



Sustainability Report 2022

RESHAPING OUR FUTURE



Acknowledgement of Country

We acknowledge the Traditional Owners of the lands across Australia. We recognise and respect Aboriginal and Torres Strait Islander peoples and their unique position in Australian culture and history, and pay our respects to their Elders past, present and emerging.

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Find Boral's reporting suite at www.boral.com



Annual Report



Sustainability Report



Further sustainability information

Front cover:
Heritage Lanes commercial office precinct,
80 Ann Street, Brisbane, Queensland.
Built using Boral's lower carbon concrete,
ENVISIA®. (Image supplied by Woods Bagot)

Forward looking statements

This report contains forward looking statements, including statements of current intention, opinion and expectation regarding Boral's present and future operations, possible future events, and future prospects. This includes statements regarding the impacts of climate change and other environmental and energy transition scenarios. These forward looking statements are based on the information available as at the date of this report and they are, by their nature, subject to significant uncertainties, many of which are outside of the control of Boral. There are also limitations with respect to scenario analysis, and it is difficult to predict which, if any, of the scenarios might eventuate. Scenario analysis is not an indication of probable outcomes and relies on assumptions that may or may not prove to be correct or eventuate.

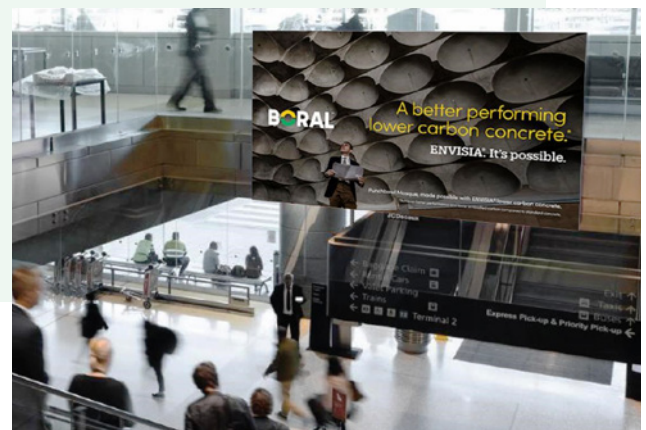
Actual results, circumstances and developments may differ materially from those expressed or implied, and Boral cautions against reliance on any forward looking statements in this report.

ENVISIA® lower carbon concrete

Our aim is for more of the concrete that we sell to be lower carbon concrete. This will help us to achieve our Science Based Target initiative approved decarbonisation targets for FY2030, and support our customers to reduce their carbon emissions, and achieve their targets and building standards certifications. To help build awareness and understanding of our lower carbon concrete ENVISIA®, we have launched a major advertising campaign in late FY2022.

ENVISIA® is our lower carbon concrete² that also offers premium performance. With high early-strength characteristics, low shrinkage, and a bright white colour, it makes technically challenging projects possible. Being lower carbon and high performance is a win-win for our customers, and the campaign features iconic projects that have selected and utilised ENVISIA® including Crown Hotel and Resort, Sydney; Barangaroo South Precinct, Sydney; and Punchbowl Mosque, Sydney.

The campaign has been kicked off in the Qantas Terminal in Sydney, with large-scale signage in a variety of locations and will also be featured in print advertising, social media, digital advertising, and editorials.



About this report

This report outlines our sustainability performance and approach to our material sustainability topics for the year ended 30 June 2022 (FY2022). All sustainability data relates to Boral's continuing Australian construction materials operations. However, our data tables on pages 69–71 also provide greenhouse gas (CO₂-e)¹ emissions data for our discontinued Australian Building Products businesses that align with our reporting under the National Greenhouse and Energy Reporting Scheme. Boral's FY2022 financial results and the Corporate Governance Statement can be found in the *Boral Annual Report 2022*.

Where possible, we have sought to align our disclosures and metrics with the Sustainability Accounting Standards Board (SASB) Construction Materials standard, and for climate-related disclosures with the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). We also aim to align with the Greenhouse Gas Protocol for carbon emissions reporting.

Our TCFD disclosures can be found on the following pages:

- Governance: 14–15
- Strategy: 40–45 and 48–50
- Risk management: 14–15
- Metrics and targets: 41, 46–47 and 69–71.

Our Sustainability reporting boundary only includes entities over which we have operational control. Joint ventures that are equity accounted are excluded, except as included in our Scope 3 emissions data.

Our safety metrics, except where otherwise stated, include employees and contractors.

Our energy and CO₂-e emissions data has been subject to independent assurance – refer to page 72.

1. CO₂-e refers to carbon dioxide equivalent emissions.

2. References in this report to 'lower carbon concrete' are references to Boral's lower carbon concrete product range. Details of that product range are set out on pages 32–33.

Our Purpose and Values



Boral is the largest integrated construction materials company in Australia, producing and selling a broad range of construction materials, including quarry products, cement, concrete, asphalt and recycled materials.

We provide construction material products and solutions to our customers to build homes, high-rise commercial and civic buildings, and infrastructure, including roads and highways in every state and territory across Australia.

We also have a property segment that aims to maximise the long-term value of our portfolio of surplus property and operating footprint.

Image above:
Greenland Centre,
Sydney, NSW

Our Purpose

talks to our role in meeting the challenges of a changing world and the expectations of future generations.

Creating a world future generations will be proud of

Our Values

say what we stand for, how we behave, and guide our decision making.

Looking out for each other

Leading the way

Doing what we say

Achieving together

Our People



11.8

recordable injury frequency rate

1,300+

frontline employees have completed the Leading Safe Work program



1.03: 1.00

female-to-male average base salary equity ratio



Women represent

30%

of Executive Leadership Team

30%

of professional positions

14%

of employees

Our Products



135%+

increase in lower carbon concrete sales volumes

ENVISIA® advertising campaign

for lower carbon concrete launched



One of Australia's largest recyclers

of construction and demolition waste, through our Circular Materials Management service with

2.2m+ tonnes

recycled in FY2022

Environmental Product Declarations

Expanded our library of EPDs covering concrete, cement, asphalt, lime, and limestone

Our Operations

Science-based climate targets

FY2030 emissions reduction targets validated by Science Based Targets initiative

8%

reduction in Scope 1 and 2 carbon emissions versus FY2019, progressing toward target of 18% reduction by FY2025

\$30m

grant awarded by Australian Government to use Calix's innovative carbon technology to assess the viability of a commercial-scale carbon capture plant

Water sub-metering

installed at priority high water-risk sites

Trigger action plans

implemented at priority high water-risk sites

\$6.0m

spend with Indigenous-owned and social enterprises

\$360k

community investment

58%

of operational waste diverted from landfill¹

1. Operational waste includes all site-based waste streams where collection services are managed by our waste services supplier, and excludes concrete wash-out waste, recycled asphalt materials, and Circular Materials Management construction and demolition volumes.

Our business



4,749
employees¹



~4,400
contractors¹



~3,500
heavy road vehicles²

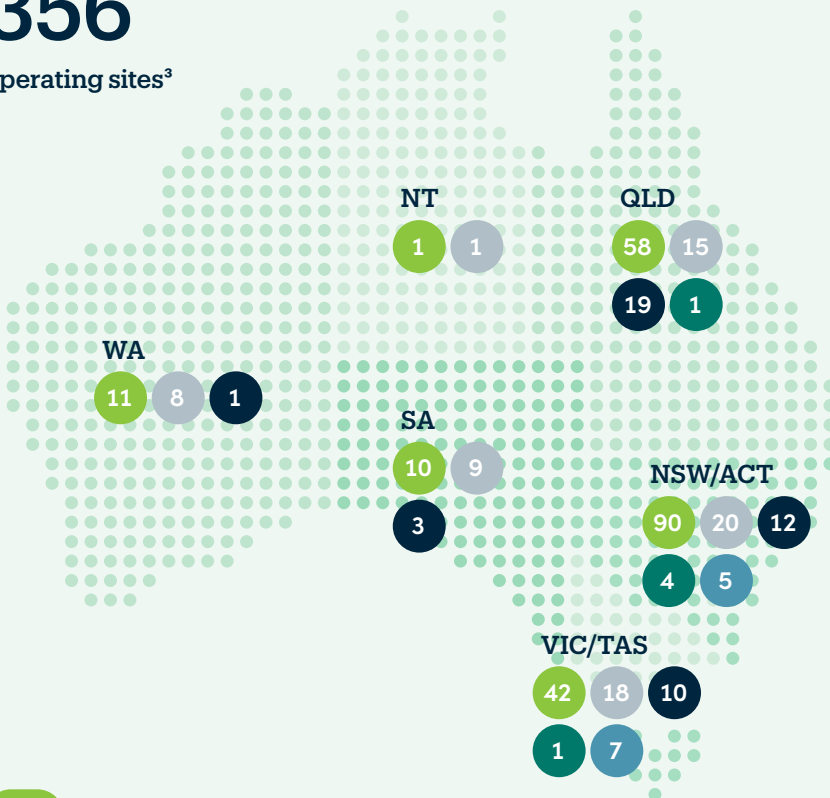


~14,000
customers

Construction materials: Leading integrated network

356

operating sites³



- 212 Concrete and Placing
- 71 Quarries
- 45 Asphalt

- 6 Cement
- 12 Recycling

1. Full-time equivalent (FTE) for continuing operations.
 2. Managed or used by Boral.
 3. Includes transport, fly ash, and research and development sites. Concrete site definition has been revised, with restated comparable number of Concrete and Placing sites in FY2021 of 213.
 4. On a net present value basis, using discount rate of 9%, with future cash flows estimated based on a combination of contractual terms, comparable property prices and management's estimate of timing realisation, and excluding existing landfill operation. Based on management's estimates that may change due to a variety of factors. Those factors may include general economic conditions, prevailing interest rates, a downturn in local property markets in general, changes in property income, or regulatory change affecting the value of sites.
 5. 40%-owned in joint venture with Holcim and Hanson.

Property: Maximising value creation from our surplus property assets



~30

surplus property assets

Totalling

~3,800

hectares

Valued at

\$1.0b+⁴

Major surplus properties include:

- Donnybrook, Vic**
- Scoresby, Vic**
- Waurm Ponds, Vic**
- Penrith Lakes, NSW⁵**

Valuable upstream and downstream operations



Cement

Our Cement operations manufacture and import clinker, grind clinker into cement, and supply supplementary cementitious materials. Our 1.5 million-tonne clinker manufacturing plant is at Berrima, NSW.

Quarries (including Recycling)

Our hard rock and sand quarries supply about 30 million tonnes of materials annually to our Concrete and Asphalt operations and customers.

Our Recycling operations process more than 2.2 million tonnes of construction and demolition waste for reuse, helping supplement quarries' materials supply and supporting circular construction.



Bitumen

Our 50%-owned Bitumen Importers Australia joint venture supplies about 40% of Asphalt's operations bitumen needs.



Concrete and Placing

We supply 6–7 million m³ of concrete annually, including advanced and lower carbon solutions, and are one of the largest concrete placing and pumping companies in NSW.

Asphalt

We produce and supply more than 2 million tonnes of asphalt annually, and spray seal and technical materials for the surfacing and maintenance of infrastructure networks.

Construction and demolition waste from customers

Our customers

We deliver products and solutions used for a range of applications, from homes and commercial buildings to infrastructure projects such as roads and highways.

We work with our customers to deliver more sustainable, high-performing and innovative solutions.

Message from CEO & Managing Director



Reshaping our future

Having redefined our operational footprint and delivery for customers over the last two years, I am proud of the progress we have made toward our Purpose of creating a world future generations will be proud of.

Boral was the first in the global construction materials industry to set FY2030 science-based Scope 1 and 2 targets aligned with a 1.5°C pathway.¹ And in FY2022 our ambitious emissions reduction targets for FY2030 were approved by the Science Based Targets initiative (SBTi).

At Boral, we understand that environmental and social sustainability is intricately linked to the sustainability of our business, and we are continuing to focus on, and embed, our Sustainability Framework in our broader business strategies, and making progress on decarbonisation.

Increasingly Boral is contributing to Australia's circular economy through our innovative application and re-use of waste materials, and provision of construction and demolition materials management services. We are part of building a better future for our company, our people, our customers, and many other stakeholders in Australia.

FY2022 has been a challenging year due to the external operating environment, but also a year of progress and renewal. We know Boral's success will rely upon robust and socially responsible operations, enduring stakeholder relationships, and a diverse and effective workforce that helps to deliver smart solutions that address the needs and demands of society.

We have been prioritising creating a more customer-focused organisation that leverages our assets and advances best practice across our product streams, supporting Boral in keeping pace with change and demand. While we have made progress in meeting our objectives in FY2022, we know there is more work to do in strengthening our performance and profitability.

Our performance was impacted by a number of external operating challenges during the year. These included COVID-19 related construction shutdowns in the first half of FY2022, sharp energy price increases, and exceptional rainfall across the east coast, particularly in the second half of FY2022.

1. Based on construction materials, including cement, companies taking action through the Science Based Targets initiative.

Alongside these challenges, the construction industry has continued to face supply chain disruptions, curtailing strong construction demand and delaying a number of major projects.

We have seen hard times before, and every time we have weathered them and responded by strengthening Boral. This past year has been no different. Our transformation strategy focused on creating a more agile and streamlined organisation has strengthened our ability to respond to and mitigate headwinds and will better support the company through ongoing challenges.

Sustainability Framework

We know that being a leader in sustainable construction materials is central to our future success. A year on from launching our Sustainability Framework, we continue to progress our decarbonisation strategy and our commitment to reach net-zero emissions by 2050.

We continue to progress our decarbonisation strategy and our commitment to reach net-zero emissions by 2050.

Our framework identifies 17 priorities across four key areas: Our People, Our Products, Our Operations and Our Performance. The priorities are aligned with the sustainability issues identified through our latest sustainability materiality assessment completed in FY2021.

Our focus on innovation and commitment to decarbonisation, through our products and operations, has meant we are reducing our carbon footprint while meeting the needs and expectations of our stakeholders. We continue to invest in materials-based research and development while also developing our people to effectively lead in a dynamic world.

Our People

The safety of our people continues to be our number one priority. Led by the Board and our Zero Harm Council, we are focused on delivering industry-leading Health, Safety and Environment excellence. We aim to build a culture where our people are engaged in working safely, and empowered to seek and support continuous improvement.

To support this culture building, in FY2022, we launched our Life Saving Commitments, which seek to prevent serious harm or fatalities. Our Life Saving Commitments were developed following extensive engagement with our frontline people, and have been rolled out via a series of toolbox talks, and additional internal communications.

In FY2022, we had no reportable employee or contractor fatalities. We reported six actual serious harm incidents compared to two in FY2021. This is a disappointing outcome, and as result of these events we have implemented initiatives centred on improving our Safe Systems of Work and visible leadership.

We have a diverse workforce, but we know there are opportunities to improve representation of women and Indigenous people. In FY2022 we undertook a review of our Diversity and Inclusion Plan and sought feedback from our employees, key stakeholders, and leaders to understand areas of focus and priority for FY2023. Our new Diversity and Inclusion strategy has been designed from this review, bringing our Value of **Achieving together** to life through our everyday workplace behaviours and interactions.



The Pipi luxury apartments in Bondi, NSW, built using Boral's lower carbon concrete, ENVISIA®.

Our Products

As a leading manufacturer of concrete in Australia, a key priority of our decarbonisation pathway has been to shift demand from conventional concrete mixes to our suite of lower carbon concretes. This is one of the fundamental changes we can make and why we began investing in innovative technologies more than a decade ago.

Our customers' needs have evolved, and today demand for superior performing and lower carbon products such as ENVISIA® are providing the solution. Despite a 50% or more cement replacement, ENVISIA® achieves high early-age strength that is the equivalent to conventional concrete, and improved durability and lower shrinkage. This is game changing technology for our industry and is already playing a critical role in supporting customers' sustainability ambitions.

As we look to FY2023 and beyond, our ambition is to make our standard offer lower carbon concrete. To support this, in June 2022 we launched a major advertising campaign featuring iconic Sydney locations that were built using ENVISIA®.

Alongside the development of lower carbon products we have been embedding a circular economy across our operations most notably through Boral Circular Materials Management where we process construction and demolition waste to produce high quality construction materials.

Boral Recycling is one of the largest recyclers of construction and demolition materials in Australia, producing recycled products from construction, demolition and excavation waste materials that would otherwise go to landfill. In FY2022, we processed over 2.2 million tonnes of these materials, re-using some in our Quarries, Asphalt and Concrete operations as well as selling on to our customers.



Western Sydney University, NSW.

In FY2023 we will expand our focus on both our lower carbon concrete products and our recycling and Circular Materials Management solution, playing a key role in building a better future for all.

Our Operations

We remain committed to our sector-leading, science-based emissions reduction targets aligned with our ambition to reach net-zero emissions by 2050.

We have been embedding a circular economy across our operations.

Our decarbonisation pathway and goals were validated in FY2022 by the SBTi, confirming that our FY2030 targets are consistent with the levels required to meet the goals of the Paris Agreement. We are making progress toward our target of reducing our absolute Scope 1 and 2 emissions by 46% by FY2030. In FY2022 we reduced our Scope 1 and 2 emissions by 8%, working toward our interim FY2025 goal of an 18% reduction compared to FY2019.

While lower carbon products are the keystone to our transition, embedding a more circular economy across our operations and processes will be critical to our success. While this work is already achieving great results in Boral Circular Materials Management, we are continuing to see how we can further implement circularity across the rest of the business. One area we are investigating is the development of a carbon capture plant in the Southern Highlands in NSW which was awarded a \$30 million grant from the Australian Government in partnership with leading technology group, Calix.

Boral and Calix have access to the infrastructure, technology and operational expertise required to deliver this project. By modernising Australia's cement industry, we will enable the growth of lower carbon construction materials which will play an essential role in the future of jobs and local economies.

Related to carbon capture, use and storage, we also have a pilot of re-carbonation technology underway, to investigate carbon storage in recycled concrete products. This pilot has also been supported by a \$2.4 million grant from the Australian Government.

With the energy transition continuing to move at pace and with rising energy costs, our use of alternate fuels remains a key focus of our decarbonisation strategy. At the Berrima kiln, investment in a chlorine bypass is underway, which will enable alternative fuels use to increase from about 15% currently to 30% by the end of FY2023, and thereafter targeting 60% by FY2025. We also continue to assess opportunities to transition to renewable electricity sources.

Water is a critical resource for our operations, particularly at our concrete, cement, and quarry sites. We use recycled water in production processes across many of our operations and we are investing resources to improve our water metering, efficiency, and resilience.

We are also strengthening our strategic approach to biodiversity protection and enhancement by continuing to work with the NSW Government through the Biodiversity Conservation Trust to establish our first fully owned biodiversity offset site at Coolumburra, NSW. This site will generate over 3,500 ecosystem

credits, that recognise the value of the vegetation and the habitat present on the land, combined with over 7,000 species credits recognising the presence of the Koala and Large-eared Pied Bat. A significant proportion of the credits generated will go towards meeting Boral's biodiversity offset obligations for new and progressive works at some of our other sites.

Looking forward and thanks

While we have been impacted by a challenging year, our progress in creating more sustainable operations has been considerable. We also move into the new year as a more agile and customer-focused organisation, well positioned to support Boral's and our customers' decarbonisation ambitions, and deliver improved performance and profitability.

As announced in June 2022, I will be departing Boral and Vik Bansal will become Boral's CEO & Managing Director on 10 October 2022. Vik and I have already been working together over the last few months to ensure a smooth transition

and preserve momentum towards our strategic priorities, including sustainability and decarbonisation.

I want to sincerely thank our leaders and people for their trust, hard work and commitment.

Through our people, our work, and our expertise, Boral is excited to pave the way forward and shape how we live together in the built and natural environments of the future. As the custodians of a great Australian company, we are united in this commitment to pass it on to the next generation, stronger and better than ever before.



Zlatko Todorovski
CEO & Managing Director



For generations to come

We aim to lead the way in offering innovative and sustainable construction materials products and solutions.



Snowy Hydro 2.0

Boral is supplying lower carbon concrete to build 27 kilometres of tunnels for the Snowy Hydro 2.0 renewable energy project.

This is providing the Snowy Hydro and Future Generation joint venture with high durability and good early-age strength concrete that also delivers an efficient production cycle time for the project.



Sydney Metro Linewide

Boral's ENVISIA® lower carbon concrete is being used to build 31 kilometres of railway tunnels to expand the Sydney Metro in NSW.

ENVISIA® is delivering superior engineering qualities, including lower drying shrinkage and improved constructability that allows the concrete to be pumped up to 1.2 kilometres in distance.



Quay Quarter Tower

ENVISIA® concrete was used to build this iconic, architecturally unique tower in the Sydney CBD.

ENVISIA® concrete enabled us to meet the high one-day strength constructability requirements and achieve improved sustainability performance with significantly lower embodied carbon concrete.

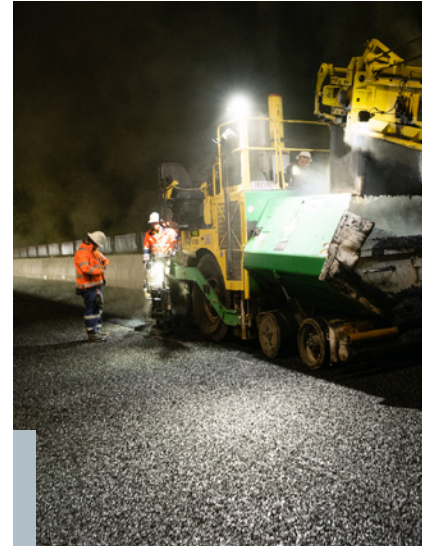
© Adam Mork, supplied by AMP Capital

Heritage Lanes

Suncorp's headquarters in Brisbane was built by Mirvac using ENVISIA® lower carbon concrete.

ENVISIA® delivered superior early-age strength performance to meet pour-cycle times, and a significantly lower carbon footprint.

Image supplied by Woods Bagot



Pacific Highway upgrade, Queensland

We supplied more than 70,000 tonnes of asphalt to the Varsity Lakes to Burleigh upgrade, which was completed in FY2022.

The project used about 13% recycled asphalt product, a reprocessed pavement containing asphalt and aggregates that reduced the amount of virgin aggregates and bitumen required.



Our Sustainability Framework

As a leading construction materials company, what we help create today will be around for generations to come. We are committed to leading the way in sustainability and creating a world that future generations will be proud of.

Our Sustainability Framework, established in FY2021, sets out our commitment to achieving this across four focus areas. The Framework is underpinned by our commitment to a high standard of corporate governance, responsible business conduct, effective risk management and Boral's Values which inform everything we do.



1. Icons show alignment of focus areas with United Nations Sustainable Development Goals.

The topics that we consider significant to Boral and to our stakeholders define the scope of our Sustainability Framework, strategies, and reporting.

Since FY2017, we have undertaken regular materiality assessments to define our material sustainability topics.

We assess sustainability issues with reference to the Global Reporting Initiative’s definition of a material topic: “a topic that reflects a reporting organisation’s significant economic, environmental and social impacts; or that substantively influences the assessments and decisions of stakeholders”.

We completed our most recent sustainability materiality assessment in FY2021. For this assessment, we refined our process to better capture the perspective of our customers, employees, and leaders, including the Executive Leadership Team. We also engaged with members of the Board Health, Safety and Environment (HSE) Committee to obtain their views on the prioritisation of topics.

We monitor the external environment and our internal priorities on an ongoing basis to ensure currency of our view on material topics.

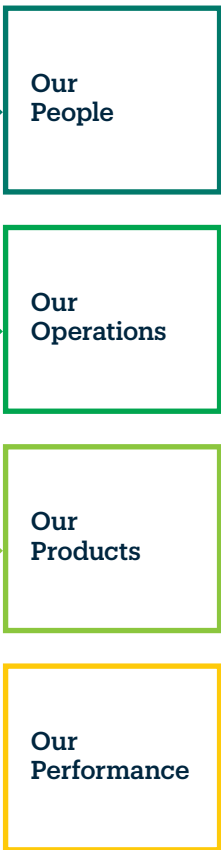
Our materiality assessment was a three-step process:

Desktop assessment	Analysis of industry peers; media; environmental, social and governance ratings; sustainability reporting frameworks and benchmarks; and data captured from investor, customer, and employee feedback to identify and prioritise topics
Leadership interviews and focus groups	One-on-one interviews including with members of the Board HSE Committee, and focus groups involving about 35 senior functional and operational leaders to obtain further insight
Validation	Outcomes reviewed by the Head of Risk, the Executive Leadership Team and Board HSE Committee

Our material sustainability topics

- Workforce health, safety and wellbeing
- Culture, engagement, diversity and inclusion
- Employee attraction and development
- Workplace relations
- Human rights and modern slavery
- Environmental performance
- Water management
- Land management and biodiversity
- Customer experience and satisfaction
- Sustainable procurement
- Community engagement and cultural heritage
- Climate change, resilience and energy
- Circular economy and waste management
- Sustainable products and innovation
- Product stewardship
- Corporate governance
- Business conduct
- Cybersecurity

Sustainability Framework



Enablers



Sustainability governance



Management steering groups and committees include:

Diversity and Inclusion Council	Provides oversight of implementation of Diversity and Inclusion Plan
Zero Harm Council	Provides oversight and leadership on all aspects of HSE, including strategy, governance, risks, compliance and effectiveness
Decarbonisation Steering Committee	Provides oversight and leadership of decarbonisation strategy and climate targets and risks
Capital Committee	Ensures alignment of capital plans and sustainability priorities, particularly in relation to decarbonisation
Modern Slavery Working Group	Reviews and supports improvements to our approach to assessing and managing modern slavery risk

Board oversight

The Board of Directors maintains oversight of sustainability, including our sustainability strategy, risk identification and management, and external reporting.

The Board HSE Committee is responsible for reviewing and monitoring matters including:

- Boral’s performance in relation to HSE and sustainability, assessed by reference to agreed targets and measures
- the effectiveness of Boral’s policies, systems, and governance structure in identifying and managing HSE and sustainability risks that are material to the business
- the policies and systems for ensuring compliance with applicable legal and regulatory requirements associated with HSE and sustainability
- Boral’s operational risks as they relate to HSE and sustainability matters, and
- Boral’s material reporting regarding sustainability.

Business management teams and the corporate HSE and Sustainability functions report quarterly to the Board HSE Committee on HSE and sustainability performance, risks, and management actions, including in relation to climate-related topics. The committee considers these items at each of its meetings, with an increasing focus on sustainability more holistically.

The Board Audit & Risk Committee is responsible for satisfying itself that a sound system of risk oversight and management exists, and that internal controls are effective.

It meets at least four times a year and receives an annual report on our organisation-wide risks, including climate-related risks.

Management responsibility

Sustainability is embedded in business unit strategies, action plans and reporting, and is monitored by relevant senior executives, including the Chief Financial Officer, the Chief People and Culture Officer, the Executive General Manager of HSE, the Head of Sustainability, and the Head of Environment.

Various steering groups and committees provide support, guidance, oversight, and leadership over specific areas of sustainability.

Business unit leaders are responsible for compliance with HSE and sustainability regulations and are supported by functional specialists.

Line managers are also supported by functional specialist managers across people and culture, marketing, procurement, sustainability, HSE, and community engagement.

Health, safety and environment and sustainability governance

The Zero Harm Council supports our efforts to deliver industry leading HSE excellence. The council, chaired by Boral's HSE Executive General Manager, includes Boral's CEO & Managing Director, and the Executive Leadership Team.

Current key priorities of the Zero Harm Council are:

- prioritising efforts to reduce serious harm incidents
- heavy vehicle safety
- mental health and wellbeing
- climate, decarbonisation, and energy
- contractor management
- environmental performance, and
- water usage.

Management remuneration

Managing sustainability, including safety, is considered an integral component of leadership, and is considered in setting performance plans, reviewing performance, and setting fixed remuneration increases. In FY2022, a new short term incentive plan was introduced that incorporates a balanced scorecard approach comprising strategic and financial key performance indicators (KPIs). Strategic KPIs related to safety, decarbonisation, environment, customer, and diversity account for around 30% of short term incentives at target. Refer to the Remuneration Report in the *Boral Annual Report 2022*.

The Board has discretion to adjust executive remuneration outcomes if there is evidence of a breakdown in management oversight and processes leading to poor outcomes, including safety performance.

Climate and decarbonisation governance

The Decarbonisation Steering Committee has been responsible for oversight and leadership of Boral's decarbonisation strategy and climate targets. The committee comprises executive leaders and senior functional leaders, including from Sustainability, HSE, Strategy, Risk, Finance, and Investor Relations. It also reviews and endorses recommendations to Boral's Executive Leadership Team and the Board.

In FY2023, as Boral moves to implement and embed its decarbonisation strategy with broader business objectives, this committee will transition to an operationally focused forum, reporting to the Executive Leadership Team and the Board.

Climate-related information in this Sustainability Report has been reviewed by the Executive Leadership Team, the Board HSE Committee and the full Board.

Climate change risk management

Climate change risks are incorporated into Boral's enterprise risk management (ERM) framework and processes. These processes include business-specific, organisation-wide, and detailed single-risk reviews. The Risk function works with business leaders and functional managers to ensure risks are adequately considered.

The Head of Risk reports quarterly to the Board Audit & Risk Committee on a range of risks, including specific risk reviews and business unit risk profiles. It also reports on Boral's organisation-wide risks at least once a year.

Climate change risks are incorporated as a standalone category of risk in our ERM framework. The severity of the risk is assessed using Boral's ERM risk scoring methodology, which assesses risks based on consequence and likelihood of occurrence. The consequence is rated according to several factors including potential financial impact.

An overview of our risks related to weather and physical climate impacts and the transition to a low-carbon economy, and our mitigation activities to respond to these risks, is included on pages 24–25 of the *Boral Annual Report 2022*.



Our People

Engaged and proud of our progress

- Diversity and inclusion
- Culture and engagement
- Training and development
- Workplace relations
- Health, safety and wellbeing

3 GOOD HEALTH AND WELL-BEING



5 GENDER EQUALITY



8 DECENT WORK AND ECONOMIC GROWTH



10 REDUCED INEQUALITIES



Our People

We recognise that our people are critical to our success. We are committed to building a safe, engaged, diverse and inclusive workplace and creating a culture that supports our people to deliver their best.

As at 30 June 2022, we had 4,749 full-time equivalent (FTE) employees, and approximately 4,400 FTE contractors. Our contractors work in a range of roles, including in product emplacement, as drivers in our transport operations, supporting plant maintenance, and in information technology functions.



4,749

FTE employees

▼ from 4,856 in FY2021



~4,400

FTE contractors

▼ from ~4,500 in FY2021

Employee turnover

Voluntary employee turnover was 17%, up from 12% in FY2021, reflecting broader labour constraints and high demand for skilled labour. Involuntary turnover was 5%, compared to 6% in the prior year.

Working through the COVID-19 pandemic

As we enter our third financial year affected by the COVID-19 pandemic, our people and workplaces have continued to adapt and respond to its impacts. We have taken comprehensive measures to help reduce the spread of the virus and ensure the safety and welfare of our employees, contractors, customers, and the public.

These measures include hygiene practices, social distancing protocols and sophisticated processes to track movements of our vehicles and drivers to support contact tracing efforts.

The start of FY2022 saw lockdown restrictions in some Australian states requiring construction activity, except for emergency construction, to cease. In response, our operations supplying customers in Greater Sydney and South Australia were shut down for the duration of the restrictions, except for a skeleton crew to supply any emergency construction activities.

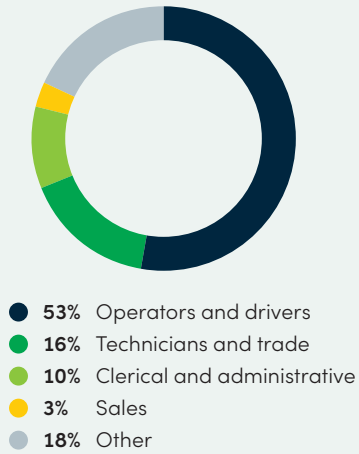
This had a pronounced and direct impact on our employees and contractors in affected areas. For all our employees who were unable to work due to mandated lockdowns and restrictions, we offered five days of pandemic leave, and we encouraged employees to take annual leave during the affected period, allowing up to 10 days leave to be taken in advance.

We have also supported flexible and remote working arrangements where possible, and assisted our people to access relevant government support. In the second half of FY2022, we commenced a hybrid working pilot and new ways of working at key head office sites.

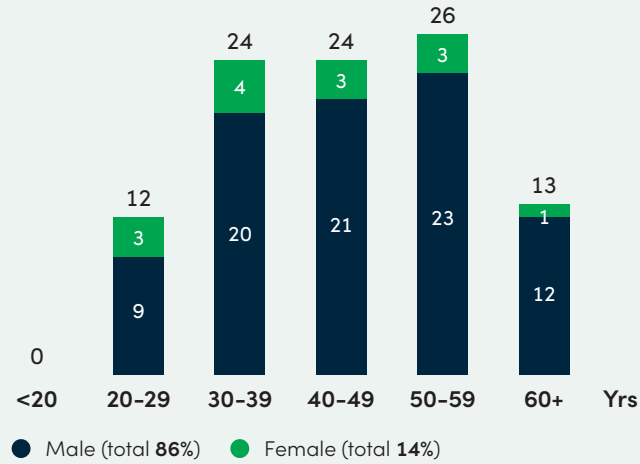


1. Classification of employees by occupation has been changed in FY2022, so that a proportion of 'Other' has been reclassified as 'Technicians and trade'.

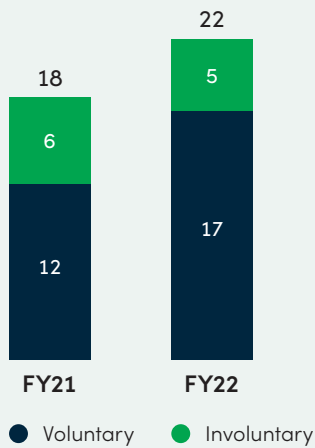
Occupation profile of employees (%)¹



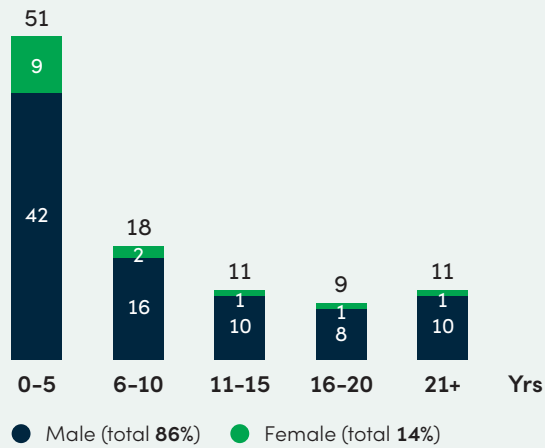
Age profile of employees (%)



Employee turnover (%)



Length of service of employees (%)





Women represent

25%

of Directors

14%

of employees

15%

of management
positions

30%

of professional
positions

Diversity and inclusion

In FY2022 we undertook a review of our Diversity and Inclusion (D&I) Plan and sought feedback from our employees, key stakeholders, and leaders to understand areas of focus and priority for FY2023.

Our new D&I strategy has been designed from this review, bringing our Value of **Looking out for each other** to life through our everyday workplace behaviours and interactions.

Our D&I strategy outlines our organisational commitment to creating a diverse and inclusive workplace, where every person is respected, connected and able to contribute to their full potential.

We recognise that to create a world future generations will be proud of, we need to cultivate an inclusive workplace where the unique perspectives, experiences and backgrounds of all our people are leveraged and embraced.

To achieve this, we have defined several strategic objectives to increase representation of diverse groups and provide equitable access to opportunities.

Over the course of FY2023, we will:

- establish Employee Action Groups (EAGs) to lead the design and delivery of strategic initiatives for key diversity areas. Each EAG will be sponsored by a member of the Executive Leadership Team and comprise employee representatives to drive education and advocacy for change

- support our employee community groups to connect, network, and learn from each other
- provide ongoing education and awareness on diversity and inclusion, through targeted initiatives, campaigns, and leadership training
- establish metrics and reporting mechanisms to track and monitor our progress against our D&I goals.

Gender diversity and equality

As at 30 June 2022, women represented:

- 14% of employees, no change compared to the prior year
- 25% of our Directors on the Board, compared to 38% in the prior year
- 40% of independent non-executive Directors
- 30% of our Executive Leadership Team¹
- 15% of management positions, an increase of two percentage points compared to FY2021.

During the year, significant changes were made to Boral's Executive Committee and the Boral Australia leadership team (Operations Committee), with these two executive leadership forums merging at the end of June 2022 to create a single Executive Leadership Team. As of 1 July 2022, Boral's ten-member Executive Leadership Team includes three women and seven men.

We continue to have favourable pay equity outcomes, with a female-to-male average base salary ratio of 1.03:1.00.

1. Based on Executive Leadership Team changes announced 30 June 2022.

Culture and engagement

Since July 2021, a number of programs have supported our transformational agenda. This includes a new operating model, the introduction of a hybrid working pilot and new ways of working at key head office sites, and a Values and behaviours refresh.

In FY2022, an organisation-wide engagement survey was planned with a target of 7% improvement in engagement and overall improvement across all measures. This is now being considered as part of a more holistic cultural transformation program, commencing with a discovery phase in mid to late 2022.

Training and development

During FY2022, our employees participated in a wide range of job-related skills training and development opportunities, including on-the-job placements to help them succeed in their roles and support their career goals.

More than 3,700 employees completed learning programs in FY2022 and 193 employees completed individual units of competency, skillsets, or qualifications. This equates to 586 individual units of competency for FY2022, through Boral's registered training organisation (RTO) or external RTOs.

Five graduates successfully completed their Certificate IV in Surface Extraction Operations in South Australia. Three of the five are currently obtaining their Quarry Managers licence. We are now in the process of working through leading practice for our RTO accreditation and a nationally aligned approach.

FY2021 and FY2022 saw the completion of our Leading Safe Work program delivered to our operational teams, and new online courses developed to promote safe working habits.

To increase our engagement and improve our learning and development programs, we have moved from LinkedIn Learning to Skillsoft. Skillsoft is Boral's new on-demand learning solution consisting of 180,000 courses, videos, and books to support learning pathways, career journeys and our overall initiatives.

Our centralised training and operational compliance system, My Learning Space, provides standardised access to online training and monitors all the ongoing training needs of our employees.



In FY2022, we continued to improve standardisation of training across the product lines and the review of training requirements across businesses and individuals; making it simpler for employees and managers to identify training needs and opportunities and driving efficiencies. Our highest priority is to ensure that our people have the knowledge, skills, and abilities to perform their roles safely aligned with our life saving commitments.

Workplace relations

Our approach is to work collaboratively with our people and their representatives, and to provide fair and equitable employment conditions that deliver sustainable outcomes for Boral in a challenging competitive environment. We respect and support the rights of our employees to freedom of association.

We have 57 enterprise or industrial agreements covering 2,748 employees – equivalent to 58% of our employees.² These agreements cover a term of two to four years on average.

2. This includes employees covered by agreements which have passed their nominal expiry date, and which are deemed to continue to operate until they are replaced or terminated by the Fair Work Commission.

Health, safety and wellbeing

At Boral, we look out for each other. Our first and foremost priority is the health and safety of our people, including our contractors, and all those we interact with through our operations. We want everyone to go home healthy and safe every day.

In FY2022, we continued to embed our refreshed Health, Safety and Environment (HSE) strategy and supporting priorities established in FY2021. A key objective of our HSE strategy is to prevent serious harm incidents that cause fatalities or life-threatening or life-changing injuries. While progress is being made, we acknowledge that we have much more work to do.

We are focused on recording and learning from incidents that have the potential to seriously harm our people. We report both our actual serious harm incident frequency rate (ASHIFR) and potential serious harm incident frequency rate (PSHIFR). We encourage our people to report potential serious harm incidents as these provide key learnings for the organisation to prevent actual serious harm incidents in the future.

We had no reportable employee or contractor fatalities in FY2022.¹ However, we were deeply saddened that there was a community fatality when a heavy vehicle driven by one of our contractors was involved in a multi-vehicle crash on the Logan Motorway, Queensland. Our sympathy goes out to those affected. This incident is still being investigated to identify causal and contributing factors.

We reported six actual serious harm incidents compared to two in FY2021, which equated to an ASHIFR of 0.4², compared to 0.1 in the prior year. This was a disappointing outcome. As a result of these events, we have implemented initiatives centred on improving our Safe Systems of Work and visible leadership, which will continue to be a focus in FY2023. PSHIFR was 5.2, compared to 5.3 in the prior year.

We reported a recordable injury frequency rate (RIFR) of 11.8, an increase from 11.5 in FY2021. The majority of injuries are low severity sprains and strains caused by manual tasks.

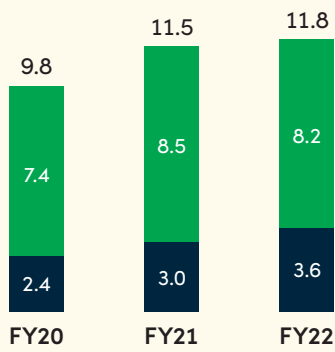
In FY2022, parts of our Cement and Asphalt businesses trialled injury prevention and management initiatives which aim to reduce the frequency of these types of injuries. Early indications from this trial have been positive and leadership engagement has been high, with early intervention continuing to be an ongoing focus for improvement activities in FY2023.



1. We also had no fatalities in our joint ventures.
2. All injury rates are per million hours worked for employees and contractors.

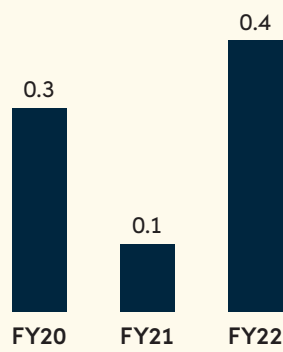


Recordable injury frequency rate³

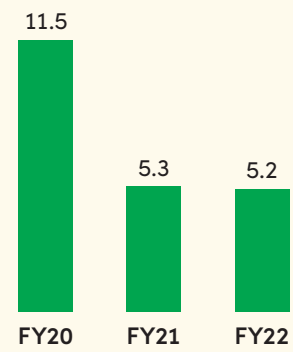


- Lost time injury frequency rate
- Medical treatment injury frequency rate

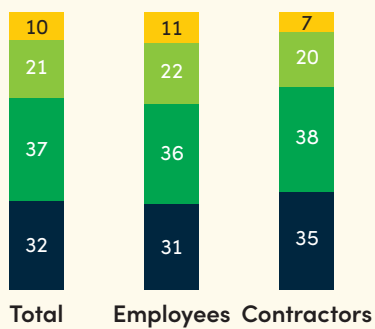
Actual serious harm incident frequency rate



Potential serious harm incident frequency rate

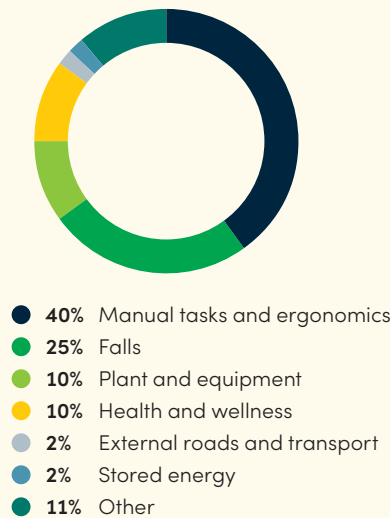


Injury treatment (%)



- No treatment
- First aid injury
- Medical treatment injury
- Lost time injury

Mechanism of injury (%)



- 40% Manual tasks and ergonomics
- 25% Falls
- 10% Plant and equipment
- 10% Health and wellness
- 2% External roads and transport
- 2% Stored energy
- 11% Other

3. Recordable injury frequency rate per million hours worked is made up of lost time injury frequency rate and medical treatment injury frequency rate.

Health, Safety and Environment strategy

Our HSE strategy aims to build a culture where our people are engaged in the solution to eliminate or control critical risks, and they are empowered to seek and support continuous improvement.

Our key focus is to strengthen the prevention of serious harm through more standardised and tailored controls that identify and mitigate our critical risks. Our approach is based on the view that people are the solution, and we encourage our leaders and people to think differently, and look for better ways to do work and innovate.

We focus on supporting our people to lead effectively through regular leadership interactions as a key way to develop learnings and improve how we control risks.



In FY2022, we continued to deliver on our five HSE strategic objectives and priorities:

Vision	To deliver leading HSE management practices that are valued, understood and implemented by our leaders, employees and stakeholders. We aim to create a culture where our people are engaged in the solution to eliminate or control critical risks so that everyone goes home healthy and safe every day and we deliver a positive legacy to sustainable development.				
Strategic objectives	Leaders, employees and contractors are trained, competent and demonstrate responsible decisions in everything they do	Critical risks are identified and, where appropriate, eliminated or managed to an acceptable level	Stakeholders recognise and support us to be a leader achieving HSE excellence	We are a learning organisation that applies the lessons from proactive interactions with our people and stakeholders, incidents and HSE assurance	Our management systems, processes and procedures are streamlined, provide clear direction and allow leaders to maintain a focus on the field
Priorities	Serious harm prevention	Health and wellbeing	Environment	Leadership, collaboration and technical capability	Systems, assurance and innovation

Serious harm prevention

In FY2022, we continued to embed our Safe Systems of Work program. The program incorporates principles that enable processes for managing risks and controls to keep people safe, to be understood and followed.

To support our Safe Systems of Work program, we completed the rollout of our Leading Safe Work program, with more than 1,300 leaders and workers completing the program. The program supports our leaders in how to embed our Safe Systems of Work and coach our people to make better decisions on the job.

As part of our Leading Safe Work program, we are focused on our leaders using Critical Control Gembas¹, to enhance coaching in the field. Gembas are a way for leaders to engage in proactive conversations with our frontline teams to find better ways to manage our risks and to confirm our controls are in place every day.

Life Saving Commitments

In FY2022, we launched our Life Saving Commitments, which seek to prevent serious harm or fatalities. Our Life Saving Commitments were developed following extensive engagement with our frontline people, and therefore align with the behaviours that our people believe are important for controlling HSE risks.

To assist our sites in embedding these commitments, a series of toolbox talks and supporting awareness and communication resources have been developed that have been rolled out month by month, outlining what each commitment means and how it can be put into action. This supports our leaders to uphold our standards rather than focusing solely on checking compliance with rules.

Public road safety

We manage or use a fleet of about 3,500 heavy vehicles on public roads daily to transport and deliver our products and services.

We strive for high standards through continuous improvement to our fleet by investing in higher-specification vehicles, telematics, and in-vehicle driver safety systems. We also work closely with our contracted heavy vehicle fleet providers on continuous improvement initiatives.

In FY2022, we established a Heavy Vehicle Safety Group as a forum for executives, operations leadership and safety and subject matter experts to discuss heavy vehicle performance and continuous improvement initiatives.

This year we introduced Heavy Vehicle Gembas to help our leaders coach our people on focusing on the critical controls associated with the use of heavy vehicles.



1. Gemba is a term used extensively in Lean Manufacturing approaches, meaning “the real place” where the work occurs in Japanese. Gemba is the most important place for a team as it is the place where the ‘real’ work happens.

Health and wellbeing

The health and wellbeing of our people is a priority within our HSE strategy and we provide a range of programs for our people focused on physical and mental wellbeing. We also help raise awareness of mental wellbeing by actively promoting our free confidential counselling service, the Boral Employee Assistance Program (BEAP).

The impacts of COVID-19 continued to present challenges to our operations in FY2022. To ensure we kept our people safe we implemented a series of COVID-19 controls, which were in step with government restrictions and recommendations, and reviewed these as we progressed through the various stages of the pandemic.

Our Wellness and Connection Hub continued to help support our employees during this challenging time, including continuing to run webinars on strategies for our people on return to the office. As we continue to respond and recover from the pandemic, we continue to look for ways to make hybrid working sustainable for office-based roles in our business.



Dust management

As a producer of construction materials, Boral's operations can produce dust as part of the manufacturing and downstream handling processes. It can be a nuisance to the environment, the community, and our people, and if it is of a certain type and severity, it can adversely impact people's health.

We take our commitments and responsibilities to manage dust across all our sites very seriously and take a focused approach to dust management. In FY2022, we launched a Dust Management Improvement Project to comprehensively review our approach to dust management.

As part of this project, we have identified opportunities that can be executed in the short term and enhancements that can be made over the longer term to support our goal to be an industry leader in dust management.

The dust management improvement project involves five phases:

1. Enhance our risk management framework
2. Review current state through Health Exposure Risk Assessments
3. Identify improvement opportunities
4. Implementation
5. Ongoing review and continuous improvement

We have commenced implementation of improvements, and are committed to embedding continuous improvement opportunities identified throughout the project.

Based on ongoing employee health monitoring, we had no new detected cases of silicosis in FY2022.



Systems, assurance, and innovation

As part of our HSE strategy, we are focused on streamlining our systems and processes to provide clearer direction to our people and allow leaders to maintain a focus where it matters most – in field.

In FY2022, as part of the refresh of our Health, Safety, Environment, and Quality Management System (HSEQ MS), we launched a new HSEQ Portal. The new HSEQ Portal provides a more modernised system that enhances the user experience.

We continue to streamline our HSEQ MS to focus on controls for identified HSE hazards and risks, with controls tailored specifically to each site and to our frontline people. This has continued to make our system simpler for our frontline people to use and implement these controls. It also empowers our people to make better and safer decisions and supports our teams to come up with innovative solutions to their challenges through design of controls and elimination of hazards as applicable. This will be an ongoing focus in FY2023.

Our HSEQ MS, which covers all our operations, enables us to certify operations against external standards. We undertake certification at sites where doing so is important to our customers and where it drives additional value beyond the equally high standards of our HSEQ MS.

34 Boral sites are certified by AS/NZS 4801 or ISO 45001 Occupational health and safety management systems, 25 sites by ISO 14001 Environmental management systems, and 325 sites by ISO 9001 Quality management.

Our HSEQ MS is supported by our SEquence HSE reporting system, dashboards, and our HSE assurance program, enabling our leaders to understand and monitor their safety performance, and determine whether controls are effectively in place. Our HSE assurance program works to support an integrated and effective approach to HSE management and presents an opportunity to learn, share, and continually improve our systems, processes, and risk management practices.

HSE training

All new staff, including contractors, receive standardised training that aligns with our HSEQ MS standards. We seek to integrate our overarching focus on safety, health, and environment through our training programs. All new employees and contractors also receive safety and environment induction training.



Our Products

Making a lasting positive impact

- Our sustainable products and services
- Lower carbon concrete
- Boral Circular Materials Management
- Asphalt
- Product stewardship



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



11 SUSTAINABLE CITIES
AND COMMUNITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



Our sustainable products and services

We aim to lead the way in offering innovative and more sustainable construction materials and services that meet our customers' changing needs – reducing our operational environmental footprint, and supporting our customers' lower carbon ambitions.

We are prioritising lower carbon concrete innovation, development, and availability, to support Boral's decarbonisation ambitions, including to reach net zero emissions by 2050, and to help our customers achieve their own lower carbon and sustainability targets for projects and their businesses.

Boral's lower carbon concretes use our distinctive proprietary binder ingredient – ZEP® technology – plus expertise in concrete mix design to replace cement used in concrete with supplementary cementitious materials (SCMs).

We are also playing an increasing role in Australia's circular economy. We are now one of Australia's largest construction and demolition waste recyclers and sell a growing range of recycled materials such as aggregates and sands. We also add recycled materials to many of our products including some of our cement, concrete, and asphalt mixes.

Lower carbon concrete

In addition to our ENVISIA®, Envirocrete® Plus, and Envirocrete® range of products, we also tailor carbon neutral solutions for customers using the Australian Climate Active Carbon Neutral Standard.

For customers wanting a carbon neutral concrete product, we can offer any concrete covered by a current Environmental Product Declaration (EPD), plus carbon offsets, under our current Climate Active certification.



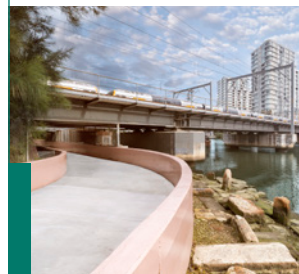
ENVISIA®

Boral's superior performance concrete achieves an embodied carbon reduction of 43–49%.¹



Envirocrete® Plus

This product, launched in FY2021, offers up to 39–42% embodied carbon reduction.¹



Envirocrete®

Our more general purpose lower carbon offering, achieves up to 38–40% reduction in embodied carbon.¹

1. Embodied carbon reduction for 20–40 megapascal (MPa) concrete in Sydney region compared to the Infrastructure Sustainability Council reference case.

Recycled products

We offer a range of recycled materials to our customers, diverting more than 2.2 million tonnes of waste from landfill in FY2022 and re-using precious resources across Cement, Concrete, Asphalt and Quarries. Some of our recycled products include:



INNOVO asphalt system™

Incorporates recycled materials, including glass, crumb rubber (from tyres), recycled asphalt pavement and plastics.



Enviro-O-Agg® Glass Sand

Made of clean, washed and crushed recycled glass and is blended with natural and/or recycled material.

Our full range of recycled products include various quarry products such as roadbases, compaction sand, and aggregates, as well as inclusion of excavation sand and other recycled content into selected concrete and asphalt mixes.

Boral Circular Materials Management

We provide a Circular Materials Management solution to our customers, directly managing and processing construction & demolition 'waste' and developing it into new construction materials.

Boral Circular Materials Management solution



Waste materials managed and recycled by Boral include construction and demolition waste such as concrete, bricks, asphalt, soils and other materials.

Lower carbon concrete

Our lower carbon concrete range

We are prioritising lower carbon concrete innovation, development and availability. This is supporting both our own decarbonisation goals – we are aiming to reach net zero emissions by 2050 – and our customers' lower carbon and sustainability ambitions. This includes supporting customers to achieve certifications under Australian sustainable design and building standards such as Green Star and the Infrastructure Sustainability Council (IS Council) rating scheme.

Over time, we plan to shift our conventional concrete mixes, which contain an average of 20% supplementary cementitious materials (SCMs), to the lower carbon concrete mixes, containing 40% to at least 50% SCMs, significantly reducing the embodied carbon of Boral's concrete, and making these products the standard for our customers.

In FY2022, lower carbon concrete represented 7% of our concrete sales volume, up from 3% in FY2021, with our customers' uptake reaching 19% by the end of June 2022.

Boral's lower carbon concretes use our distinctive proprietary binder ingredient – ZEP® technology – plus expertise in concrete mix design to replace cement used in concrete with SCMs, typically ground-granulated blast-furnace slag and fly ash, which are by-products of steel manufacturing and coal-fired power generation respectively.

ENVISIA®

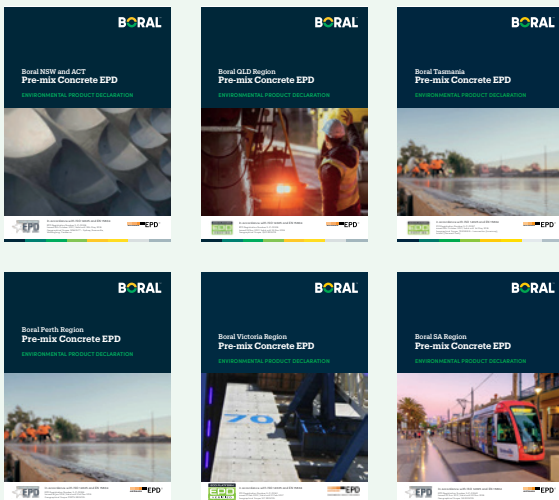
ENVISIA® is our highest performing lower carbon concrete and achieves a cement replacement of at least 50%, and sometimes even up to 70%. It also provides superior engineering performance relative to conventional concrete, including high early strength and low shrinkage – important characteristics in high-rise construction and infrastructure.

As an example of its decarbonisation benefits, for ENVISIA® concrete products between 20 MPa and 40 MPa in the Sydney region, there is a 30–35% lower embodied carbon than our conventional concrete mixes, and 43–49% lower embodied carbon compared to the IS Council's reference case.

ENVISIA® meets the requirements of the IS Council and helps the construction industry achieve higher Green Star ratings on projects assessed by the Green Building Council of Australia.

ENVISIA® has now been approved for use by several government infrastructure agencies including the Queensland Department of Transport and Main Roads (TMR), Main Roads Western Australia (MRWA), and Transport for New South Wales (TfNSW).

ENVISIA® is the concrete of choice for some of Australia's most iconic and sustainable developments and buildings including Crown Hotel and Resort, Sydney; Salesforce Tower, 17 Pitt Street, Sydney; 333 George Street, Sydney; Perth's Forrestfield-Airport Link; Campbell Primary School, ACT; Systems Connect's Sydney Metro Tunnel project; Western Sydney University Innovation Hub; 180 George Street, Sydney; University of Tasmania green building program, Launceston; West Connex, Sydney; Heritage Lanes, 80 Ann Street, Brisbane; Punchbowl Mosque, Punchbowl, NSW; and Barangaroo Ferry Wharf, Sydney.



Trusted information for our customers to make more sustainable choices

Understanding the sustainability impacts of different products and services can be complex, and we strive to simplify this process for our customers by providing them with all the information they need to make more environmentally sustainable product choices.

We offer a growing library of Environmental Product Declarations (EPDs) for our cement, concrete and asphalt businesses in different states and regions. Our concrete EPDs provide cradle-to-gate environmental indicators for a range of conventional pre-mix concrete products, lower carbon concrete (ENVISIA®, Envirocrete® and Envirocrete® Plus) and concrete for general and special applications.

Envirocrete® Plus

Envirocrete® Plus, which we launched in FY2021, achieves a cement replacement of 45% or more, offers good early-age strength and is suitable for most post tensioned applications and all mainstream uses such as house slabs and multi-residential construction. Envirocrete® Plus, at 20 MPa in the Sydney region, has an embodied carbon reduction of 39% compared to the IS Council's reference case. Envirocrete® Plus achieves up to 25% less shrinkage compared to conventional sustainable concrete mixes, providing superior engineering properties and durability compared to conventional concrete. Customers have selected Envirocrete® Plus for Queen's Wharf, Brisbane; Western Sydney Airport Terminal; Campbell Primary School, ACT; and Brisbane Grammar School.

Envirocrete®

Envirocrete® 20 MPa in the Sydney region provides around 40% cement replacement and 38% embodied carbon reduction compared to the IS Council reference case, and is ideal for general applications where high-performance concrete is not required. Boral can use manufactured sand as our Green Star recycled material in Envirocrete®. Manufactured sand is produced as a byproduct of coarse aggregate and is a replacement for natural sand, minimising the need to extract natural resources. Envirocrete®'s credentials are also strengthened through the inclusion of recycled water.

Extending availability and growing awareness

In FY2022 we commenced a major expansion of the availability of our lower carbon concrete range, so that it can now be purchased in most states. This is a major operational infrastructure and capability

program requiring capital investment, process change management, and training of our people at our concrete mixing plants. Having already achieved 19% penetration of lower carbon concrete, we have plans to grow this over the next few years to the point where our standard offering is lower carbon. To help support this ambition, we also commenced a major advertising campaign in June 2022 featuring some of the iconic projects that have used ENVISIA®. See our inside front cover for further details on this campaign.

Carbon neutral concrete

Increasingly we have customers such as developers, builders, and owners, requesting carbon neutral concrete for their projects, and we are delighted to be easily able to meet their requirements in this important area. We provide a fully certified package of our lower embodied carbon concrete ENVISIA® or Envirocrete®, together with accredited and credible carbon offsets to reduce the total net greenhouse gas emissions of the material to zero. We offer the same solutions package for many other products in our range with registered Environmental Product Declarations (EPDs).

We have secured Climate Active certification for this offering for specific products as an additional guarantee of the carbon neutral status of the delivered product. Climate Active is the Australian Government's initiative to certify carbon neutrality, and it ensures that businesses achieve this in a credible and transparent way.

As an example, we are proud to have worked with Lendlease to deliver Climate Active-certified net carbon neutral concrete, a first for both Boral and Lendlease, for the construction of Campbell Primary School in the ACT, which was completed in FY2022.

Our EPDs provide independent third-party verified, transparent and comparable information about the environmental life-cycle impact of these products and can be found on our website, as well as on the website of EPD Australasia, the Program Operator with overall responsibility for the EPD program in Australia and New Zealand.

In addition, to meet Climate Active certification requirements and claims, we provide reporting to our customers on the carbon neutral status of concrete supplied and offsets purchased and then voluntarily retired.

We can also provide reporting on the recycled content of our concrete for specific projects, as well as recycling rates for our Boral Circular Materials Management solution.

Partnering to drive innovation and sustainable solutions

To build on the innovative offering of ENVISIA®, Envirocrete® Plus, and Envirocrete®, we are focused on broadening the range of lower carbon concrete products we can offer to our customers, including, in partnership with the University of Technology Sydney (UTS), developing the next generation of lower carbon concretes via the Innovative Manufacturing Cooperative Research Centre (IMCRC). We are also accelerating our research into the new binders that will be required as traditional SCMs become less available. We want to push lower carbon boundaries even further while maintaining or improving on the practical properties of conventional concrete. Further information on our Innovation program can be found on page 51.

More information on how we decarbonise cement and concrete can be found on pages 44-45.

Boral Circular Materials Management

Boral is one of the largest recyclers of construction and demolition materials in Australia, producing recycled products from construction and excavation waste materials that would otherwise go to landfill.

Our recycling business sorts, crushes, blends and sells recycled materials such as crushed concrete, bricks, glass, soils (e.g. from sandstone or excavated sand) and other materials, both for road base-type materials as well as input into our concrete and asphalt mixes.

In FY2022, Boral Recycling processed more than 2.2 million tonnes of materials, for use in our Quarries, Asphalt and Concrete operations, and for sale to our customers.

The use of recycled materials in road, infrastructure, and building construction is also increasingly being mandated by governments and requested by other customers. We are therefore focused on continuing to grow our existing footprint to better serve our customers. Our footprint currently includes recycling sites in NSW, Victoria, and the ACT, including the recently repurposed Emu Plains site in Sydney, our partnership with the Delta Group in Melbourne at the Delta Sunshine site and other Boral quarries, and our new site at Waurin Ponds, Victoria. Over 95% of all waste received at Boral Recycling is recycled and repurposed into materials that can be used in the construction industry.

Circular concrete solution at Green Square project with Mirvac, Sydney

This project featured a service for direct collection of the concrete waste generated on site, comprising a skip-bin co-located alongside Boral's De Martin & Gasparini concrete pumping capability, combined with a materials handling and logistics solution bringing the waste directly to Boral's recycling facility at Widemere. There it was processed back into recycled construction materials resold into the market. To complete the service offering, we included a full materials traceability reporting solution for Mirvac, to enable their sustainability and circular economy reporting and certifications. Around 300 tonnes of concrete waste was recycled from this site. This equates to around 6 tonnes reduction in carbon emissions from the project.²

Boral Circular Materials Management solution overview

Customer engagement and design

Early engagement with our customers during the design phase enables:

- Identification of materials that can be recycled at our recycling facilities
- Identification of materials that can be used as part of Boral's land rehabilitation programs
- Specification of more sustainable products for future supply into the project

Supply of recycled materials

Boral supplies product mixes with higher recycled content including roadbase, aggregates, pipe bedding, sand, asphalt, concrete, and other recycled materials.¹

Boral also provides customers with detailed reporting on recycling rates, carbon content, material flows, and green credits or certifications.

Any waste generated through Boral's materials supply can be brought back to Boral recycling sites ensuring full circular outcomes for our customers.



1. Availability of recycled content in products varies by location, with Sydney and Melbourne currently offering more options.
2. Based on NSW Environment Protection Authority's emissions factor of 20 kg CO₂-e per tonne of recycled concrete.



Project pre-construction phases – demolition and excavation

As civil contractors perform demolition and excavation phases of the project, the 'waste' materials are generated, e.g. concrete, brick, soils, etc.

Boral can play an active management role, ensuring these materials are sent for recycling at our recycling locations; providing full visibility on materials flow, maximising recycling rates, ensuring circular product development, and coupling all that with detailed reporting for sustainable outcomes to our customers.

Materials recycling

Materials sent to Boral's recycling sites may be:

- Reprocessed into construction materials
- Blended with Boral's virgin materials to develop new products
- Blended with externally sourced materials (e.g. glass, plastic, rubber) to develop new products

Circular soils and concrete solution at Pagewood project with Meriton, Sydney

At Meriton's Pagewood site in Sydney, Boral managed over 200,000 tonnes of excavation sand generated by the project, transporting it to our recycling sites, washing the material and re-using as input to concrete production across various Boral concrete plants. This has not only led to more sustainable concrete mixes but also a more efficient process for the customer, with financial and sustainability value delivered to both parties. Additionally, Boral has managed another 6,000 tonnes of other materials, such as concrete, from the site, achieving a 99%+ recycling rate at Boral Recycling sites. This is being supported by comprehensive reporting, for materials flow visibility, recycling rates and circular products developed, enabling full capture of the project sustainability impacts.



Our asphalt supply, placing, and maintenance business is committed to delivering innovative, high-performing and more sustainable products and solutions that respond to a changing world, where circular solutions are expected, and which better meet our customers' needs.

Safety innovation

Surfacing roads is a challenging task for construction crews because of the materials used and their application. In addition, high reversing tippers can face issues such as rollover accidents, blind spots and can interfere with power lines and trees. Boral designed and engineered Australia's first Forward Moving Aggregate Spreader, which allows a clear line of sight for the operator with no need for reversing or tipping, minimising risk to people and infrastructure.

Innovation in sustainable materials

Increasingly we are using a range of recycled materials and lower carbon processes for asphalt pavement and spray seal surfacing.

WarmPave asphalt

WarmPave asphalt reduces the carbon footprint of asphalt roads, by lowering the temperature of asphalt during manufacturing and application.

INNOVO™

INNOVO™ sustainable asphalt is an asphalt system that replaces some natural raw materials with recyclable materials.

INNOVO can be used wherever asphalt is currently used. Mix designs are primarily based on road authority specifications or performance qualified to meet client expectations. Performance is expected to meet or exceed these specifications or relevant high value proposition parameters set by the application.



Recycled materials used in INNOVO™ asphalt can include:

Recycled asphalt pavement (RAP)

RAP roads and highways can be used to replace some of the bitumen and raw aggregates used in the production of asphalt, reducing the demand for imported bitumen and virgin aggregate materials.

Crumb rubber

End-of-life vehicle tyres are processed into 'crumb rubber' that can be used to partially replace bitumen in asphalt. The material behaves like an elastic polymer and is suitable for spray seal and asphalt solutions.

Glass

Recycled crushed glass can replace a small percentage of the sand in the manufacturing process of asphalt. With a similar particle density, using glass reduces the need for raw material.

Plastic

Hard plastics that might have otherwise gone to landfill can be substituted for fine aggregates and soft plastics can improve asphalt performance properties when included in the asphalt binder.

Slag

This by-product of iron ore processing can be used as a partial replacement for the natural aggregate used in asphalt. It can provide increased skid resistance and be used where high levels of surface friction are required.

INNOVO™ asphalt meets the specifications of a growing number of government infrastructure entities and development companies including Queensland's Department of Transport and Main Roads; Transport for NSW; Department of Transport, Victoria; Department for Infrastructure and Transport, South Australia; and Main Roads Western Australia.

In FY2022 we also published our first National Asphalt EPD featuring INNOVO™, with a complete cradle-to-gate assessment of the environmental impacts of the product, also compared to other asphalt mixes.

We work to responsibly manage our products through their life cycle – so that they are safe for our customers, our people, communities and the environment.

Product stewardship is core to our ambition to create a more circular economy, including through lower carbon and recycled product strategies.

Our Product Stewardship Protocol sets the policies and systems that govern our approach to product safety, stewardship assurance activities, and compliance with our legal and regulatory requirements. It establishes a consistent approach to how we assess and manage the health, safety, environment, and sustainability

risks across the life cycle of our products. This includes undertaking a documented assessment of HSEQ risks for all new or modified products.

We communicate information on the safe handling and use of our products, including any potential hazards through safety data sheets, product labels, and safe work method statements. We also provide EPDs for our main products, and are looking to expand the range and scope of these EPDs over time.





Our Operations

Responsibly meeting today's and tomorrow's needs

- Decarbonisation pathway and progress
- Climate resilience
- Innovation
- Sustainable operations footprint
- Customer experience and satisfaction
- Sustainable procurement
- Our Reconciliation Action Plan
- Community engagement and partnerships



Our commitment

Boral was the first in the global construction materials industry to set FY2030 science-based Scope 1 and 2 targets aligned with limiting global warming to 1.5°C,¹ and has joined the Science Based Targets initiative (SBTi) Business Ambition for 1.5°C and the United Nations Framework Convention on Climate Change Race to Zero. We are committed to net zero carbon emissions by no later than 2050.²

Boral's FY2025 and FY2030 targets
from a FY2019 base year

18%

reduction in absolute Scope 1 and 2 emissions by FY2025³

46%











reduction in absolute Scope 1 and 2 emissions by FY2030³

22%

reduction in relevant Scope 3 emissions per tonne of cementitious materials⁴

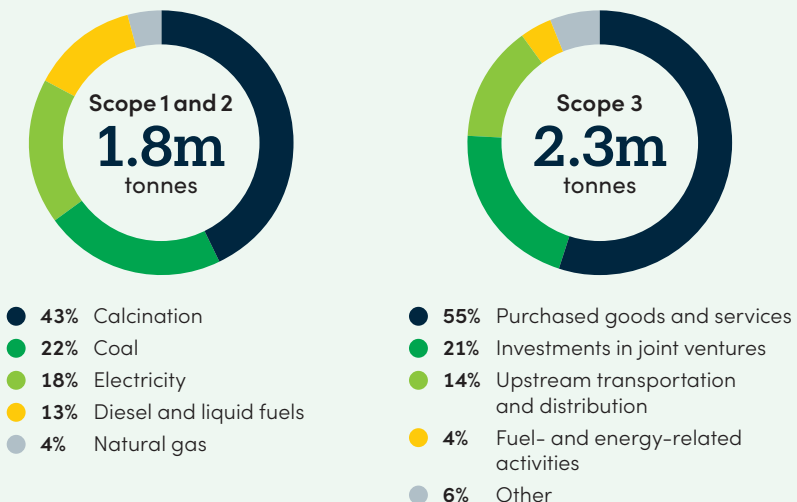
Our decarbonisation levers

We have established a detailed decarbonisation pathway based on five key levers. The pathway is being reviewed and refined as we move forward and is contingent on cost-effective and available technologies.

<p>1 Energy</p>	<ul style="list-style-type: none">  Alternative kiln fuels: Transition Berrima Cement kiln fuel away from coal, increasing energy derived from alternative fuels from 15% to 60%, and explore hydrogen and renewable gas  Renewable energy: Aim to transition to power supply from renewable sources  Energy efficiency: Improve energy efficiency by 5% to 10%
<p>2 Cementitious intensity</p>	<ul style="list-style-type: none">  Lower carbon concrete: Increase use of supplementary cementitious materials  Kiln feed and cement plant optimisation: Implement processes to increase cement plant efficiency
<p>3 Transport</p>	<ul style="list-style-type: none">  Optimise supply chain: Optimise supply chain logistics and routes  Renewable fuels: Explore and implement alternative fuels for Boral and contractor fleets including electrification, biofuels, and hydrogen
<p>4 Sourcing</p>	<ul style="list-style-type: none">  Lower carbon supply chain: Prioritise lower CO₂-e intensity suppliers, including for imported clinker
<p>5 CCUS</p>	<ul style="list-style-type: none">  Mineralised carbon products: Pilot and implement a mineralised carbon product stream  Carbon capture use and storage: Explore and implement emerging CCUS technologies

Our starting point

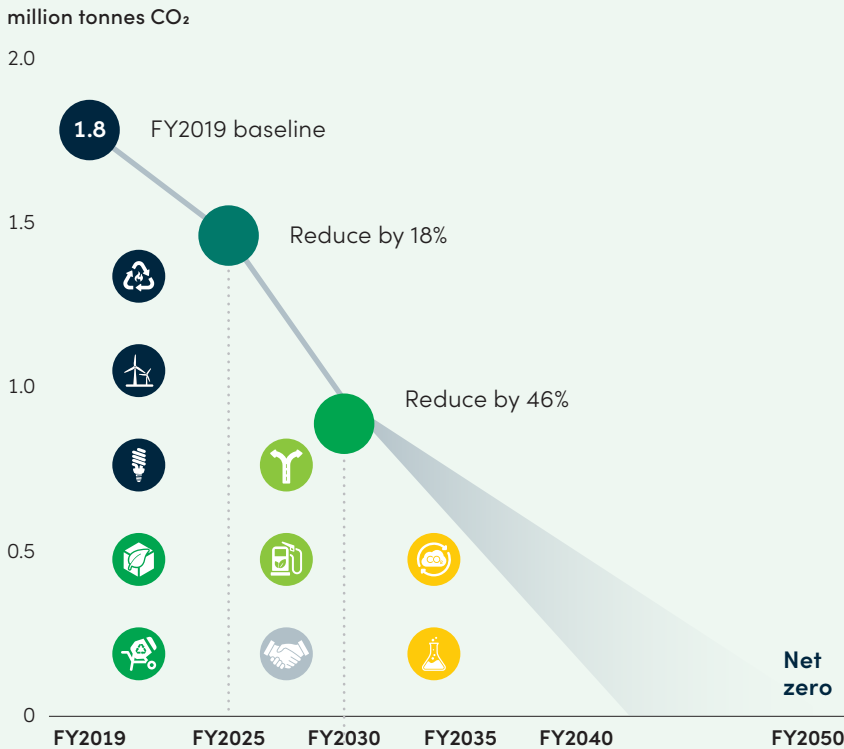
FY2019 baseline CO₂-e emissions



Our decarbonisation pathway

Scope 1 and 2 targets³

- FY2025** Reduce absolute CO₂-e emissions by **18%**
- FY2030** Reduce absolute CO₂-e emissions by **46%**

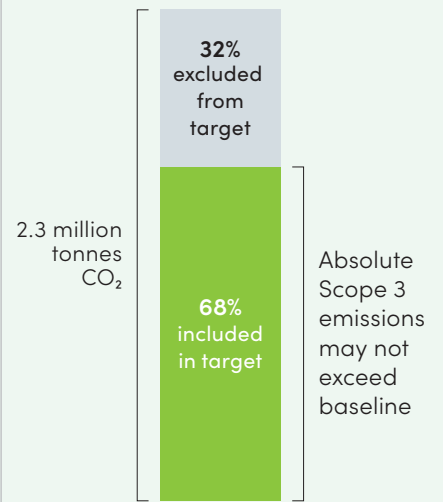


Scope 3 target⁴

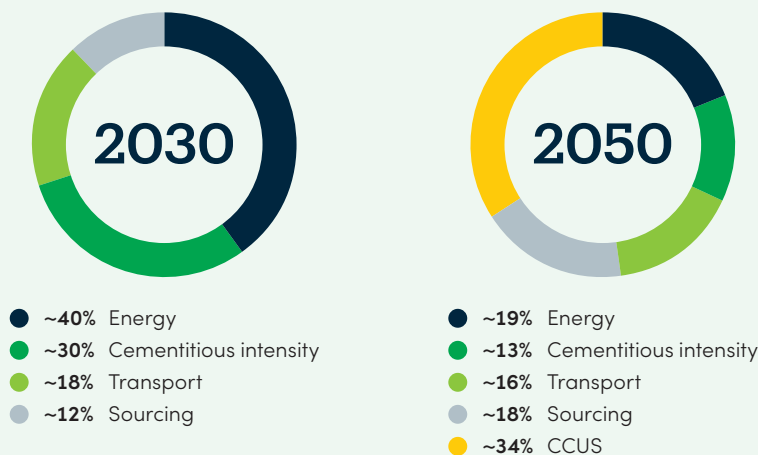
- FY2030** Reduce CO₂-e emissions per tonne cementitious materials produced⁵ by **22%**

Physical intensity target⁴

Applies to a minimum of two-thirds of Scope 3 baseline emissions



Decarbonisation estimated contribution⁶ – Scope 1, 2 and 3



- Based on construction materials, including cement, companies taking action through the Science Based Targets initiative (SBTi).
- While SBTi's methodology permits use of carbon offsets to achieve net-zero emissions post-2030, our decarbonisation pathway post-2030 is prioritising achieving actual operational emissions reductions for Scope 1, 2 and 3. We are exploring the use of offsets for the latter part of our decarbonisation journey and to continue to support customer net zero objectives for products that we supply.
- Aligned with SBTi rules we have an allowance for a 5% exclusion from the FY2019 baseline for Scope 1 and 2 emissions combined, justified by a proportion of our cement clinker being sold to external parties. Whilst this graphic shows an even downward trajectory each year between targets, the decarbonisation achieved annually may be greater or lesser than the glide-path shown, depending on timing of initiatives and availability of cost-effective technology.
- Aligned with SBTi rules and Scope 3 physical intensity target methodology, we have an allowance for a 32% exclusion from the FY2019 baseline for Scope 3. This is justified by excluding selected categories of Scope 3 emissions, or activities within these categories, where we have less capacity to influence or change the emissions intensity of that activity.
- Cementitious materials produced is defined following the Global Cement and Concrete Association definition: Total clinker produced for cement production or direct clinker sale plus mineral components and all clinker substitutes consumed for blending, plus all cement substitutes.
- Estimated contribution is contingent on cost-effective and available technologies.

FY2022 decarbonisation progress

In FY2022 we reduced our absolute Scope 1 and 2 emissions by 8% compared to FY2019, making progress toward our FY2025 target of 18% reduction.

In FY2022 our decarbonisation journey has seen a focus on continued assessment of lower carbon technologies, and progress made on increasing our use of alternative fuels and increasing sales of lower carbon concrete. Our Scope 3 emissions included in our SBTi target increased slightly by 1% compared to FY2019. However, the physical intensity per tonne of cementitious materials increased by 10% compared to FY2019, because of an 8% decline in cementitious materials produced over the same time period.

1 Energy



Alternative kiln fuels

15%

of our kiln thermal energy is provided by alternative fuels

Seeking approvals for alternative fuel use at our Marulan limestone kiln

Chlorine bypass

Commenced construction of the chlorine bypass at our Berrima cement kiln, which supports an initial increase of alternative fuels from 15% to 30%, and to around 60% by FY2025

Hydrogen

Exploring hydrogen technology pilots for our Berrima cement kiln



Renewable energy

3

sites now using solar energy from on-site installations with more being assessed



Energy efficiency

LED lighting

assessments, and ongoing identification and prioritisation of energy efficiency opportunities underway

2 Cementitious intensity



Lower carbon concrete

7%

of total concrete sales by volume were lower carbon concrete products – up from 3% in FY2021

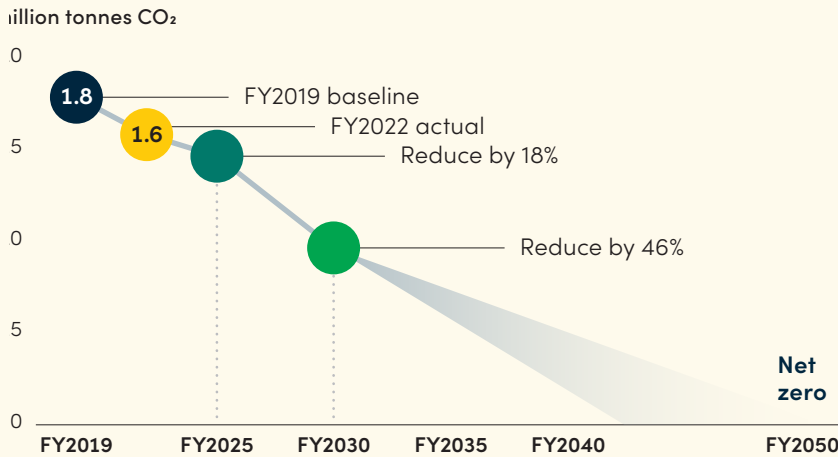


Kiln feed and cement plant optimisation

Plant efficiency

Implementing processes to optimise cement and lime plant efficiency

FY2025 Reduce absolute CO₂-e emissions by **18%** **FY2030** Reduce absolute CO₂-e emissions by **46%**



1. Whilst this graphic shows an even downward trajectory each year between targets, the decarbonisation achieved annually may be greater or lesser than the glide-path shown, depending on timing of initiatives and availability of cost effective technology.

3 Transport

Optimise supply chain

Automated allocation

technology being trialled and assessed with progressive deployment to commence in FY2023

Renewable fuels and efficiency

Hydrogen

Monitoring technology development and exploring pilot projects

4 Sourcing

Lower carbon supply chain

Emissions disclosure

Exploring platforms for supplier disclosure of emissions intensity

Supplier engagement

Engaging with suppliers on lower carbon energy, materials and services

5 Carbon capture, use, and storage

Mineralised carbon products

\$2.4m

grant from Australian Government CCUS Development Fund, supporting re-carbonation technology pilot underway at Berrima cement kiln

Carbon capture

\$30m

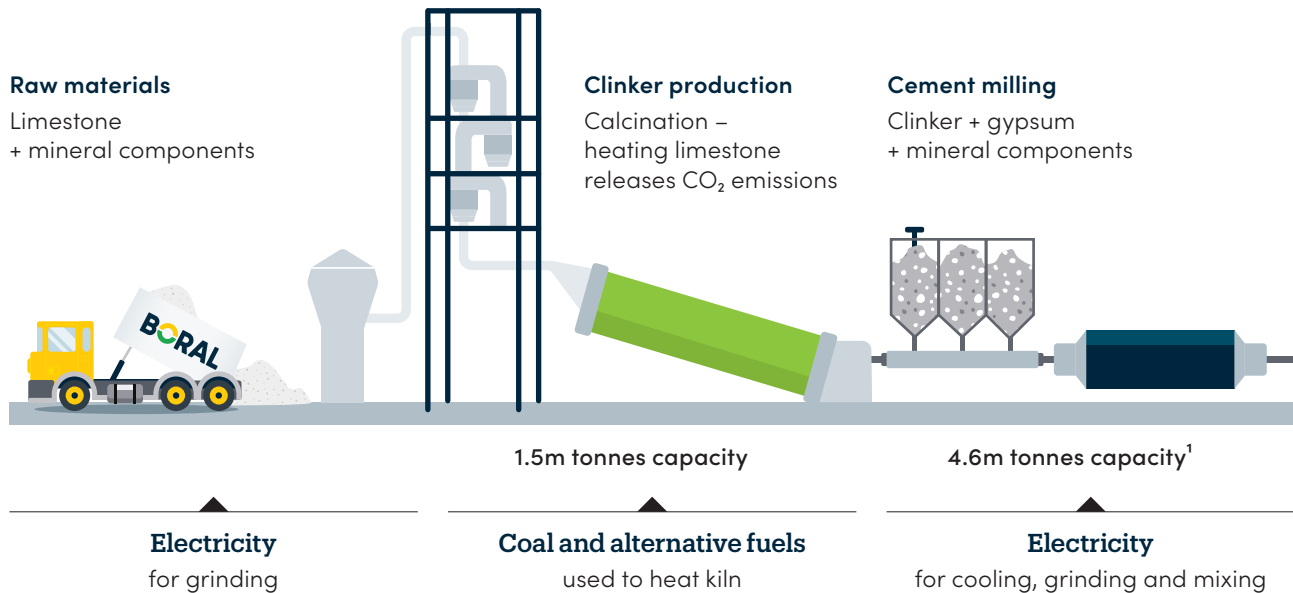
Australian Government grant awarded to explore the feasibility of developing a carbon capture plant in the Southern Highlands – the project will be run in partnership with leading technology group Calix and utilise their innovative carbon technology

Decarbonising cement manufacturing

The manufacture of cement, a key ingredient in concrete, has a substantial carbon footprint. Many of the opportunities for emissions reductions are therefore in our Cement business.

We also import clinker and purchase cement domestically. Reducing the carbon intensity of our clinker and cement purchases over time will be one of the levers to reduce our Scope 3 emissions.

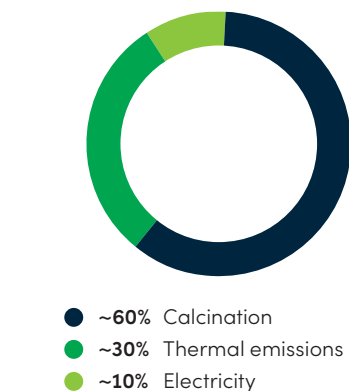
Boral Cement manufacturing process



Cement decarbonisation levers

Project priorities		
Thermal emissions	Alternative fuels	Kiln fuel transition away from coal
	Cement plant efficiency	Kiln feed and cement plant optimisation
Electricity	Renewable electricity	Transition to renewable sources
Process emissions from calcination	CCUS	Exploring re-carbonation technology at Berrima
	Clinker substitution	Increase mineral addition - currently limited to 7.5% under Australian Standard

Source of cement Scope 1 and 2 manufacturing emissions



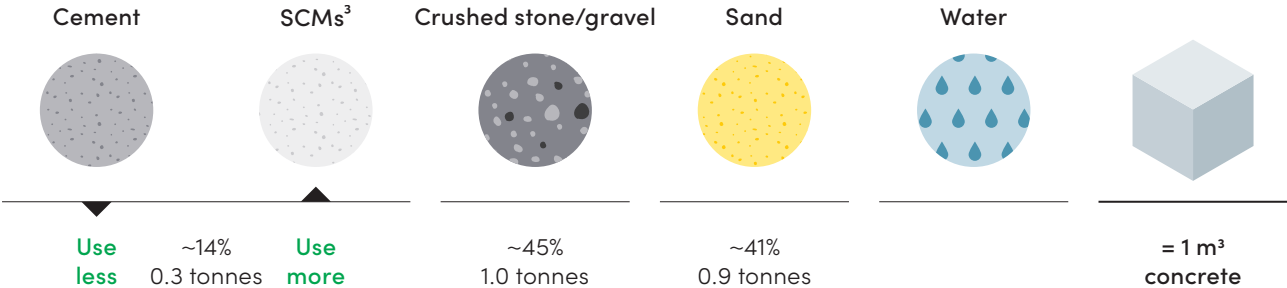
Based on historical average.

1. Includes the Geelong Cement grinding and storage plant, and Boral's 50% share in 1.5 million tonne grinding capacity of the Sunstate Cement joint venture.

Decarbonising concrete

A key lever of our decarbonisation pathway is to reduce cementitious intensity through our lower carbon concrete strategy. By shifting our conventional concrete mixes to our ENVISIA®, Envirocrete® Plus, and Envirocrete® range of products we will reduce our use of cement in the production of concrete.

Typical composition of Boral concrete – by weight²



Lower carbon concrete range	Embodied carbon reduction (for 20 MPa concrete in Sydney region) Compared to IS Council reference case	Portland cement replacement	Engineering performance versus conventional concrete
ENVISIA®	43%	≥ 50%	High engineering performances for advanced applications
Envirocrete® Plus	39%	≥ 45%	Matches standard concrete blends and applicable to all mainstream uses
Envirocrete® 40%	38%	≥ 40%	Matches standard concrete blends and applicable to all mainstream uses



The Boral advantage – ZEP® technology

Our lower carbon concrete products replace cement with supplementary cementitious materials, such as ground-granulated blast-furnace slag and fly ash, and use proprietary binder technology – ZEP® technology – to drive lower embodied carbon concrete while maintaining and/or improving engineering outcomes for our customers.



Net zero concrete offering with additional carbon offsetting

For customers seeking a fully net zero concrete for their project, we supply an integrated package of any concrete covered under a current registered Environmental Product Declaration (EPD) together with credible carbon offsets. This offering is also certified under Australia’s primary carbon neutral standard – Climate Active.

2. Based on recent historical average by weight per cubic metre of concrete.
 3. Our lower carbon concrete products incorporate our proprietary binder ZEP® technology.

Our carbon footprint

Our goals and targets

FY2025

Reduce Scope 1 and 2 emissions by

18%

FY2030

Reduce Scope 1 and 2 emissions by

46%

Reduce relevant Scope 3 emissions per tonne of cementitious materials produced¹ by

22%²

Targets are from an FY2019 baseline

FY2022

Scope 1 and 2 emissions
(tonnes CO₂-e)

▼ 8% to 1.6m

from FY2019 baseline

Scope 3 emissions covered by SBTi target
(tonnes CO₂-e)

▲ 1% to 1.6m

compared to FY2019 baseline

0.95 CO₂-e tonnes

per tonne of cementitious materials produced¹

▲ 10% from FY2019 baseline

Carbon accounting methodology

The Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard provides requirements and guidance for companies and other organisations preparing a corporate-level GHG emissions inventory. Boral follows this standard, including the GHG Protocol Scope 2 Guidance, and currently uses the location-based methodology for corporate sustainability reporting (this report) and mandatory reporting under the Australian National Greenhouse and Energy Reporting Scheme (NGERS).

Scope 1 and 2

In FY2022, our Scope 1 and 2 emissions were steady at 1.6 million tonnes compared to the prior year.

Scope 1 and 2 emissions from the Cement business declined by 1%. However, our emissions associated with coal use remained largely unchanged because we replaced some gas at our Marulan lime kiln with coal in the last quarter of FY2022 to manage energy costs.

Our Scope 1 and 2 emissions decreased by 8% compared to the FY2019 baseline for our climate targets. This is progressing toward our goal of 18% reduction by FY2025 compared to the baseline year.

Going forward, we remain focused on implementing our decarbonisation initiatives (outlined on pages 42–43) to progress towards our emissions reduction targets.

Scope 3

Our approach to Scope 3 reporting follows the principles outlined in the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

We are working to improve our Scope 3 reporting and outcomes, focusing on the emissions sources which are covered under our SBTi FY2030 target, which account for around 68% of our total Scope 3 emissions. We acknowledge that this is an area where we need to continue to improve our data, including by working with our suppliers and other parts of our value chain.

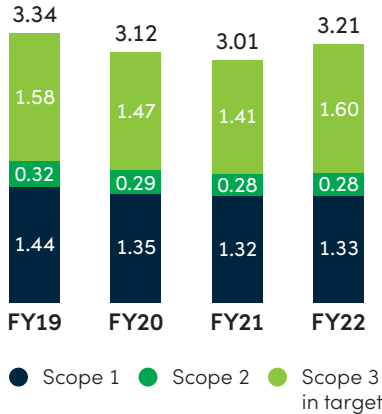
Compared to FY2019, the Scope 3 emissions covered under our SBTi physical intensity target increased by 1%, with the physical intensity per tonne of cementitious materials up 10%, driven by an 8% decrease in tonnes of cementitious materials produced. The decline in cementitious materials produced reflects lower levels of construction activity in NSW in FY2022 compared to FY2019.

In FY2023, we will be reviewing our current Scope 3 target and approach, in light of the September 2022 release of new guidance from SBTi on cement company targets and pathways, including for Scope 3.

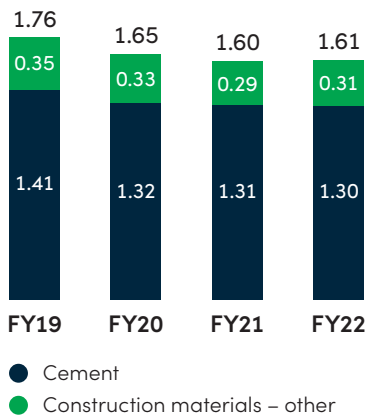
For Scope 3 emissions covered by our target, approximately 44% were related to purchased goods and services, including clinker, and a further 33% were related to our investments in joint ventures.

1. Cementitious materials produced is defined following the Global Cement and Concrete Association definition: Total clinker produced for cement production or direct clinker sale plus mineral components and all clinker substitutes consumed for blending, plus all cement substitutes.
2. The SBTi issued a draft Cement Science Based Target Setting Guidance and Tool in March 2022, with plans to finalise this guidance in FY2023. Boral will therefore review its current Scope 3 approach and target in light of any material changes to Scope 3 methodology that may be recommended by SBTi.
3. Scope 3 emissions only include those categories of emissions sources covered by the SBTi target, which were equivalent to 68% of the FY2019 total estimation of Scope 3 emissions.
4. Renewable and alternative energy sources defined in accordance with Sustainability Accounting Standards Board (SASB) Construction Materials standard excluding the mandated renewable power percentage (RPP) under the Australian Renewable Energy Target.

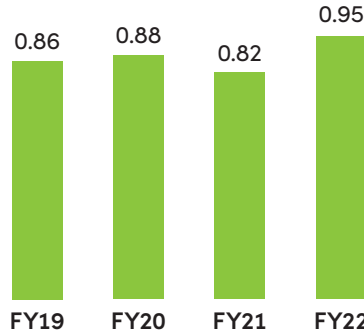
Total emissions covered by SBTi targets³
(million tonnes CO₂-e)



Scope 1 and 2 emissions
(million tonnes CO₂-e)



Scope 3³ physical intensity
(CO₂-e tonnes/tonne cementitious materials produced)

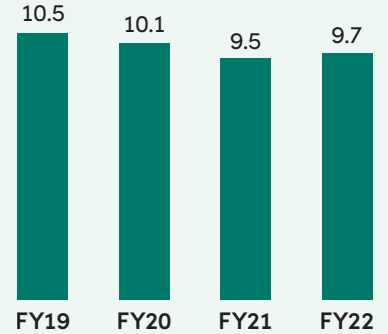


Energy

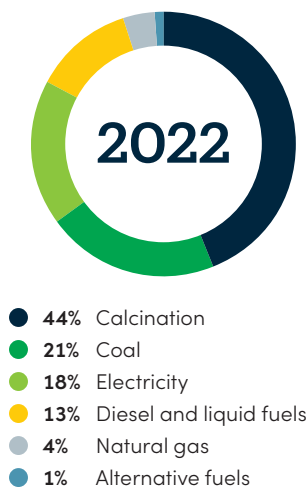
Energy consumption increased by 2% on the prior year. This reflects higher levels of production and activity, largely in our Asphalt and Quarries businesses.

The combined energy contribution of renewable and alternative energy sources⁴ was 6%, down slightly compared to the prior year.

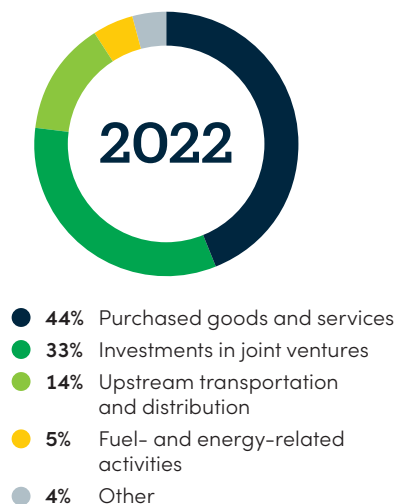
Energy consumption
(petajoules)



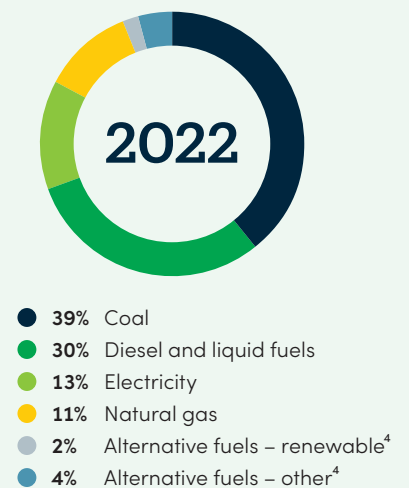
Scope 1 and 2 emissions by source³ (tonnes CO₂-e)



Scope 3³ emissions by category (tonnes CO₂-e)



Energy by fuel source
(petajoules)



Climate resilience

By committing to net zero by 2050¹ and adopting ambitious emissions reduction targets supported by well-defined decarbonisation levers, Boral has embarked on a path that significantly mitigates our future transition risk and seeks to build a competitive advantage. We are also seeking to further understand our physical climate risks and opportunities to enable resilience building for our business and our communities.

Assessing climate-related risks and opportunities

We understand that completing a Taskforce on Climate-related Financial Disclosures (TCFD) scenario analysis is an important step to obtaining greater insight into the potential future risks and opportunities of climate change. It enables us to adapt Boral's strategy to strengthen our resilience to climate-related risks, maximise any opportunities, and prepare for the transition to a low-carbon economy.

In FY2021 we completed a two-year program to use TCFD-based scenario analysis to further assess our most significant climate-related risks and opportunities, assessing both physical and transition risks and opportunities, including the risk of an introduction of a broad-based carbon price in Australia.

Physical climate change risk analysis

We considered two climate scenarios based on the Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC AR5), which considers greenhouse gas concentration trajectories, referred to as Representative Concentration Pathways (RCPs). These scenarios were:

- the no or limited mitigation scenario, where global warming is likely to increase by nearly 4°C by 2100 (RCP8.5); and
- the scenario where strong emissions mitigation actions are expected post-2040 and the global temperature increase is more likely to stay below 2°C by 2100 (RCP4.5).

The assessment covered three time horizons being: short-term (< 5 years), medium-term 2030, and long-term (2040, 2050). It focused on 277 sites, which were grouped in six strategically important clusters and represent more than 75% of our sites. We also considered six strategic shipment and rail routes.

Five climate hazards were selected for in-depth analysis:



Bushfires



Drought and water stress



Heatwaves



Heavy precipitation and riverine flooding



Number of rain days

The results of scenario analysis indicated that three out of the four hazards show a change that may result in increased risks for Boral: heat stress, drought and water stress, and bushfires. The analysis over the three time horizons points to a gradual increase from 2035 to 2050 in the climate indicators for these three hazards, particularly under the RCP8.5 scenario.

However, only two hazards, drought and water stress, and bushfires, were identified as having the potential to have a significant adverse financial impact on our operations.

A summary of the projections for 2050 under both scenarios, indicating the level of impact for each climate indicator – which is defined in relation to the exposure and the change in the hazard – is provided on page 50.

We also recognise that we are already seeing the direct impact of climate change, and we note the actual impact of extreme weather events on our FY2022 financial results, being an adverse \$45 million EBIT impact due to the combined impact of number of rain-days and floods on our sales volumes and additional operating and repair costs.

We are integrating Bureau of Meteorology climate outlooks – weeks, months, and seasons – into our forward planning as a qualitative overlay, and will improve our use of this information for a more thorough understanding of the quantitative impacts of a changing climate using three-month forward assessments.

In FY2022, we also commenced an all-of-business review of bushfire and extreme weather hazards, including flooding and inundation, across our sites. This assessment will utilise information from our insurers to quantify risk, identify mitigation strategies and environmental controls in place, and plan for improvements to mitigation approaches to build resilience for our sites.

Carbon price risk scenario analysis

With the recent change in government at the national level, we expect the climate change policy environment in Australia to change to meet more ambitious national carbon reduction targets.

With a plan to significantly lower the embodied carbon in our concrete products and use more recycled and lower carbon materials throughout our value chain, we are mitigating future carbon price exposure, creating a competitive advantage, and offering our customers attractive lower carbon concrete options to help meet their own decarbonisation goals.

To further understand the financial impact of the potential introduction of a broad-based or site specific carbon price, we are reviewing how we apply carbon price scenarios to both capital and operational decisions. We already monitor carbon offset pricing in relation to investments and initiatives at sites that are captured under the Australian Government's Safeguard Mechanism. Where those decisions may lead to an increase in emissions above the baseline determined by the Clean Energy Regulator, we consider the potential cost of Australian Carbon Credit Units to offset excess emissions as part of the overall financial assessment.

In FY2023, we will monitor the developing carbon policy environment and consider the introduction of an internal carbon price scenario assessment to investment and operational decisions on a broader basis across our business and value chain.

Further detailed information on the TCFD-based scenario analysis methodology and findings can be found in Boral's *Sustainability Report 2021*.

Potential climate-related physical and transition opportunities

A changing climate, with increased risks of bushfire, flooding, other extreme weather events, and sea-level rises, will see a change in how we plan and build our roads, houses, offices, schools, hospitals, and other infrastructure, leading to some potential 'second-order' opportunities for Boral as one of Australia's largest suppliers of construction materials, and construction and demolition recycling services. We have started considering these with a view to building this understanding into our broader strategic planning and disclosures.






Some of the opportunities we have identified include:

- Increased rebuilding programs for infrastructure, towns, and cities, as we see greater frequency of, and damage caused by, extreme weather events and bushfires
- Greater demand for more resilient and fire-proof materials in flood and bushfire prone areas, supported by increased building controls or standards in response to these hazards, and extension of areas covered by such controls
- Greater demand for buildings using concrete due to its thermal characteristics, improving heating and cooling efficiency compared to most other construction materials
- Increased requirement for flood, sea-level rise and surge mitigation infrastructure, such as levees and artificial reefs, which will be made almost exclusively of concrete due to its resilience and strength
- Greater expectations of longevity of buildings and infrastructure to avoid the need for regular rebuilding or renovating, thus reducing waste and emissions, with concrete being an ideal material for structures that need to stand for centuries, and
- Growing circular economy opportunities supported by an understanding that improving recyclability and recycling plays an important role in reducing emissions. Boral's increasing role in the circular economy via recycling of construction and demolition waste, expanding use of waste materials for energy, and increasing use of recycled materials in all our products, provides a strong platform for improved sustainability impacts and commercial gains.








Scenario analysis potential climate risk and EBIT impact






RCP8.5 – 4°C global warming scenario in 2050

Cluster					
Sydney	●	●	●	●	●
Southern Highlands, NSW	●	●	●	●	●
Melbourne	●	●	●	●	●
South East Queensland	●	●	●	●	●
Perth	●	●	●	●	●
South Australia	●	●	●	●	●
Potential adverse EBIT impact	Significant	Modest to significant	Insignificant ¹	Neutral to positive impact	Neutral to positive impact

RCP4.5 – less than 2°C global warming scenario in 2050

Cluster					
Sydney	●	●	●	●	●
Southern Highlands, NSW	●	●	●	●	●
Melbourne	●	●	●	●	●
South East Queensland	●	●	●	●	●
Perth	●	●	●	●	●
South Australia	●	●	●	●	●
Potential adverse EBIT impact	Significant	Modest to significant	Insignificant ¹	Neutral to positive impact	Neutral to positive impact

Climate hazards

-  Bushfires
-  Heatwaves
-  Number of rain days
-  Drought and water stress
-  Heavy precipitation and riverine flooding

Risk rating

- High
- Medium
- Low
- Neutral or beneficial

1. Excludes potential second-order impacts.

We recognise that investing in innovation and technology is vital to meet the evolving needs of the construction industry, to create new market opportunities, and to strengthen our position as the partner of choice for our customers.

Boral's Innovation team aims to lead the way in developing high-performing sustainable products and solutions for our industry, including by leveraging strategic partnerships and funding. To accelerate our research and development efforts, we are also partnering with academia, government and industry innovation hubs.

Boral Innovation and UTS Boral Centre for Sustainable Building

Boral has an in-house centre of excellence responsible for developing advanced cement and concrete solutions for our customers. Boral Innovation is central to enabling transformation through innovative products and consultation with our customers. Our focus on engagement and action is backed by intensive research and development through our dedicated and talented team who work in collaboration with many sections of the company creating a world future generations will be proud of.

Established in FY2020, our five-year partnership with the University of Technology Sydney (UTS) – the UTS Boral Centre for Sustainable Building partnership – is bringing together industry technology and engineering experts to accelerate lower carbon concrete product innovation.

Our ambition, through the collaboration with UTS, is to accelerate our research into new binders and develop the next generation of ENVISIA® concrete. We want to push lower carbon boundaries even further while maintaining and improving on the practical properties of regular concrete.

Other R&D collaborative efforts

Boral is highly engaged with collaborative industry innovation hubs, including Cooperative Research Centres (CRCs), to drive broader adoption of innovative and sustainable solutions in the construction industry and benefit from Australian Government funding allocated to the CRCs and other competitive funding schemes.

In August 2020, in collaboration with UTS and Highlands Concrete Constructions, we commenced a two-year research project that will accelerate our research into new binders and develop the next generation of ENVISIA® concrete. The \$1.5 million research project is co-funded by the UTS Boral Centre for Sustainable Building and the Innovative Manufacturing CRC.

We are a Tier 1 partner of the RACE for 2030 CRC, which is an industry-led cooperative research centre established in 2020, aiming to drive energy innovation across the supply chain. In 2020, RACE for 2030 CRC was awarded \$68.5 million of Australian Government funding.

Boral is also a founding industry partner of the Materials & Embodied Carbon Leaders' Alliance (MECLA), an industry, government and NGO collaboration working to decarbonise Australia's building and construction industry.

In June 2021, we were awarded a grant of up to \$2.4 million from the Australian Government's CCUS Development Fund towards a pilot carbon capture and storage project. In May 2022 Boral was also awarded a \$30 million Australian Government grant to explore the feasibility of a carbon capture plant (see below).

Leading the way to lower emissions using innovative technology

In partnership with leading technology group Calix Limited, Boral will explore the feasibility of developing a carbon capture plant in the NSW Southern Highlands after being awarded a \$30 million grant from the Australian Government to utilise Calix's innovative carbon technology.

One of the biggest challenges for the cement industry is reducing the carbon released when limestone is heated to very high temperatures in a cement kiln during the manufacturing process. Boral and Calix will work together to assess the viability of building a commercial-scale plant that can capture and compress up to 100,000 tonnes per annum of this CO₂.

Calix's technology re-engineers the existing process flows of a traditional calciner, indirectly heating the limestone via a special steel vessel. The unique process enables CO₂ to be captured as it is released from the limestone.

The project will occur in three phases to minimise investment risk. The first phase of the project is a detailed commercial model and pilot design which will assess the engineering and commercial viability of the project and is expected to be completed in June 2023. If successful, Boral will then consider further investment into the next phase of the project which involves technical and engineering design.

Sustainable operations footprint

We are committed to reducing the environmental impacts of our operations and, wherever practicable, eliminating these altogether. In addition to our ambitious decarbonisation targets and increased use of recycled materials in our products, we are investing resources to improve our water efficiency, reduce the waste generated in our operations and divert more of that waste from landfill, and strengthen our biodiversity management.

Environmental compliance

We work to ensure we meet, and preferably exceed, compliance with environmental legislation and regulations relevant to our operations.

We manage compliance obligations through an environmental management system that covers internal and external environmental standards and requirements.

We conduct a range of compliance activities focused on environmental regulatory compliance, in line with our approach to HSE assurance outlined on page 27.

Operational teams are responsible for compliance with environmental regulations, with specialist functional support provided. In FY2022, the HSE team conducted 32 internal environmental compliance audits across our operations and initiated corrective actions based on audit findings.

The HSE team completed additional audits across all our businesses, focusing on water management, land management, and waste management. These site verification audits were conducted across eight sites.

Environmental incidents and infringements

In FY2022, Boral's serious environmental incident frequency rate (SEIFR)¹ was 0.3, steady on FY2021.

Boral Australia received no penalty infringement notices during the year for events that occurred in FY2022. However, Boral did agree to contribute to two environmental projects (\$50,000 to each) in connection with the resolution of a matter in the Melbourne Magistrates' Court during FY2022. That matter related to an emulsion spill incident that occurred in November 2019 at Boral's Asphalt Williamstown (Victoria) operations. One payment was made to the Bunurong Land Council Aboriginal Corporation for a project investigating the cultural values of land and water. The second payment was made to the Friends of Williamstown Wetlands, in partnership with Hobsons Bay City Council, for habitat fencing and revegetation work in the wetlands.

In the recent devastating floods in Lismore, NSW, several storage tanks and related infrastructure at Boral's South Lismore asphalt depot were damaged and bituminous material consequently discharged into flood waters. Boral Asphalt continues to work with residents, Lismore City Council and the NSW Environment Protection Authority to address these impacts.



1. Serious environmental incident frequency rate is defined as Level 3 (or greater) environmental, regulatory or community incident rate (per million hours). Incident thresholds are determined by using the Boral HSEQ risk matrix.

Water

For all our operations, particularly our concrete, cement and quarry businesses, water is an essential resource. We use water to manufacture concrete and cement, for dust suppression, particularly in our Quarries business, and for cleaning and sanitation across our operating sites.

We used approximately 1.1 gigalitres of municipal water in our operations, in line with the prior year. Most of our municipal water use is in Boral's concrete and quarries operations. At our larger sites, including our quarries, we also source water from on-site dams and tanks, that in FY2022 were replenished by exceptionally high rainfall across most areas. In some locations we also have licences to access metered water from rivers and groundwater bores.

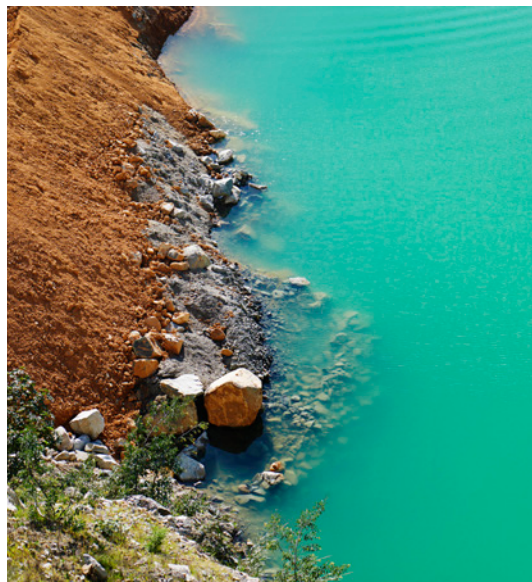
We use recycled water in our production processes across many of our businesses, including concrete, quarry, and asphalt. While some sites use 100% recycled water for their production processes, this proportion varies across our operations. Wash water, and first-flush stormwater at Boral concrete plants is regularly recycled back into the production process. We continue to invest in increasing our use of recycled water.

Measuring water use at our high water-stress sites

In FY2020 and FY2021, as part of our climate risk, resilience, and environmental risk management approach, we identified 25 Boral quarry and cement sites as being at high risk of water stress during periods of drought. During FY2022, this number was further refined to 17 following an operational review. This equates to around 25% of our quarry sites overall, and many of these locations are primarily reliant on non-municipal water sources, such as dams and groundwater.

In FY2022, we completed a major project to install water meters at these sites to measure water use and establish a baseline for future water management initiatives. Once complete, this baseline data will also allow us to set site-specific water use reduction targets. Given the very high rainfall experienced at most of our sites in FY2022, it was not a 'normal' operating environment for setting water baselines, so we anticipate this data collection and baseline setting process will need to extend through FY2023.

We have also completed trigger action response plans for our high-risk sites to prepare for periods of drought. These plans set out a certain set of conditions, the triggers, with actions for site managers and their teams to follow when those trigger events occur. For example, at some sites the trigger will be based on monitoring of dam levels, and when the water falls below a set level, plans, including restricted management of water use and seeking alternative water sources, are enacted.



Additionally, 17 sites in NSW across our Concrete, Asphalt and Recycling businesses, are participating in a water monitoring pilot sponsored by Sydney Water. Meters and sensors have also been installed for these operations. The purpose of this project is to facilitate the identification of leaks and other usage anomalies, enable water consumption baselines to be established, and to assist with identifying water efficiency opportunities.

Wastewater quality

We work to comply with environmental regulations in relation to the quality of water discharges and stormwater management to avoid adverse impacts on local water bodies. We have well-established internal compliance systems, and regulatory controls through licences and permits.

Across our operations, a relatively small amount of process water is discharged to sewers for treatment by water authorities, in line with our existing licensing conditions at relevant sites.

When building or acquiring new facilities, our due diligence process includes assessing the risks to water quality from site discharges. We also ensure sufficient water availability and supply, which may require assessing river catchments.

In FY2022, following publication of the Global Industry Standard on Tailings Management, we commenced a review of the applicability of this standard to our operations. At the completion of this review during FY2023 and if required, we will integrate relevant aspects of this standard into our HSE operating process.

Waste

Boral is playing a greater role in the circular economy by reusing by-products from our processes, such as concrete washout, recycled asphalt pavement, and quarry by-products. We are also focused on reusing production by-products and waste materials from other industries in our products, and as fuel for our kiln. We are also one of Australia's largest recyclers of construction and demolition waste and are growing our Circular Materials Management services for our customers (see page 34).

In FY2021, we partnered with a new waste services provider to improve our approach to the management of the waste generated by our operations. This service excludes material which we largely re-use on site or in our processes, such as concrete wash-out waste and recycled asphalt paving, and is assisting Boral gather data on all our waste streams. In FY2022 we now have access to a full year's data on the waste we generate and have removed, by site, covering over 25 waste streams, including how much of this waste is being recycled or diverted away from waste landfill sites. Based on the insights provided by this data, waste improvement plans are being developed, with initiatives underway.

In FY2022, via this service, we generated, and had removed, over 7,200 tonnes of waste, with 58% of this being recycled or diverted from landfill. Some of this diverted material included maintenance shutdown waste from our Berrima cement production site, which was collected, taken to a third-party processor to form processed engineered fuel and then returned to Boral

at Berrima to be used as a fuel for our cement kiln. This is a closed loop in action, diverting over 90% of waste from this shutdown away from landfill.

Our operations generate only small volumes of hazardous waste (such as waste oil), which is managed in accordance with government regulations.

Land management, rehabilitation, and remediation

Given our substantial land footprint across a broad geographic region, responsible land management is an integral part of how we operate.

For each of our extraction and operating sites, we carefully plan to mitigate any adverse environmental impacts – from development applications and operational land use through to rehabilitation and end-use planning and development.

Boral's Property and Environment teams work closely with our operations to ensure we meet our environmental rehabilitation and remediation obligations.

These obligations relate to rehabilitation of sites, or clean-up of legacy contamination issues, at the appropriate point in the life cycle of these operations. They enable the ongoing use of the relevant land, which may include recreational, industrial or other higher-value end use. Following the initial assessment of a quarry rehabilitation obligation, the estimated liability is reassessed on an annual basis, and whenever there is a change in rehabilitation requirements.¹

How Boral and Landcare helped save the Ormeau Bottle Tree

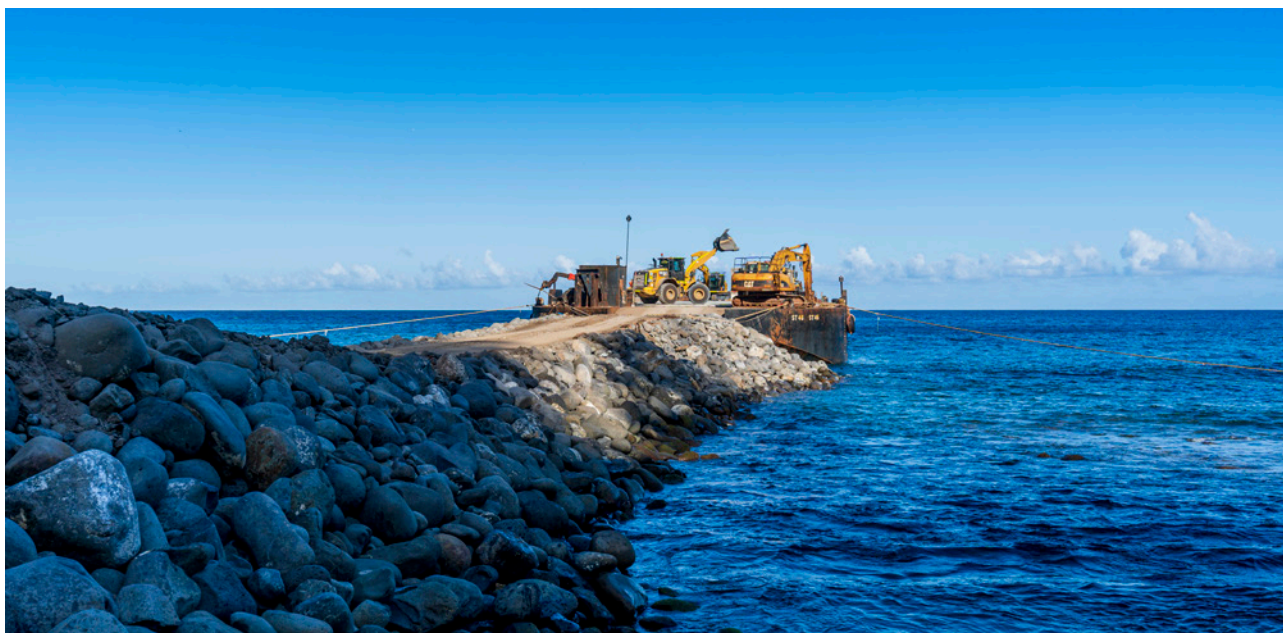
The Ormeau Bottle Tree is a unique and rare species, and ten years ago, when it was first listed as a threatened species, there were only 161 known wild plants, across only eight sites in Queensland – one of those sites was land owned and operated by Boral. Understanding the urgent need to protect and support this species, Boral through its Ormeau Quarry Liaison Group, engaged with local stakeholders including the Pimpama River Revegetation Partnership, the City of Gold Coast Council, the Ormeau Progress Association, and the North East Albert Landcare Group, to implement a long-term staged revegetation program.

This program has seen over 100,000 native trees of varying species planted to restore the rainforest, keep weeds down, and generally enhance the ecosystem around existing bottle trees. This partnership with Landcare and the local community has also seen improvements in the health of the riparian zone alongside the upper reaches of the Pimpama River.

As part of this process, Boral also established a 77-hectare Environmental Offset project, which will make a positive contribution to the ecological values of the valley and protect the tree's habitat for generations to come.



1. See Note 3.6 of the financial statements in the *Boral Annual Report 2022* for details of the provision for anticipated future costs associated with remediating and rehabilitating sites, based on our estimate of associated costs.



Biodiversity

Avoiding adverse impacts to the diversity of plant and animal species at and around our operational sites is an integral component of our land management efforts. We have management plans in place for all sites identified as having biodiversity values.

Biodiversity obligations that are integrated into site permits are audited under Boral's environmental audit program to verify that we are meeting our commitments. These are in accordance with relevant site-specific, regional, and national requirements.

All greenfield sites or expansions to existing operations undergo comprehensive internal and – where required – external assessments to identify biodiversity risks and impacts. When we identify risks, we address them through a range of mitigation activities such as offsets (either on- or off-site), management controls, and biodiversity area enhancements.

In FY2019, in partnership with the NSW Government through the Biodiversity Conservation Trust, we commenced developing our first fully owned biodiversity offset site at Coolumburra. This 960 hectare site supports five native vegetation plant community types providing habitat for two threatened species, the Koala and Large-eared Pied Bat (LEPB). Registration of the land as a Stewardship Site will generate over 3,600 ecosystem credits, that recognise the value of the vegetation and the habitat present on the land, combined with over 7,000 species credits recognising the presence of the Koala and LEPB. A significant proportion of the credits generated will go towards meeting Boral's biodiversity offset obligations for new and progressive works at the Peppertree Quarry and the Marulan South Limestone mine.

Our Quarries business has the highest potential to impact biodiversity – and we actively rehabilitate our quarries over time. In FY2022, we rehabilitated 27.5 hectares of land, accounting for about 1% of land disturbed through our operating activities, totalling about 3,872 hectares.²

Air quality

We have rigorous systems and processes to minimise air emissions across our operations. These are tailored to the type of operation and site-specific regulatory requirements.

Where we have identified that air emissions may occur, our operations have engineering and procedural controls. These controls range from scrubber and filtering systems at major manufacturing sites, such as for cement, to simpler dust suppression measures, such as for water sprinklers that are typical of quarries and concrete batching plants.

Where relevant, our operations have either continuous or scheduled air quality monitoring programs. Data is available to local communities through regulatory reporting or stakeholder engagement programs such as quarry liaison group meetings and information posted online.

In FY2021, we installed a real-time dust monitor at our Berrima Cement facility to improve local air quality management. The dust monitor, located on our boundary nearest to the New Berrima community, is linked to the site's control room. This is enabling the site to respond to potential dust emission events more rapidly before they escalate.

Boral's Linwood quarry site in South Australia is equipped with real-time monitoring equipment to enable close monitoring of air quality. The monitoring equipment has recently been upgraded to incorporate alert functions and visual displays which serve to forewarn site personnel if an action level is approached, enabling timely preventative response. The quarry will be making air quality readings publicly available on the site web page as part of their new operating conditions.

When we exceed regulatory limits, we report these instances in accordance with regulatory requirements. We also address the underlying causes to ensure we maintain ongoing emissions within required levels.

We report data on various air emissions to the National Pollutant Inventory. Our approach to dust management is described on page 26.

2. Rehabilitation and disturbance figures are aligned with SASB Construction Materials Standard which requires reporting on rehabilitation of land during the reporting period compared to the cumulative total of land disturbed at current operational sites.

Customer experience and satisfaction

We aim to deliver a superior customer experience by listening to our customers to better understand their needs, and then focusing our efforts on delivering continuous improvements in products and services to better meet those needs.

We also strive to respond to changing customer trends and demands by innovating to enhance our product offering and adopting digital technologies to better serve our customers. This includes offering further services in recycled construction materials and lower carbon materials.

Our customers include:



Homeowners



Builders



Commercial developers



Infrastructure contractors



Local, state and federal government



Architects and designers

Measuring customer satisfaction

We seek feedback from our customers to understand how we can serve them better through three types of net promoter scores (NPS). These key performance indicators help us measure customer satisfaction and loyalty.

Types of NPS	Measures
Interaction	Individual customer interactions
Episode	Customer journey
Strategic	Brand

We monitor our Interaction NPS, known as *The Vibe*, daily across each of our product lines: quarries, concrete, asphalt and cement.

We issue this feedback daily to our frontline team to enable them to rectify any concerns and improve the experience of our customers. Each month, the insights gained through our NPS are also shared with business leaders and used to inform systematic improvement initiatives.

We established a baseline Episode and Strategic NPS in our Concrete business in FY2019, and updated this in FY2021, obtaining feedback from more than 5,000 customers and potential customers in this process. In Concrete, our Episode and Strategic scores increased across this two-year period by 15 points, which reflects the business's positive efforts in responding to customer feedback. We plan a further update to this in FY2023.

In FY2021 we also expanded our NPS survey to our Cement and Quarries businesses, setting the baseline at that point, with Episode and Strategic scores for both reflecting positive customer endorsement, and we plan to update these in FY2023.

In FY2022 we surveyed Asphalt customers and potential customers for the first time and set the benchmark for future assessments.

Apart from the scoring process, the qualitative feedback from these surveys provides valuable insights into opportunities for us to continue to improve our customers' experiences.





Responding to changing customer needs – innovation and sustainability

Boral is introducing and expanding its use of digital technologies to support the customer journey, including new digital docketing to improve the flow of information with our customers, and marketing automation tools which enhance the customer experience from lead to order.

Our **Boral Connects** technology provides an efficient way for our customers to interact with us and manage their concrete deliveries. Using this portal customers can:

- **Place and modify orders at their convenience:** Request a plus load for their pour; confirm or cancel orders without needing to call
- **Manage Concrete Orders:** View past, current and future orders by job site and status
- **Monitor deliveries:** Including viewing the truck on a map with estimated arrival times, and setting up in-app notifications
- **Access dockets and download reports:** Access all delivery information for customer daily orders, and produce reports

Customers representing more than 70% of our total annual volume are now enrolled to use Boral Connects, with usage continuing to increase.

In addition, we are responding to growing requests from our customers for more sustainable services and products including, construction and demolition waste management; increased use of recycled materials; lower carbon cement, concrete and asphalt; carbon neutral certified concrete; lower carbon logistics; and greater focus on products and services with social benefits, such as improving Aboriginal and Torres Strait Islander employment outcomes and social procurement. To support our growing sustainable products and services offering we also aim to provide our customers with all the information they need to make the most sustainable choices, meet a variety of environmental and sustainability certifications, and complete their own external and internal reporting. We do this by providing Environmental Product Declarations for our main products, together with reports on carbon intensity and recycling rates for major projects.

Sustainable procurement

We understand that sustainable procurement is vital to support our environmental and social priorities and ambitions, as well as the sustainability requirements and goals of our customers, investors and other stakeholders.

Our priorities for sustainable procurement and supplier engagement at Boral include:



Support sustainability reporting

both mandated and voluntary requirements



Promote diversity and inclusion

in our supply chain



Reduce the carbon footprint

of purchased goods and services



Ensure safe, ethical and sustainable practices

in our supply chain, including addressing modern slavery risks

Our sustainable procurement approach

Our approach to sustainable procurement is underpinned by our Sustainable Procurement, Indigenous Procurement, Small Supplier Payment, and Human Rights policies, and our Supplier Code of Conduct. Together, these policies demonstrate our commitment to purchasing goods and services in a responsible way, adopting a proactive approach for the inclusion of Indigenous businesses in our supply chain, respecting and promoting human rights, and setting out the minimum expectations we have of our suppliers in relation to health and safety, environment, human rights, labour standards, including prohibition of child labour, and ethical standards.

We also use ISO 20400:2017 as guidance for our approach, and have incorporated sustainability considerations into the Procurement Management System. Targets for social procurement expenditure and supplier numbers, Scope 2 and 3 emissions, and modern slavery effectiveness indicators have also been embedded into key performance indicators for the Procurement function.

Promoting diversity and inclusion in our supply chain

We continually seek ways to grow Boral's Indigenous procurement and social procurement spend and supplier numbers in partnership with online business directories such as Supply Nation and Social Traders and not-for-profit organisations. In FY2022 we spent \$5.5 million with Indigenous suppliers, a decrease on the prior year's \$6 million expenditure.¹ Our social enterprise purchases increased 2% to \$500,000. As an example, all our stationery is supplied by an Aboriginal-owned company and increasingly we are also using services, including technical services, from Indigenous suppliers.

Boral has committed to supporting Australian small businesses by providing payment terms of 30 days or less, and simplified payment processes. We encourage our small business suppliers to identify their eligibility. This is communicated to new suppliers at the onboarding stage as well as on our website. Boral complies with our reporting obligations under the *Payment Times Reporting Act 2020*.

1. FY2021 Indigenous supplier spend has been restated due to additional suppliers being classified as being Aboriginal-owned.

Reducing our supply chain carbon footprint

Boral has set ambitious carbon emissions reduction targets for FY2025 and FY2030, and decisions we make regarding the fuels we use, the vehicles and equipment we operate, and the embedded carbon of any purchased materials, are critical to supporting this ambition. We engage with our suppliers on opportunities for lower carbon products and services, and are also assessing digital platforms for supplier disclosure of their emissions and other sustainability-related metrics.

Ensuring safe, ethical and sustainable practices

We screen and evaluate our suppliers through our onboarding processes, which includes ensuring they are aligned with Boral standards as outlined in our Supplier Code of Conduct. The process is differentiated for our domestic and international suppliers. Our domestic suppliers and contractors are required to complete a pre-qualification process and onboarding questionnaire to ensure awareness of our policies and Supplier Code of Conduct. Our international suppliers complete a pre-qualification questionnaire to assess supply chain risk based on factors such as corruption and bribery, human and labour rights, HSE compliance and quality standards. Based on the results of this risk evaluation, we may also require satisfactory findings from an on-site visit to a supplier's premises and/or a third-party evaluation.

We use a global independent screening platform to identify any potential areas of risk associated with elements such as financial crime, fraud and human rights abuses within our supply chain. We also review our risk assessment of international suppliers for modern slavery risk. In FY2022, this annual review was extended to selected categories of domestic suppliers such as security and cleaning services, which are considered at higher risk of modern slavery practices.

Our Modern Slavery Statement 2021 provides further information on our approach to modern slavery and our planned actions to further strengthen how we assess and address these risks. Boral's Modern Slavery Statement 2022 will be published in late 2022.

Working with suppliers to reduce modern slavery risk

In FY2022, and as part of our modern slavery management process, a total of six on-site ethical audits were conducted on overseas-based suppliers identified as higher risk. Only minor issues were identified by our auditor. An example of a minor issue was the supplier not displaying a human rights and/or modern slavery policy on their site noticeboards. In response, all six suppliers submitted rectification feedback and related documents, training plans and updated policies.

All those issues have now been addressed and we have no outstanding rectifications to track for those suppliers. Furthermore, all six suppliers responded very positively to the audit and saw it as an opportunity to not only improve their controls but also raise awareness amongst their management, employees, and contractors.

Our Reconciliation Action Plan

We are committed to building strong and long-lasting relationships with Aboriginal and Torres Strait Islander peoples and communities, and empowering Aboriginal and Torres Strait Islander peoples and communities by driving improved social and economic outcomes. We also work to build respect for, and an understanding of, Aboriginal and Torres Strait Islander cultures, histories and achievements.

Our Innovate Reconciliation Action Plan

We adopted our first Reconciliation Action Plan (RAP) in 2019, and launched our second RAP, an **Innovate RAP**, in November 2020. This RAP outlines our actionable commitments for 2020–22 to deliver meaningful progress towards reconciliation, across four key pillars: relationships, respect, opportunities, and governance. We are extending the timeline for our Innovate RAP commitments to reflect the impact of COVID-19 on our engagement program.

To date, across FY2021 and FY2022, we have made meaningful progress across each of these pillars including returning a parcel of culturally significant land at our Waurn Ponds site in Victoria to the Traditional Owners, the Wadawurrung People; spending more than \$11.6 million, including \$5.5 million in FY2022, with Aboriginal and Torres Strait Islander-owned businesses; continuing to celebrate National Reconciliation Week and NAIDOC Week with our staff and Aboriginal communities; launching a Boral wide Cross Cultural Awareness program to ensure our Boral employees learn and become more aware of Aboriginal issues, and are better equipped to work

and consult with Aboriginal people and Communities; launching a self-directed Aboriginal Community Network to support our Aboriginal and Torres Strait Islander staff; embedding Aboriginal heritage and cultural protocols by assigning all of our meeting rooms at our North Ryde and Milton Offices with names in Aboriginal Language of Aboriginal groups and also of well-known Aboriginal people, and also including Acknowledgment of Country and Welcome to Country statements and ceremonies at the commencement of main meetings and ceremonies. Where Aboriginal Participation in Construction Policies exist for major projects, we work to not just meet but exceed minimum requirements of customers and project developers and provide pathways for employment and development beyond the project life.

The Boral Innovate RAP will be extended into an Innovate RAP Stage 2 from November 2022, until June 2024 to ensure that the engagement between our sites and their local Aboriginal communities is further developed.

Technical partnership with Australian Indigenous Business Services for Snowy Hydro 2.0

In FY2022 Boral was proud to announce a new partnership with Australian Indigenous Business Services Pty Ltd (AIBS), to supply skilled labour to help us deliver our laboratory structure across the Snowy Hydro 2.0 project.

AIBS is a flexible and multi-skilled Indigenous company whose story started in 1988 when the founders were inspired to work in rural and remote Australian Aboriginal communities to help improve the lives, health and prosperity of the people there. Today AIBS offers services across commercial construction, geotechnical laboratory testing, project management, quantity surveying, and engineering; helping new starters, apprentices and graduates enter various industries, and providing employment opportunities and development pathways across many trades and professions.

AIBS will provide a team of field testers for the next stage of this iconic hydro-electric project, helping Boral deliver ongoing excellent quality control, whilst also supporting the objectives of our Reconciliation Action Plan.



The four key pillars of reconciliation:

Relationships

Respect

Opportunities

Governance

Protecting cultural heritage

We are committed to protecting places and items of significant cultural heritage for local Aboriginal and Torres Strait Islander peoples across our Australian operations. Working alongside First Nations people, we seek to protect places and items of cultural heritage, including across our sites subject to Cultural Heritage Management Plans.

We review existing partnerships, create new partnerships, hold Aboriginal Cultural Heritage Inductions with quarry staff and have a Cross Cultural Awareness program for all staff. We also meet with Aboriginal people for walkovers before commencing quarry works, and to maintain respectful and positive relationships throughout the life of the quarry.

As part of Boral’s Cultural Heritage Management Plans, we conduct training for quarry staff with the guidance of the Traditional Owners of the land. This includes a field survey with representatives of the Aboriginal peoples to see if any relevant places or cultural heritage items are present where quarrying is to occur.

We continue to review our systems and processes associated with protecting places and items of cultural significance, including our ground disturbance process, to strengthen our approach.



Community engagement and partnerships

We work to build genuine and positive long-term relationships with the communities in which we operate.

We do this by listening to our stakeholders, maintaining proactive and transparent communication, responsibly managing our operations, and investing in strong partnerships aligned with our values and priorities.

Community engagement

We openly engage with communities to provide information, address concerns, and make improvements where possible. The most common areas of interest and concern are heavy vehicle traffic, noise, dust, odours, cultural heritage, water, waste, quarry end use, and biodiversity.

Across our key sites, we hold regular community liaison group meetings, which are designed to address local issues relating to our operations with stakeholders. Typically, these meetings are attended by neighbours, community representatives, and council and government representatives. We also keep local communities informed through more informal channels, including online information resources, newsletters, local advertising, community inspections and site tours, community open days, one-on-one meetings and surveys.

More broadly, we play an active role in creating economic value for our local communities through employment, supporting local businesses, and supporting communities through our community investment program. We also promote the use of Aboriginal and Torres Strait Islander suppliers and social enterprises within our supply chain.

Community investment

Through our community investment program, we support Borals' purpose of Creating a world future generations will be proud of. We support a range

of projects through our community partnerships that seek to create safer, sustainable and more liveable communities for generations to come.

We give preference to partnerships and programs that also promote our social commitments to youth development and education, Aboriginal and Torres Strait Islander reconciliation, diversity and inclusion, and social and environmental sustainability.

Our community investment support was substantially impacted by COVID-19 constraints and lower in FY2022 relative to recent years. In FY2022 we had a community investment cash expenditure of about \$360,000 as well as providing additional support through volunteering. We regularly review our partnership programs and expect to evolve our focus in FY2023 to increase investment in local communities where Boral operates.

In FY2022 our community partners included:

- **Road Safety Education** – supporting their RYDA program which gives Year 11 students, generally of learner driver age, a deep understanding of how to stay safe on the road.
- **Habitat for Humanity** – contributing to their Habitat Women 'Pathways to Permanence' program that aims to create quality employment outcomes for disadvantaged women entering the construction industry, and also supporting their Brush with Kindness initiative (see below).
- **Bangarra Dance Theatre** – with our funding contribution shifted from being a performance partner to supporting on-Country programs with Aboriginal young people.

Habitat for Humanity's Brush with Kindness

Our volunteers helping survivors of domestic violence

In early May FY2022, to coincide with International Women's Day, volunteers from Boral attended Habitat for Humanity's Brush with Kindness program, one of their corporate volunteering offerings. Under this initiative, volunteers refurbish and repaint transitional shelters and crisis accommodation available to women and children escaping domestic abuse.

Fifty Boral employees volunteered across five days, in three states – New South Wales, Queensland and Victoria – for a total of 350 volunteering hours, to establish four gardens, remove mould, paint multiple bedrooms at two facilities, and refurbish a large outdoor camp kitchen which had been destroyed in the February 2022 floods in Queensland.

The block's camp kitchen was decaying badly in the weather and had recently been submerged in the floods. The fresh coats of primer and top coat will extend its life significantly. It also makes the place look loved, and will make a huge difference to those using the property.

Habitat for Humanity Coordinator

Responsible business conduct, SASB and GRI content index, data summary, and assurance certificate



Responsible business conduct

Business conduct

Working with integrity, respect and fairness is fundamental to how we do business. We expect all employees and people representing Boral to meet the highest ethical standards and to observe both the letter and spirit of the law.

Our Code of Business Conduct (Code) and supporting policies set out the high ethical standards we expect everyone to adhere to. We are committed to working with third parties – including customers, subcontractors, distributors, suppliers, and joint venture partners – whose business ethics and behaviour are consistent with our Code.

Our commitment to anti-corruption compliance is reflected in our Code, which prohibits bribery and corruption in all forms, whether direct or indirect. Our anti-corruption measures include clear policies, accountability, training, reporting and audit review. We also assess conduct risk and corruption risk as part of our enterprise risk management review process.

We complement our policy and risk management framework with clear communication and training on the Code and associated policies in our induction training and through ongoing refresher training programs.

The Board and senior management team take breaches of the Code and other misconduct very seriously.

We have consistent and transparent policies and practices in place to address any non-compliance with our Code and supporting policies.

Formal employment consequences include the requirement to complete additional training, impacts on individual rewards and promotions, and, where appropriate, formal warnings or termination of employment.

We provide clear avenues for our people to report ethical concerns and improper behaviour. In addition to internal reporting channels – via the senior management, people and culture, internal audit, and legal teams – we provide an external independent whistleblower service known as FairCall. Reports via FairCall can be made on an anonymous basis, and we are committed to maintaining the independence, impartiality and confidentiality of the reporting and investigation processes. These measures enable our people to raise concerns without fear of recrimination. The Company Secretary reports on these matters to the Board Audit & Risk Committee.

Boral's Code prohibits political donations or contributions.



Tax transparency

Our approach to tax is consistent with our Code. We are committed to the timely meeting of our taxation obligations in the jurisdictions in which we conduct business including the payment of our taxes.

We structure all aspects of our business transactions and dealings to comply with the law in all jurisdictions, and we do not use artificial arrangements or tax haven jurisdictions where no business purpose exists.

We recognise the need to be transparent about our tax affairs, and in Australia, we have adopted the Voluntary Tax Transparency Code and publish an annual Tax Transparency Report on our website.

Cybersecurity

Boral continues to invest in cybersecurity controls, and to monitor cybersecurity threats that could potentially impact our technical infrastructure, data security and customer privacy.

In FY2022 we were indirectly impacted by a cyber attack on a third-party time-keeping platform that we use. The third party has taken the appropriate remediation steps and the issue has now been resolved.

Our cybersecurity program aligns with the National Institute of Standards and Technology (NIST) Cybersecurity Framework, which represents a set of standards, best practices, and recommendations for managing cybersecurity risk.

Boral's Chief Information Officer is responsible for developing and implementing the Boral cybersecurity program, including remediation and improvement plans. We also engage third-party cybersecurity specialists to conduct regular penetration testing, assess security controls, and identify required remediation measures.

The Board Audit & Risk Committee oversees cybersecurity risk, the cybersecurity program, and controls to manage the evolving cybersecurity risk.

Industry associations

As part of Boral's commitment to industry collaboration, we participate in several industry associations. Participants in industry associations are provided competition law training to ensure that association with other industry participants is always compliant with the law. Our annual membership fees for industry associations totalled around \$1.9 million in FY2022.

Through our involvement in these associations, Boral strives for a united voice on areas of common interest in the industry such as developing technical standards, sharing new ideas, including via cooperative research centres, and advocating on public policy positions including industry decarbonisation.

Our major industry associations and their policy positions on climate change and industry decarbonisation are outlined below:

Cement Industry Federation

"Our industry remains committed to working with all levels of government in the development and application of climate and energy policy that strives to reduce greenhouse gas equivalent emissions in line with our international commitments, while at the same time ensuring the long-term viability of Australia's cement industry and the communities in which they operate."¹

Australian Flexible Pavement Association (AfPA)

"AfPA members commit to achieving net zero carbon emissions by 2050 across its Scope 1 and 2 activities.

AfPA members commit to reduce Scope 1 and 2 emissions by a minimum of 30% by 2030 (relative to 2019 emissions per tonne of asphalt produced)."³

Cement Concrete & Aggregates Australia (CCAA)

"Climate Ambition Statement:

Australia's cement and concrete industries recognise the challenges of climate change and adaptation.

Our industries hold an ambition to reduce their CO₂ footprint and deliver society with net zero carbon concrete by 2050.

We are committed to work across the value chain to deliver this in a circular economy, whole-of-life context to support a sustainable built environment."²

Green Building Council of Australia

"Our policy priorities are:

- carbon positive buildings
- strong government leadership
- realising our vision for cities and communities
- smarter infrastructure investments
- affordable, sustainable housing"⁴

1. See <https://cement.org.au/sustainability/climate-change/>

2. See https://www.ccaa.com.au/CCAA/Sustainability/Climate_Ambition_Statement/CCAA/Public_Content/SUSTAINABILITY/Climate_Ambition_Statement.aspx?hkey=55062c4b-0c47-4682-abbe-7b001d9797bd

3. Represents an expected industry average outcome. Individual member results may vary.

See https://www.afpa.asn.au/wp-content/uploads/2022/06/AfPA-Industry-Commitment-to-Net-Zero_Release_2022_06_09.pdf

4. See <https://new.gbca.org.au/policy/policy-priorities/>

SASB and GRI content index

This table references where Sustainability Accounting Standard Board (SASB) Construction Materials standard and Global Reporting Initiative (GRI) metrics and disclosures can be found in our reporting suite.

Description	SASB (EM-CM)	GRI standards	FY2022 reporting
General disclosures	–	102	About this report; Our business; Message from CEO & Managing Director; Materiality assessment; Sustainability governance; Our People; Responsible business conduct AR
Economic performance	–	201; 203–205; 207	Innovation; Sustainable procurement; Community engagement and partnerships; Reconciliation Action Plan; Responsible business conduct AR MSS TR
Workforce health and safety	320a.1 320a.2	403	Health, safety and wellbeing; Data summary – Health and safety
People	–	401; 404–405; 407–409; 412	Our People; Data summary – Our People MSS
Environmental compliance	–	307	Sustainable operations footprint; Data summary – Environmental compliance
Greenhouse gas emissions	110a.1 110a.2	305	Lower carbon concrete; Committed to net zero; FY2022 decarbonisation progress; Decarbonising cement manufacturing; Decarbonising concrete; Our carbon footprint; Data summary – Greenhouse gas emissions
Energy management	130a.1	302	Committed to net zero; FY2022 decarbonisation progress; Our carbon footprint; Data summary – Energy consumption
Water management	140a.1	303	Sustainable operations footprint – Water
Waste management	150a.1	306	Sustainable operations footprint – Waste
Biodiversity impacts	160a.1 160a.2	304	Sustainable operations footprint – Land management, rehabilitation and remediation
Air emissions	120a.1	305	Sustainable operations footprint – Air quality; Data summary – Air emissions
Communities	–	413	Community engagement and partnerships
Products	410a.1 410a.2	416–417	Our Products; Customer experience and satisfaction
Business conduct	–	415	Responsible business conduct
Pricing integrity and transparency	520a.1	206	Boral had nil monetary losses as a result of legal proceedings associated with cartel activities, price fixing, or anti-trust activities.
Activity metrics	110a.1	–	Production information by product line is not reported as this is considered proprietary information.

AR

Annual Report 2022

MSS

Modern Slavery Statement 2022 (to be published late 2022)

TR

Tax Transparency Report 2021

Health and safety

	FY2020	FY2021	FY2022
Reportable fatalities			
Employees	0	0	0
Contractors	0	0	0
Injury rates¹			
Employees and contractors			
Lost time injury frequency rate (LTIFR)	2.4	3.0	3.6
Medical treatment injury frequency rate (MTIFR)	8.0 ⁴	8.5 ⁴	8.2
Recordable injury frequency rate (RIFR) ²	9.8	11.5	11.8
Actual serious harm incident frequency rate (ASHIFR) ³	0.3	0.1	0.4
Potential serious harm incident frequency rate (PSHIFR) ³	11.5	5.3	5.2
Near miss frequency rate (NMFR)	152	91	62
Employees			
LTIFR	2.4	4.2	4.9
MTIFR	7.8	7.2	9.8
RIFR	10.2	11.4	14.7
NMFR	151.9	90.9	61.6
Contractors			
LTIFR	2.4	1.5	2.1
MTIFR	8.3	7.2	6.2
RIFR	10.7	11.7	8.3
NMFR	0.0	67.0	44.0
Occupational health			
New cases of mild to moderate silicosis	1	2	0
Silicosis incidence rate	1.4	2.2	0.0

1. All injury rates are per million hours worked.

2. RIFR is the combined lost time injury frequency rate (LTIFR) and medical treatment injury frequency rate (MTIFR) for controlled businesses.

3. Serious harm incident frequency rates (PSHIFR and ASHIFR) per million hours worked for employees and contractors in controlled businesses.

4. Restated modestly lower following a review of some injuries and methodology for excluding Building Products businesses following divestments.

Our People

	FY2020	FY2021	FY2022
Full time equivalent (FTE) – number			
Employees	5,398	4,856	4,749
Contractors ¹	~4,900	~4,500	~4,400
Employees – continuing operations			
By employment contract type			
Full-time	93%	93%	95%
Part-time	2%	2%	1%
Contract	2%	2%	2%
Casual	3%	3%	2%
Gender diversity			
Women on Board of Directors	43%	38%	25%
Women on Executive Leadership Team	27%	33%	30%
Women employees	13%	14%	14%
Women in management positions	11%	13%	15%
Women in professional positions	31%	35%	30%
Women new hires	19%	19%	20%
By occupation			
Operators and drivers	53%	51%	53%
Technicians and trade	13%	14%	16%
Clerical and administrative	9%	10%	10%
Sales	4%	4%	3%
Other	21%	21%	18%
Turnover			
Voluntary	10%	12%	17%
Involuntary	6%	6%	5%
Other			
Average length of service (years)	9.4	9.3	9.1
Female-to-male average base salary ratio ²	1:1	0.99:1.00	1.03:1.00
% of employees covered by collective bargaining agreements		55%	58%

1. Data is based on 230 working days per annum.

2. Calculated as the average base cash salary for females as a proportion of the average base cash salary for males, as included in our confidential report to the Workplace Gender Equality Agency.

Greenhouse gas emissions

Reported Scope 2 emissions are location-based.

(k tonnes CO ₂ -e)	FY2019	FY2020	FY2021	FY2022
Continuing operations				
Scope 1	1,441	1,354	1,317	1,329
Scope 2	316	293	290 ³	283
Scope 1 and 2	1,757	1,647	1,607 ³	1,611
Scope 3 emissions within FY30 target	1,580	1,471	1,406	1,599
Total	3,337	3,118	3,013	3,210
Scope 1 under emissions-limiting regulations	82%	82%	84%	84%
By business – Scope 1 and 2				
Cement	1,410	1,315	1,311	1,303
Construction Materials – other	346	332	296 ³	308
Continuing operations	1,757	1,647	1,607³	1,611
Discontinued	228	191	163	11
Total	1,984	1,837	1,770³	1,623
By business – Scope 1				
Cement	1,199	1,120	1,121	1,118
Construction Materials – other	242	233	197	211
Continuing operations	1,441	1,354	1,317	1,329
Discontinued	131	109	97	3
Total	1,572	1,462	1,415	1,331
By business – Scope 2				
Cement	211	194	190	185
Construction Materials – other	105	99	100 ³	98
Continuing operations	316	293	290³	283
Discontinued	97	82	66	9
Total	413	375	356³	291
By source – Scope 1 and 2				
Continuing operations				
Calcination	43%	43%	45%	44%
Coal	22%	22%	21%	21%
Electricity	18%	18%	18%	18%
Diesel and liquid fuels	13%	14%	12%	13%
Natural gas	4%	4%	4%	4%
Alternate fuels	0%	0%	1%	1%
Boral Cement⁴				
Specific CO ₂ -e kg/tonne – gross (kg/tonne cementitious material)		620	613	604
Specific CO ₂ -e kg/tonne – net (kg/tonne cementitious material)		620	608	596

Note: data may not add due to rounding.

3. Restated to include offices' electricity

4. Cementitious materials scope aligns with Global Cement and Concrete Association definition: Total clinker produced for cement production or direct clinker sale plus mineral components and all clinker substitutes consumed for blending, plus all cement substitutes.

Greenhouse gas emissions CONTINUED

(k tonnes CO ₂ -e)	FY2019	FY2020	FY2021	FY2022
Scope 3 emissions within FY30 target – by category				
Purchased goods and services	46%	52%	52%	44%
Investments in joint ventures	28%	22%	24%	33%
Upstream transportation and distribution	16%	16%	15%	14%
Fuel- and energy-related activities	5%	5%	4%	5%
Other	4%	4%	4%	4%
Scope 3 physical intensity				
Scope 3 emissions within FY30 target – kilotonnes CO ₂	1,580	1,471	1,406	1,599
CO ₂ -e t/t cementitious tonnes produced	0.86	0.88	0.82	0.95
Cementitious kilotonnes produced	1,835	1,677	1,714	1,689

Note: data may not add due to rounding.

Scope 1 emissions: Direct emissions such as from the use of fuels in manufacturing, process emissions from calcination in cement manufacturing, and transport of raw materials. Calculated using factors and methodologies set out in legislation, regulatory or international best practice guidance, including Greenhouse Gas Protocol.

Scope 2 emissions: Indirect emissions from purchased electricity, calculated using location-based factors particular to regional electricity grids. Such factors are usually defined in legislation or regulatory guidance.

Scope 3 emissions: Indirect emissions from our broader supply chain, such as from the goods and services we purchase, and the transport of materials to our operations and to our customers not using our own vehicles. Calculated based on principles outlined in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

Air emissions

As part of the National Pollutant Inventory (NPI) Scheme, we report on pollutant emissions for significant operating sites. Further detailed data is available at <https://dcceew.gov.au/environment/protection/npi>.

(tonnes)	FY2019	FY2020	FY2021	FY2022
Facilities reporting (number)	94	96	95	FY2022 data available Dec-22
NOx emissions	5,500	4,170	4,448	
SOx emissions	12	15	13	
Particulate matter (PM10)	8,988	7,518	9,992	
Dioxins/furans	–	–	–	
Volatile organic compounds (VOCs)	190	175	307	
Polycyclic aromatic hydrocarbons (PAHs)	0.41	0.38	0.06	
Heavy metals	0.17	0.15	0.13	
Direct mercury emissions	0.03	0.03	0.02	

Energy consumption

(petajoules)	FY2019	FY2020	FY2021	FY2022
Continuing operations				
Coal	4.2	4.0	3.8	3.8
Diesel and liquid fuels	3.3	3.2	2.7	2.9
Electricity	1.3	1.3	1.2	1.3
Natural gas	1.2	1.3	1.1	1.1
Alternative fuels – renewable ¹	0.2	0.3	0.4	0.2
Alternative fuels – other ¹	0.2	0.1	0.3	0.4
Total	10.5	10.1	9.5	9.7
% grid electricity	13%	13%	13%	13%
% alternative fuels – renewable ¹	2%	3%	4%	2%
% alternative fuels – other ¹	2%	1%	3%	4%
Boral Cement				
Alternate fuel usage (% of thermal energy) – Berrima clinker	9%	10%	15%	15%
Boral Australia – including discontinued operations				
Coal	4.2	4.0	3.8	3.8
Diesel and liquid fuels	4.1	4.0	3.1	2.9
Electricity	2.0	1.9	1.7	1.3
Natural gas	2.6	2.3	2.5	1.2
Alternative fuels – renewable ¹	0.6	0.7	0.5	0.2
Alternative fuels – other ¹	0.2	0.1	0.3	0.4
Total	13.7	12.9	11.9	9.8
Energy consumption (units of measure)				
Continuing operations				
Coal (k tonnes)	201	188	180	179
Diesel and liquid fuels (m litres)	89	87	72	78
Electricity (GWh)	373	355	351 ²	351
Natural gas (PJ)	1.2	1.2	1.1	1.1
Alternative fuels – renewable (PJ)	0.2	0.3	0.4	0.2
Alternative fuels – other (PJ)	0.2	0.1	0.3	0.4

Note: data may not add due to rounding.

Environmental compliance

	FY2019	FY2020	FY2021	FY2022
Environmental incidents				
Serious environmental incident frequency rate ³			0.3	0.3
Infringements and penalties				
Number	9	11	4	0
Fines ⁴	\$38,820	\$53,576	\$0	\$0
Penalties ⁴	\$0	\$0	\$12,310	\$0
Undertakings	\$0	\$0	\$0	\$100,000 ⁵

1. Renewable and alternative fuel sources defined in accordance with SASB Construction Materials standard excluding the mandated renewable power percentage (RPP) under the Australian Renewable Energy Target.

2. Restated to include offices' electricity

3. Serious environmental incident frequency rate is defined as Level 3 (or greater) environmental, regulatory, or community incident rate (per million hours). Incident thresholds are determined by using the Boral HSEQ risk matrix.

4. Regulators issue fines and courts issue penalties.

5. This relates to the 2019 matter at Boral's Asphalt Williamstown (Victoria) site described on page 52.

Independent Limited Assurance report to the Directors of Boral Limited

Our Conclusion

Deloitte has undertaken "limited assurance" engagement relating to the Sustainability metrics detailed below (the 'Subject Matter Information') presented in Boral Limited's ('Boral') 2022 Sustainability Report in relation to the facilities of Boral for 1 July 2021 to 30 June 2022. Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the accompanying Subject Matter Information has not been prepared, in all material respects, in accordance with the Reporting Criteria detailed below.

Subject Matter Information and Reporting Criteria

The Subject Matter Information and Reporting Criteria in scope for our limited assurance engagement for the year ended 30 June 2022 is as follows:

Sustainability Metrics	Reporting Criteria
Greenhouse gas (GHG) emissions – Scope 1 and 2 measured in tonnes of carbon di oxide equivalent (t CO ₂ -e) for Boral Australia (Page 69)	Boral's own publicly disclosed criteria (policies and procedures)
Total energy consumed measured in petajoules (PJ) for Boral Australia (Page 71)	
Boral Australia's gross and net emissions intensity (per GCCA definition) (Page 69)	

Basis for Conclusion : We conducted our limited assurance engagement in accordance with Australian Standard on Assurance Engagements ASAE 3000 Assurance Engagements Other than Audits or Reviews of Historical Financial Information ("ASAE 3000"), issued by the Australian Auditing and Assurance Standards Board. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Boral's Responsibilities : The management of Boral are responsible for:

- Ensuring that the Subject Matter Information is prepared in accordance with the Reporting Criteria;
- Confirming the measurement or evaluation of the underlying subject matter against the applicable criteria, including that all relevant matters are reflected in the Subject Matter Information;
- Designing, establishing and maintaining an effective system of internal control over its operations including, without limitation, systems designed to ensure achievement of its control objectives and its compliance with applicable laws and regulations;
- Selecting and applying measurement methodologies in accordance with the Report Criteria, and making estimates that are reasonable in the circumstances; and
- For referring to or describing in its Subject Matter Information the applicable criteria it has used and, when it is not readily apparent from the engagement circumstances, who developed them.

Our Independence and Quality Control : We have complied with the independence and other relevant ethical requirements relating to assurance engagements, and applied Auditing Standard ASQC 1 Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information, Other Assurance Engagements and Related Services Engagements in undertaking this assurance engagement.

Deloitte's Responsibilities : Our responsibility is to express a limited assurance conclusion on the Subject Matter Information as evaluated against the Reporting Criteria based on the procedures we have performed and the evidence we have obtained. ASAE 3000 requires that we plan and perform our procedures to obtain limited assurance about whether, anything has come to our attention that causes us to believe that the Subject Matter Information is not properly prepared, in all material respects, in accordance with Reporting Criteria. A limited assurance engagement in accordance with ASAE 3000 involves identifying areas where a material misstatement of the Subject Matter Information is likely to arise, addressing the areas identified and considering the process used to prepare the Subject Matter Information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control,

and the procedures performed in response to the assessed risks.

The 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. Accordingly, we do not express a reasonable assurance opinion about whether the Subject Matter Information has been properly prepared, in all material respects, in accordance with the Reporting Criteria.

Our procedures included : The review we perform will include procedures as we consider necessary in the circumstances based on our professional judgement, including, but not limited to:

- Inquiring with respective Subject Matter data owners to understand and assess the approach for collating, calculating and reporting the respective Subject Matter Information across the reporting period ended 30 June 2022.
- Undertaking walkthroughs of key systems and processes used / relied upon to compile the Subject Matter Information.
- Reviewing the supporting process documentation developed to support the collation, calculation and reporting process in accordance with Boral's related internal sustainability policies and procedures and the GRI Standards as applicable.
- Performing analytical reviews over material data streams to identify any material anomalies / gaps for the Subject Matter Information and investigate further where required.
- Agreeing overall data sets for the Subject Matter Information to the final data contained in the 2022 Boral Limited's Sustainability Report.

Inherent Limitations : Because of the inherent limitations of an assurance engagement, together with the inherent limitations of any system of internal control there is an unavoidable risk that it is possible that fraud, error, or non-compliance with laws and regulations, where there has been concealment through collusion, forgery and other illegal acts may occur and not be detected, even though the engagement is properly planned and performed in accordance with Standards on Assurance Engagements. Additionally, non-financial data may be subject to more inherent limitations than financial data, given both its nature and the methods used for determining, calculating and sampling or estimating such data.

Restricted Use : This statement has been prepared for use by the management of Boral for the purpose of assisting directors and management in their reporting of the Subject Matter Information. We disclaim any assumption of responsibility for any reliance on this report to any person other than the management of Boral or for any purpose other than that for which it was prepared.

Matters relating to electronic presentation of information : It is our understanding that Boral may publish a copy of this report on their website. We do not accept responsibility for the electronic presentation of this report on the Boral website. The security and controls over information on the web site is not evaluated or addressed by the independent assurance practitioner. The examination of the controls over the electronic presentation of this Report on the Boral website is beyond the scope of this engagement.

Deloitte Touche Tohmatsu
 DELOITTE TOUCHE TOHMATSU

PR Dobson
 PR Dobson

Partner, Chartered Accountants, Sydney, 13 September 2022

Boral Limited

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AGM details

The Annual General Meeting
of Boral Limited will be held on
Thursday, 3 November 2022
at 10.30am (Sydney time).