within or extraction from Financial or IT systems.

Use of our Assurance Statement

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

P Adams

Dr Paul Adams
Audit Team Leader, Carbon Intelligence Pty Ltd

13 September 2021

Appendix 2: SASB Index

Sustainability Accounting Standards Board: Extractives and Minerals Processing Industry Sustainability Accounting Standards Board: Extractives and Minerals Processing Industry.

Topic	Accounting Metric	Unit	SASB Code	Reference
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tonnes (t) CO2-e, Percentage (%)	EM-CM-110a.1	Sustainability Report, Page 27
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	N/A	EM-CM-110a.2	Sustainability Report, Page 29
Air Quality	NOx (excluding N ₂ O)	Metric tonnes (t)	EM-CM-120a.1	Brickworks Website
	SOx	Metric tonnes (t)	EM-CM-120a.1	Brickworks Website
	Particulate matter (PM10)	Metric tonnes (t)	EM-CM-120a.1	Brickworks Website
	Dioxins/furans	Metric tonnes (t)	EM-CM-120a.1	Brickworks Website
	Volatile organic compounds (VOCs)	Metric tonnes (t)	EM-CM-120a.1	Brickworks Website
	Polycyclic aromatic hydrocarbons (PAHs)	Metric tonnes (t)	EM-CM-120a.1	Brickworks Website
	Heavy Metals	Metric tonnes (t)	EM-CM-120a.1	Brickworks Website
Energy Management	Total energy consumed	Gigajoules (GJ),	EM-CM-130a.1	Sustainability Report, Page 24
	Percentage grid electricity	Percentage (%)	EM-CM-130a.1	Sustainability Report, Page 24
	Percentage alternative	Percentage (%)	EM-CM-130a.1	Sustainability Report, Page 24
	Percentage renewable	Percentage (%)	EM-CM-130a.1	Sustainability Report, Page 24
Water Management	Total fresh water withdrawn	Thousand cubic meters (m ³)	EM-CM-140a.1	Sustainability Report, Page 35
	Percentage recycled	Percentage (%)	EM-CM-140a.1	Gap
	Percentage in regions with High or Extremely High Baseline Water Stress	Percentage (%)	EM-CM-140a.1	Sustainability Report, Page 34

Topic	Accounting Metric	Unit	SASB Code	Reference
Waste Management	Amount of waste generated	Metric tons (t)	EM-CM-150a.1	Sustainability Report, Page 31
	Percentage hazardous	Percentage (%)	EM-CM-150a.1	Negigible
	Percentage recycled	Percentage (%)	EM-CM-150a.1	Sustainability Report, Page 31
Biodiversity Impacts	Description of environmental management policies and practices for active sites	N/A	EM-CM-160a.1	Sustainability Report, Page 20
	Terrestrial acreage disturbed	Acres (ac)	EM-CM-160a.2	Gap
	Percentage of impacted area restored	Percentage (%)	EM-CM-160a.2	Sustainability Report, Page 38
Workforce Health & Safety	Total recordable incident rate (TRIR)	Rate	EM-CM-320a.1	Sustainability Report, Page 23 Contractor injuries to be included FY22
	Near miss frequency rate (NMFR) for: (a) fulltime employees and (b) contract employees	Rate	EM-CM-320a.1	In progress
	Number of reported cases of silicosis	Number	EM-CM-320a.2	Management approach set out in Sustainability Report, Page 48
Product Innovation	Percentage of products that qualify for credits in sustainable building design and construction certifications	Percentage (%) by annual sales revenue	EM-CM-410a.1	Gap
	Total addressable market and share of market for products that reduce energy, water, and/or material impacts during usage and/or production	Reporting currency, Percentage (%)	EM-CM-410a.2	Carbon Neutral sales: Sustainability Report, Page 58
Pricing Integrity & Transparency	Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities	Reporting currency	EM-CM-520a.1	Gap
Activity	Production by major product line	Metric tonnes (t),	EM-CM-000.A	Confidential

Legal Note: SASB standards are not intended to, and indeed cannot, replace any legal or regulatory requirements that may be applicable to a reporting entity's operations.

Appendix 3 – Sustainable Development Goals

The United Nations Sustainable Development Goals (SDGs) are a call for action to promote prosperity while protecting the planet.

We contribute to many of the 17 SDGs which have connection to our business, reflected in our “Build for Living: Towards 2025” strategy. We have highlighted three of the sustainable development goals where we believe our actions have the greatest potential to make a real and lasting difference. The alignment of our business strategy and sustainability approach with these three highlighted SDGs are outlined in the following table. Our industry is resource-intensive and we are aware of the challenges we face to ensure we manage our potential adverse impacts and maximise our opportunities. We are committed to building and strengthening the wide range of partnerships needed to support these goals. We will further align our processes with the SDGs.

Sustainable Development Goals	Goal Details	Our Commitments	Our Challenges	Our Progress
 <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>Ensure equitable access to safe, affordable housing and basic services.</p> <p>Provide access to sustainable, affordable, and safe transport systems.</p> <p>Strengthen efforts to protect and safeguard heritage and cultural sites globally.</p>	<p>Commitment to providing high quality products, services and building products to support the sustainable optimisation of urban systems.</p>	<p>A global lack of collaboration across governments, industries, and wider society to integrate carbon reduction strategies into sustainable solutions.</p>	<p>We have been pushing collaborative efforts across our industry in designing products for resilient construction, while improving the energy efficiency of production processes.</p>
 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>Achieve sustainable management and efficient use of natural resources.</p> <p>Achieve environmentally sound management of waste.</p> <p>Substantially reduce generated waste through prevention, reduction, reuse, and recycling.</p> <p>Encourage companies to adopt sustainable practices and integrate sustainability information into reporting.</p>	<p>Increasing the use of alternative fuels and materials within Brickwork's activities and products, aiming to promote a more efficient use of natural resources while minimising negative environmental impacts.</p>	<p>A lack of sufficient access to alternative fuels and materials, alongside regulatory frameworks that recognise co-processing as the optimal waste management solution for unrecyclable materials.</p>	<p>We are continually adapting products to incorporate recycled material, and innovative new technologies and methods to recover energy from alternative fuels.</p>
 <p>13 CLIMATE ACTION</p>	<p>Strengthen adaptive capabilities and resilience to climate-related hazards and natural disasters globally.</p> <p>Integrate climate change measures into policies, strategies and planning.</p>	<p>Designing resilient products and continually adapting processes to improve energy efficiency.</p>	<p>Insufficient support for whole life-cycle performance of thermal mass products, considering the complete sustainability assessment of thermal mass products and the overall sustainability outcome of its use operational phase of buildings.</p>	<p>We are focusing on adapting products to help improve the resilience of the built environment and improving the energy efficiency of production processes.</p>

BRICKWORKS

**Contact details for
questions relating to
the content of this Report**

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