

Sustainability report



Our people deliver for a better Australia

Contributing to a safe, healthy and sustainable future for Australians, our communities and the environment is a fundamental part of Adbri's culture. Whether we are putting safety first or developing lower carbon products, supporting local businesses or hosting community groups, our people are *Always Ready* to make Australia a better place.

■ Scope

Adbri Limited (the Company) reports on controlled entities as held at year ended 31 December 2021. Joint ventures are excluded unless stated otherwise. Greenhouse gas emissions, alternative fuel data and water usage is reported as at financial year 30 June 2021, consistent with regulatory reporting requirements, unless otherwise stated. All financial data is reported in Australian dollars. References to 'Adbri', 'the Company', 'we' and 'our' are to Adbri Limited. Any restatements are noted in the Report.



Message from our sustainability leaders

Operating a sustainable business is a fundamental part of Adbri's role as an industry leader. We believe in doing business responsibly; keeping our people and communities safe; meeting the needs of our customers; and creating long-term value for our shareholders. This is essential for achieving Adbri's purpose of *Building a Better Australia*.

In 2021, we publicly announced our aspiration of net zero emissions by 2050 and will launch our Net Zero Emissions (NZE) Roadmap ahead of the next Annual General Meeting (AGM). Our disclosures in this Report reflect Adbri's commitment to the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations. As a hard-to-abate industry, the challenges of achieving net zero will require future investment in technology and partnerships.

Despite ongoing challenges from the COVID pandemic, we made progress towards our 2024 sustainability targets this year. Since 2019, we recorded a 41% reduction in our total injury frequency rate (TRIFR). Disappointingly, in 2021 our TRIFR increased by 12%, however our lead indicators such as critical control audits and visible leadership continued to improve. We approach 2022 with a heightened focus on our safety performance. Scope 1 and Scope 2 greenhouse gas (GHG) emissions have reduced by 4% since 2019. We continued to trial lower carbon product solutions and in our Birkenhead operations use refuse derived fuel (RDF). During the year we had no reportable environmental incidents. We responded to community concerns relating to odour emissions at our Munster operations and worked with the Department of Water and Environmental Regulation (DWER) to gain approval to undertake engineering works for an odour reduction trial. We look forward to the trial occurring in 2022.

Our achievements this year relied on the passion and commitment of Adbri's workforce and we thank them for contributing to our success.

Rebecca Irwin

Chief Sustainability &
People Officer

Nick Miller

Managing Director &
Chief Executive Officer

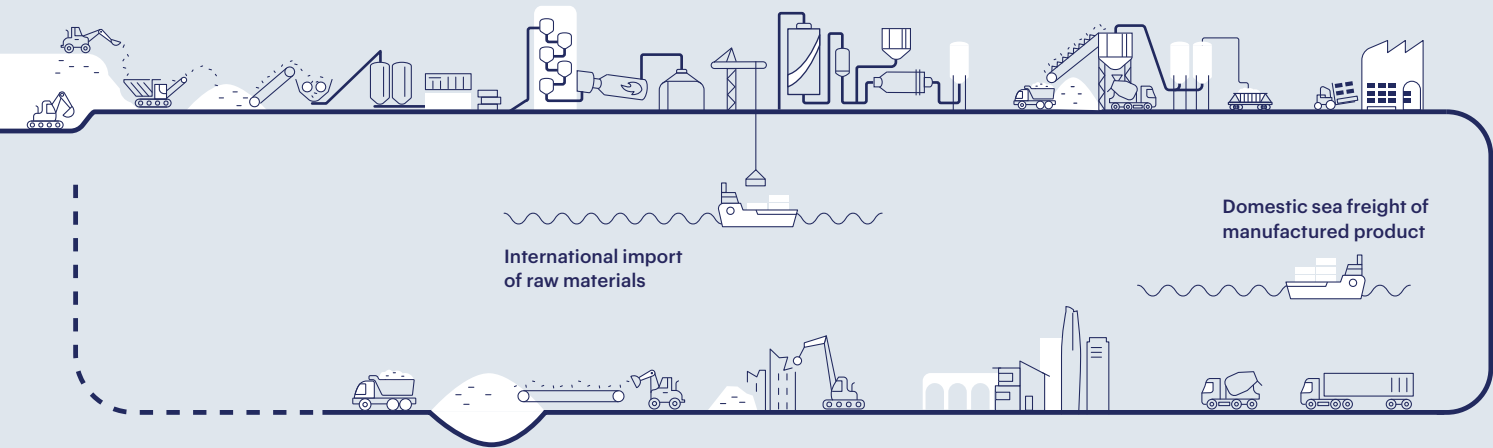
Our approach to sustainability

Adbri’s sustainability approach is built on strong relationships with our people, customers, suppliers, partners, shareholders and the communities where we operate.

We aim for continuous, company-wide improvement along the entire value chain. We identify areas with the most material sustainability impact and focus our activities on these areas.

Sustainability topics across Adbri’s clinker, cement and concrete value chain

Raw material extraction (inc. aggregate production)	Clinker production & transport	Cement production	Concrete production	Masonry production
<ul style="list-style-type: none">- Workforce health, safety and wellbeing- Workforce diversity and inclusion- Employee development and engagement- Climate response and decarbonisation- Water management- Energy management- Biodiversity management and land rehabilitation- Circular economy and waste management	<ul style="list-style-type: none">- Workforce health, safety and wellbeing- Workforce diversity and inclusion- Employee development and engagement- Climate response and decarbonisation- Water management- Energy management		<ul style="list-style-type: none">- Circular economy and waste management- Technology- Environmental compliance and data management- Noise, dust, odour and visual amenity mitigation- Managing community expectations and social licence to operate- Sustainable procurement	



Concrete use, end of life & recyclability	Built environment	Transport & logistics
<ul style="list-style-type: none">- Circular economy and waste management	<ul style="list-style-type: none">- Circular economy and waste management- Pricing integrity and anti-trust compliance- Sustainable products and innovation- Customer experience	<ul style="list-style-type: none">- Workforce health, safety and wellbeing- Workforce diversity and inclusion- Employee development and engagement- Climate response and decarbonisation- Sustainable transport

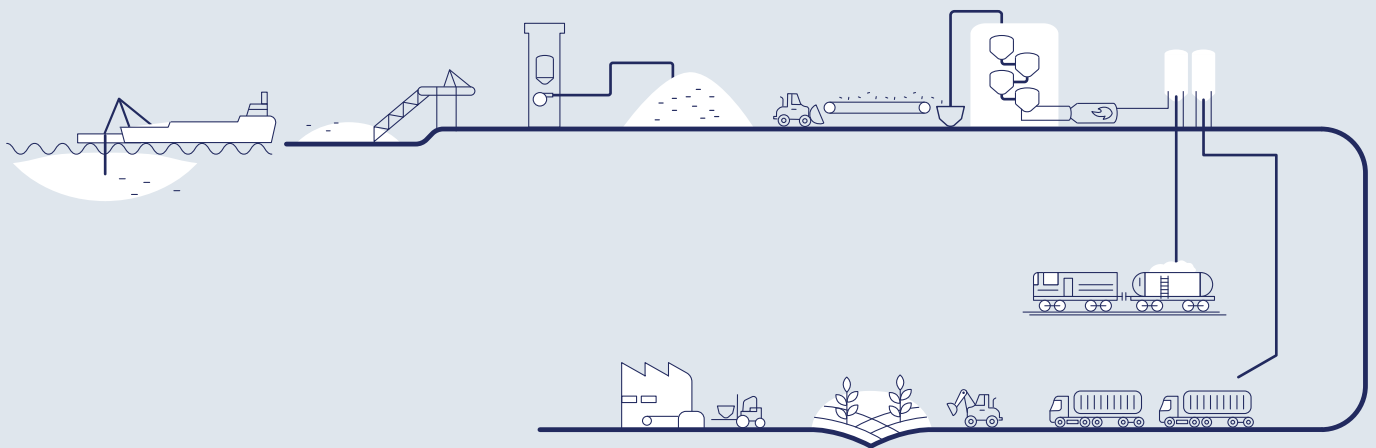
Sustainability topics across Adbri's lime processing value chain

Raw material extraction

- Workforce health, safety and wellbeing
- Workforce diversity and inclusion
- Employee development and engagement
- Climate response and decarbonisation
- Biodiversity management
- Water management

Lime production

- Workforce health, safety and wellbeing
- Workforce diversity and inclusion
- Employee development and engagement
- Climate response and decarbonisation
- Water management
- Energy management
- Circular economy and waste management
- Technology
- Environmental compliance and data management
- Noise, dust, odour, visual amenity mitigation
- Managing community expectations and social licence to operate
- Sustainable procurement



Resource & mineral processing

- Circular economy and waste management
- Pricing integrity and anti-trust compliance
- Sustainable products and innovation
- Customer experience

Agriculture

Transport & logistics

- Climate response and decarbonisation
- Sustainable transport

Our approach to sustainability continued

Governance

Adbri's Board is responsible for reviewing and approving management strategy, which incorporates sustainability objectives to mitigate material sustainability risks and identifies sustainability opportunities. Board members apply the highest governance standards to monitoring how this strategy is implemented, including compliance with Modern Slavery, TCFD and other international standards as appropriate. Where possible, we are incorporating sustainability criteria into decisions relating to change management, acquisitions and divestments. The Board regularly reviews Adbri's sustainability performance and approves the content in this Report.

The Board's Safety, Health, Environment and Sustainability (SHES) Committee monitors and oversees the effectiveness of sustainability practices, performance and continuous improvement. This assessment may involve consulting with the Board's Audit, Risk and Compliance Committee and People and Culture Committee. The Board's performance and effectiveness and that of each Committee, is reviewed every year and improvements are made where required.

The Board delegates responsibility for day-to-day oversight of managing material risks to Adbri's Managing Director & CEO. Sustainability strategy is led by our Chief Sustainability & People Officer. Our sustainability performance influences executive remuneration, which is linked to sustainability-related targets (see *the Remuneration Report*).

For more information on Adbri's Board committees, including composition, skills, independence and continuing education (see *the Directors' Report*). Their terms of reference are available at www.adbri.com.au/who-we-are/corporate-governance/.

Risk management

Adbri's approach to risk management is guided by our Group risk appetite. It is underpinned by sound risk management principles and the standards of behaviour outlined in Adbri's Code of Conduct. Our Risk Management Procedure outlines the process for operationally monitoring and managing risk plans, controls and performance and for reporting on them to the Executive Leadership Team and the Audit, Risk and Compliance Committee. Our risk register includes climate change and environmental, social and governance (ESG) issues as material risks.

Adbri's internal audit team regularly audits and inspects sites to evaluate risk management activities and performance, and identifies any control deficiencies. They report the results to the Board for information and action. The reports include remedial plans and audit team members follow up on implementation, supported by an external audit program.

All Adbri's managers are committed to sustainability and actively manage risk. They are encouraged, supported and guided by:

- a Sustainability Framework that underpins Adbri's sustainability performance, including five-year targets
- an integrated health, safety and environment management system (HSEMS), which provides standards and a framework for achieving objectives
- input and advice from the Executive Leadership Team
- personal key performance indicators based on key SHES areas
- Adbri's Code of Conduct; Diversity and Inclusion Policy; Health, Safety and Environmental Policy; Anti-bribery and Corruption Policy; and Speak Up (whistleblower) Policy.



As a responsible business, Adbri has sound governance practices and policies that protect our market reputation by mitigating ethical and financial risks and ensuring we comply with relevant laws and regulations.

Our stakeholders

Understanding the views and growing expectations of Adbri's stakeholders by regularly engaging with them is essential so we can respond effectively and keep meeting their changing needs. Our approach is open and inclusive.

Based on regular feedback from our key internal stakeholders, the table shows the topics of interest raised by our stakeholder groups and how we engaged with them in 2021. In 2022, we plan to engage Adbri's external stakeholders as part of our materiality assessment.

Who	Topics of interest	How we engage
Primary stakeholders		
Communities	<ul style="list-style-type: none"> Health, safety and wellbeing Indigenous rights Investment in community Local employment Managing environmental impacts Opportunities/challenges 	Site tours, feedback mechanisms, sponsorships and partnerships, fact sheets, Community Liaison Groups (CLGs), websites: www.cockburncementcommunity.com.au www.adelaidebrightoncommunity.com.au www.angastoncommunity.com.au www.morgancementcommunity.com.au
Customers	<ul style="list-style-type: none"> Product availability Economic vitality Compliance with regulations Lower carbon products COVID-safe deliveries 	Site visits, market tenders, meetings, phone calls, emails, website, online orders, product information, technical support, feedback mechanisms
Government (local, state, federal) and regulators	<ul style="list-style-type: none"> Regulatory and legal compliance Taxes Local employment Managing environmental impacts Contributions to communities 	Meetings, website, publications, phone calls, emails
Joint venture partners	<ul style="list-style-type: none"> Health, safety and wellbeing Regulatory and legal compliance Collaboration opportunities 	Meetings, site visits, phone calls, emails
Shareholders, financiers and insurers	<ul style="list-style-type: none"> Economic vitality Share price performance and dividends Health and safety performance Compliance with regulations Impact of a low carbon economy Acquisitions and divestments Corporate governance Ethical behaviour Sustainable finance Options for capital raising/debt Climate change Strategy and outlook 	Annual Reports, half year updates, investor briefings, market announcements, Annual General Meetings, conferences, phone calls, emails
Suppliers	<ul style="list-style-type: none"> Contract and payment terms and conditions Business and collaboration opportunities Economic vitality Responsible practices and alignment with Modern Slavery legislation 	Contractual arrangements, market tenders and other out-to-market opportunities, meetings, phone calls, emails, toolbox meetings, reviews
Workforce	<ul style="list-style-type: none"> Health, safety and wellbeing Career advancement and wage growth Diversity, inclusion and employee rights Organisational structure and strategy Economic vitality Climate change Strategy and outlook 	Intranet, newsletters, MD & CEO briefings, toolbox meetings, surveys, videos, text messages, team meetings and town halls, internal forums, collaboration tool
Secondary stakeholders		
Education/academia/research bodies	<ul style="list-style-type: none"> Lower carbon product solutions Low carbon future 	Partnerships Participating in working groups
Industry groups	<ul style="list-style-type: none"> Health, safety and wellbeing Low carbon transition 	Memberships, round table discussions, phone calls, emails
Media	<ul style="list-style-type: none"> Economic vitality Acquisitions and divestments Impact of low carbon economy Corporate governance 	Media releases, journalist interviews, phone calls, emails
Non-government organisations (NGOs)	<ul style="list-style-type: none"> Managing environmental impacts Impact of low carbon economy 	Annual General Meetings, phone calls, emails, feedback mechanisms

Our approach to sustainability continued

Materiality

Focusing on what matters most

This year Adbri undertook a materiality assessment to determine the sustainability topics that are most important to our key stakeholders and our business. Based on Account Ability's five-part Materiality Test, the process involved an independent assessment of relevant internal policies, risk and strategy documents, media coverage, peer and industry publications and internal stakeholder interviews. Our Executive Leadership Team prioritised and validated the topics, and the Adbri Board endorsed the outcomes.

To ensure we are listening to and responding to their needs, we plan to engage external stakeholders every two years in this process, starting in 2022.

The topics inform the scope and content of this Sustainability Report.

Materiality matrix*



* Topics within each arc are arranged in alphabetical order and are of equivalent priority.

We progressively undertake rehabilitation works at our sites to improve biodiversity and visual amenity.








Our approach to sustainability continued

Our Sustainability Framework

Adbri's Sustainability Framework identifies two primary goals: engaged people and communities; and a sustainable and responsible business.

To achieve these goals, we have identified five focus areas with associated challenges and opportunities. These guide Adbri's sustainability decision-making and provide a holistic, strategic framework for our activities.

Stakeholders expect us to operate responsibly, so we strengthen Adbri's social licence by prioritising our efforts. To assess our performance, we have set five-year targets that are due for completion in 2024, using a baseline of 2019 metrics.

Goal	Focus area	5-year targets	Progress (against 2019 baseline)	SDG alignment and commitments
Engaged people and communities	 Healthy, safe and engaged people	10% reduction in TRIFR every year	2021: 6.3 (12% increase from 2020) Overall: 41% reduction against baseline	3 Good health and wellbeing 8 Decent work and economic growth Enhance Adbri's diverse and inclusive culture. Protect our people from harm through our commitment to 'Work Safe, Home Safe'. Promote mental health and wellbeing. Respect and support the rights of our employees.
		Innovate Reconciliation Action Plan (RAP) approved	2021: Delivered Reflect RAP commitments, started planning for Innovate RAP	
		30% female Non-executive Directors	2021: 38%	
		20% female employees	2021: 16% Overall: 1% increase against baseline	
		Digital platform established to improve communications	2021: Updated platform implemented, averaging 500 active users per month over the first five months	
	 Positive contribution to communities	Maintain regular external communications	Ongoing communication activities	8 Decent work and economic growth Through maintaining economic vitality and sustainable growth, make a positive contribution to the communities where we operate. Mitigate the risk of modern slavery in our supply chain. Measure the economic value Adbri generates.
Sustainable and responsible business	 Reduce adverse environmental impacts	50% kiln fuel to be sourced from alternative fuel in South Australia	2021: 25% (same as 2020) Overall: 2% increase against baseline	
		25% reduction in process waste to landfill	2021: 1% increase from 2020 Overall: 12% decrease against baseline	9 Industry, innovation and infrastructure 12 Responsible consumption and production Introduce efficiencies into our processes to reduce our impact on the environment from production and our final products. Progressively rehabilitate land disturbed by our operations.
	 Responding to climate change	7% GHG emissions reduction	2021: 2% reduction Overall: 4% reduction against baseline	
	 Lower carbon products	24% supplementary cementitious materials as a proportion of final cementitious product ¹	2021: 20% (1% decrease from 2020) Overall: 1% decrease against baseline	9 Industry, innovation and infrastructure 12 Responsible consumption and production Develop and invest in product quality and research low carbon technologies to build sustainable and resilient products and manufacturing processes. Collaborate to develop technology solutions. Promote sustainable choices for consumers.

1. In 2021, we replaced our target of 20% increase in the tonnage of raw materials used with this target (see page 54 for further details).

The Framework is supported by Adbri's four company strategic pillars of safety, customer focus, inclusivity and sustainable growth. Our focus areas within the Framework align with the global objectives of the United Nations' Sustainable Development Goals (SDGs), as indicated by the SDGs numbering within the Framework. This Report includes examples of how our business and our people support these goals.

In 2021 we made progress against our five-year targets, with the exception of TRIFR which did not achieve a 10% reduction and our waste target which increased by 1%. In addition, our new supplementary cementitious material (SCMs) target saw a minor decrease of 1% against 2020.

2021 material topics

Challenges

Opportunities

- Workforce health, safety and wellbeing
- Diversity and inclusion
- Employee development and engagement
- Business conduct and ethics

- Visible safety leadership during a global pandemic with restricted travel
- Reduce harm to our people (mental and physical health)
- Increase diversity and inclusivity, beyond gender, in our operations

- Expand leading safety indicators
- Virtual connectivity
- Establish Adbri brand identity

- Managing community expectations and social licence to operate
- Customer experience
- Meeting growing stakeholder expectations
- Indigenous engagement
- Sustainable procurement

- Engage with our local communities
- Meet demands caused by increasing stakeholder expectations
- Engage Indigenous suppliers

- Measure our contribution to communities where we operate
- Improve customer experience platform
- Eliminate modern slavery risks from supply chains
- Build local prosperity in towns and cities where we operate
- Engage with Aboriginal and Torres Strait Islander communities

- Circular economy and waste resources
- Energy management
- Environmental compliance and data management

- Emissions-intensive core products
- Waste (excess concrete, packaging, using recycled materials)
- Plant design not all to current best practice
- Managing emissions to air
- Water consumption in production and site management practices

- Further alternative fuel use to reduce waste to landfill and reduce our reliance on fossil fuels
- Improve environmental risk management through technology
- Develop beneficial uses for waste generated onsite
- Responsible management of buffer land

- Climate response and decarbonisation
- Energy management

- Hard-to-abate cement and lime production processes which will require breakthrough technologies that are not yet commercially available at scale to fully decarbonise

- Implement our Net Zero Emissions Roadmap (due for release in 2022); Improve operational energy efficiency through plant upgrades, increase uptake of alternative fuels, fuel switching to use lower emissions-intensity supply options
- Partnerships and collaboration with industry and other businesses to develop decarbonisation solutions

- Sustainable products and innovation

- Regulatory impediments to replacing Portland clinker cement
- Lack of scalable demand for lower carbon products today

- Grow a portfolio of lower carbon/carbon neutral products for the built environment
- Participate in partnerships and research to develop technologies to produce construction materials
- Produce cement with up to 20% limestone content
- Provide environmental product disclosures (EPDs) to inform more sustainable consumer choices
- Acquire businesses providing sustainable products and solutions

Economic vitality and technology solutions

Adbri's pillar of sustainable growth guides our investment in Australia's people, communities and economy. Our products help build the homes and infrastructure that are essential for a thriving society. Protecting Adbri's economic vitality by being a low-cost, lower carbon, high-quality Australian producer is integral to delivering on our sustainability strategy. We invest in research and partnerships to support our future operational plans, while developing sustainable products that meet consumer demands.

Our management approach

We operate our assets efficiently and responsibly using a risk-based approach. Through organic growth, acquisitions, joint ventures and greenfield projects, Adbri is pursuing an agenda of sustainable growth and transformation. The Board regularly reviews capital needs to preserve Adbri's ability to deliver stable shareholder returns while remaining agile enough to respond to investment opportunities.

Adbri's business and improvement and growth strategy is based on five key areas for 2021 and beyond:

- operational efficiency
- lime business transformation
- vertical integration
- actively manage land holdings
- enhancing our capabilities in the infrastructure sector.

For every \$1 Adbri spends, we generate another \$1.30 for the Australian economy.

2021 achievements

Adbri delivered a reported NPAT attributable to members of \$116.7 million in 2021, an increase of 25% on the prior year. Our profit performance was driven by strong volume growth across all product lines, excluding lime. For full details about Adbri's financial performance, see our *2021 Financial Statements*.

Our economic performance will allow Adbri to reinvest in the business through capital investment upgrades, innovation, capacity expansion and major capital projects such as the Kwinana Upgrade.

Strategic investments supported Adbri's competitive advantage of being a vertically integrated business with diverse products and markets and an Australia-wide footprint. In the long term, these are expected to lead to increased operational and financial performance and deliver a return on capital invested to shareholders.

To ensure we remain competitive, our company-wide efficiency and continuous improvement programs seek out opportunities for short and long-term cost savings. Our cost reduction program delivered \$26.1 million in gross cost savings.

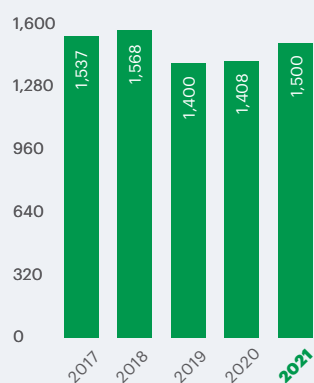
The Managing Director & CEO's review and operational reports in our *2021 Annual Report* describe these activities in detail.

Throughout the year, Adbri contributed to Australia's economic success in multiple ways, with national benefits. In 2021, we used a third party to model our economic impact on Australia for the period of 1 July 2020 – 30 June 2021, which included:

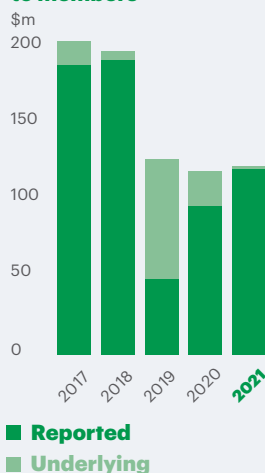
- **\$3.2 billion** – Adbri's gross value add to the Australian economy in 2020/21
- **\$626.4 million** – Our contribution to the South Australian economy (direct and indirect)
- **11,520** – Number of full-time equivalent positions we indirectly supported across Australia.

For further details about Adbri's financial performance and contribution to the Australian economy, see our *2021 Financial Statements* and *Tax Transparency Report*.

Employee numbers



NPAT attributable to members



Healthy, safe and engaged people

Adbri's vision of Work Safe, Home Safe drives our business to improve. Our safety first culture, effective management system and promotion of healthy lifestyles have delivered improvements in our safety performance and work environment since 2019. Developing a diverse workforce and inclusive culture supports high performance by providing a positive organisational culture where everyone can thrive. We seek to create workplaces that reflect the diversity of our customers and communities and welcome people from all backgrounds.

Engaged people and a strong workplace culture underpin Adbri's four strategic pillars and our company's success.

Our management approach

Our commitment to workforce health, safety and wellbeing is supported by Adbri's HSEMS. To mitigate safety and wellbeing risks, we identify critical risk controls and conduct annual safety audits, as well as offering health assessments and lifestyle management programs to employees.

Adbri's health, safety and environment (HSE) software system, Cintellate, collects and analyses data so we can monitor and respond to real time HSE trends and risk management obligations. Increasingly, we focus on lead indicators such as hazard reports and near misses so we can improve our injury prevention programs.

Our 2020-25 Diversity and Inclusion Strategy supports our goals to increase female representation and create a more inclusive environment. We continue to challenge ourselves to find innovative ways to progress our targets.

In 2022, to progress these objectives we will submit an Innovate RAP to Reconciliation Australia. This RAP will set targets for Aboriginal and Torres Strait Islander peoples employment.

Metrics

	2021	2020	2019
Fatality	0	0	0
Total recordable injury frequency rate (TRIFR) OFSC ¹ methodology ²	6.3	5.6	10.6
TRIFR (Employee) OFSC ¹ methodology ²	6.8	7.7	14.6
TRIFR (Contractor) OFSC ¹ methodology ²	6.2	3.5	5.1
Lost time injury frequency rate²	2.3	1.7	2.5
High potential incidents	50	54	37
High potential incident frequency rate	9.6	10.9	7.4
HSE near misses	529	486	874
HSE hazards	3,199	2,922	3,211
Critical control verifications in field	1,210	699	–
Critical control audits	87	109	48
Visible leadership reviews/walks	611	218	217
Female Non-executive Directors %	38	50	43
Female employees %	16	15	15

1. Office of the Federal Safety Commissioner.

2. Measured as per million person-hours worked.

Healthy, safe and engaged people continued

2021 achievements

Protected our people

Thanks to Adbri's Safety Step Change Program (see case study) and the efforts of all our workforce, we continue to achieve good health and safety performance and have made significant strides in critical risk management, visible leadership, safe transport and wellbeing. Despite pandemic restrictions, the program remained a priority, achieving a 41% reduction in TRIFR since 2019 (pre-pandemic). However in 2021, our TRIFR was 6.3, up 12% on 2020 and as such, we did not meet our target. We are resolved to continue to improve our safety performance.

We enhanced our reporting efficiency by using Adbri's mobile application, ROAM, in the field, enabling a 9% increase in hazard and near miss reporting. Heavy vehicle incidents are a key risk area and more than 50% of drivers completed safe driving programs, including rollover prevention training.

We continued to support the wellbeing of our people, including providing an ongoing Employee Assistance Program. During the year we held site-based events to encourage open discussion of mental health topics, as well as holding a webinar with an ambassador from R U OK Day?

Supported fair labour practices

Adbri continues to maintain an inclusive relationship with our people and unions, including a positive experience with Enterprise Agreements (EAs). During 2021, 20 Adbri Enterprise Agreements were successfully negotiated. At the end of the year, 59% of Adbri workers were employed under EAs.

Improved attraction

The Australian skills shortage is a challenge faced by many businesses. To mitigate this risk, we aim to be a candidate's preferred employer. To attract and retain the best people, we want to be known for developing our employees, maintaining a positive organisational culture and being a fair employer.

During 2021, we established an in-house recruiting team to increase our external market presence and define Adbri's employee value proposition, with a primary focus on attraction and positioning Adbri as an employer of choice in a competitive labour market.

Strengthened diversity and inclusion

One of our people aspirations is that the next generation of talent wants to work at Adbri because we are known for offering an inclusive workplace culture that thrives on diversity. We are delivering this through our 2020-25 Diversity and Inclusion Strategy, which was designed with feedback from our people on what is working well and where we can improve.

In 2021, Adbri made positive steps towards our 2025 target of 20% female representation by employing 85 new female hires, representing 24% of all hires in the period. For more information, refer to the *Diversity Report* in the 2021 Adbri Corporate Governance Statement.

www.adbri.com.au/who-we-are/corporate-governance/.

Expanded employee engagement

The need for more frequent engagement was a key outcome of our last employee survey, so we implemented several initiatives in 2021.

Designed to acknowledge outstanding contributions to our four strategic pillars, the inaugural Adbri's Champion Awards attracted 137 nominations. Between them, the winners helped Adbri to: increase onsite pedestrian safety; diversify our quarry product range; welcome an autistic community member to our site; and improve our debtor days.

Providing new ways for people to communicate is important for fostering collaboration and increasing engagement. In August, we rolled out the social networking app Yammer and are averaging around 500 active users each month. In 2022, we will expand its usage to non-computer user employees.

There was no employee engagement survey in 2021 as we reviewed the current tool. The survey will recommence in early 2022, using a new employee experience platform that links insights to actions and includes practical tools for building employee commitment and driving retention.

Invested in learning and development

To support Adbri's sustainable growth pillar, we rolled out several people development programs, including a cloud-based learning management system, iLearn@Adbri. This platform standardises learning across the business and tracks employee progress to improve outcomes.

Our two-year graduate program provides Adbri with a pipeline of future leaders and technical experts, and participants with invaluable practical experience. In February, we welcomed four (50% female) more graduates, all with an engineering background. Two current graduates will transfer from the program to permanent roles with Adbri next year.

Collaborated on sustainable workplace initiatives

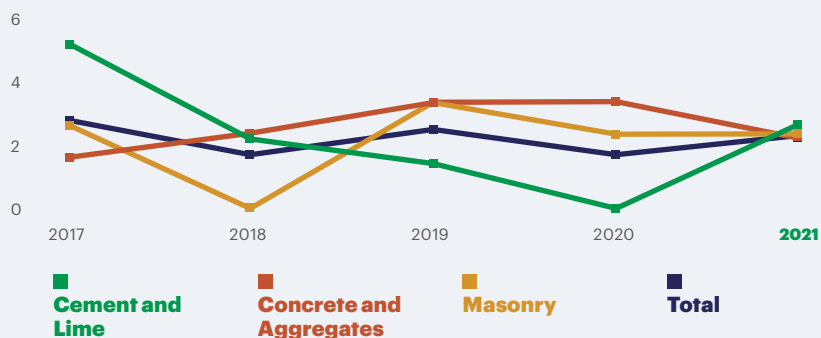
The 360 members of Adbri's Green Team, our voluntary employee sustainability action group, achieved the following this year:

- coordinating Adbri's first Group-wide celebration of Planet Ark's National Tree Day in June, starting with a joint planting with Adelaide High School students of 1,350 native trees at our Penrice quarry site
- asking each Adbri site to nominate one recycling initiative for National Recycling Week, which provided some great local ideas and highlighted how operations can learn from each other
- organising and helping to deliver climate change online learning sessions, which were attended by more than 160 people.

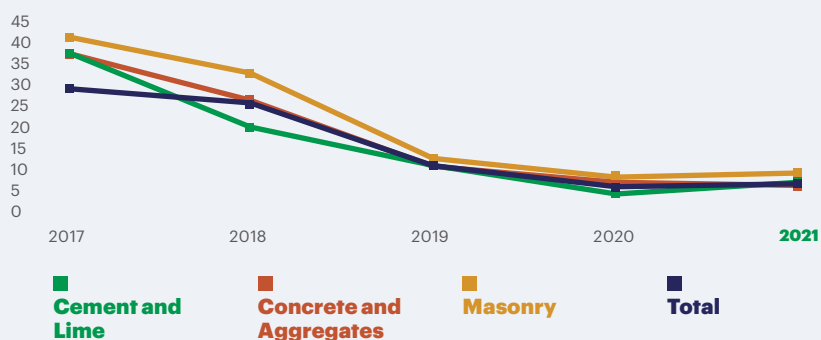
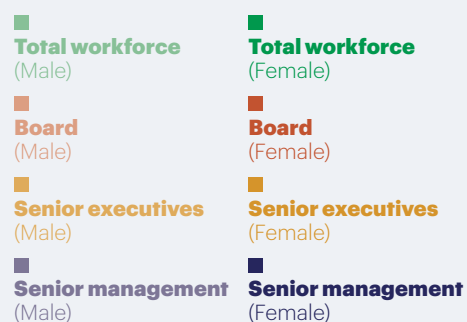
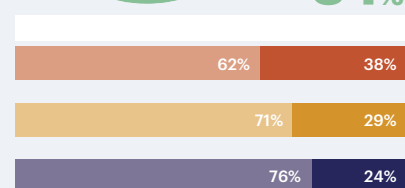
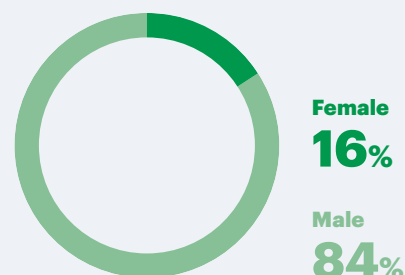
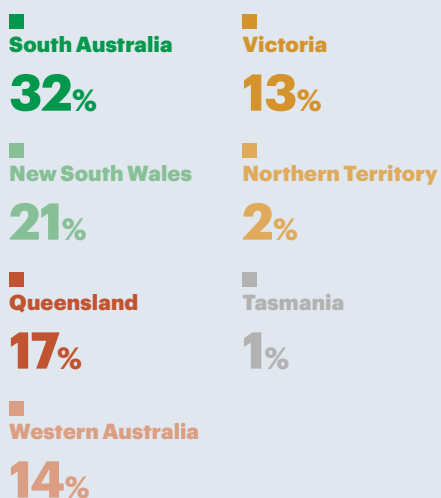
To keep the broader workforce informed, Adbri launched a staff environmental newsletter.

Lost time injury frequency rate by divisions

Total lost time injuries per million hours worked

**Total reportable injury frequency rate by divisions**

Total recorded injuries per million hours worked

**Gender diversity****Employment by geography**

1,500 Total employees in 2021

Healthy, safe and engaged people continued

Case study

Strengthening our COVID response

When planning Adbri's response to the Delta variant in 2021, and Omicron in the latter part of 2021, we built on our 2020 crisis management and business continuity experience. Our primary goal remains protecting our people's physical and mental health while maintaining supply to customers.

As well as remote working, site protection, toolbox talks and control room duplication measures introduced in 2020, we deployed a Rapid Antigen Testing program as a successful screening control, we strengthened individual support by introducing COVID in 2021 supplementary pay, isolation leave and vaccination leave, and provided dining vouchers for staff impacted by extended lockdowns.

By aligning with government guidelines, including compliance with vaccination mandates, we are not aware of any employee contracting COVID in 2021 where an Adbri site was the source of transmission.

With COVID predicted to become endemic, we began exploring opportunities to keep everyone safe, including considering compulsory vaccination as a condition of workplace entry for employees, contractors and suppliers who are not medically exempt. An employee survey indicated mixed views on mandating, with vaccination rates across Adbri consistent with community vaccination rates. In 2022, the Group will continue to adopt a risk-based approach to managing COVID based onsite and role requirements.

Our primary goal is to protect our people's physical and mental health while maintaining supply to customers.

◀ Rapid antigen tests are used in high risk areas of our operations to reduce transmission of the COVID virus



Case study**Keeping our people safe**

In two years, Adbri has inducted over 3,000 people in a Safety Step Change program with the aim to reduce the potential for fatality or serious harm to our people. A key element is the Critical Risk and Visible Leadership program. Mandatory infield critical risk controls minimise or eliminate high potential risks, combined with expected behaviours for Adbri's employees, contractors and visitors to keep each other safe.

To evaluate our safety performance we measure more than 30 lead and lag indicators on a monthly basis, including visible leadership, critical risk control verifications, high potential near-miss incidents, safety communications, and ensure learnings from critical employee reviews are shared across the Group.

In 2021, the Safety Step Change program won the South Australian Cement, Concrete and Aggregates Australia (CCAA) Health and Safety Innovation Award and the South Australian Premier's Award in Energy and Mining for Health and Safety in the Resources Sector. The Cockburn Cement Kwinana team won the Health and Safety Innovation Award at the Western Australia CCAA awards for their mobile plant alert system.

3,000+

people inducted through Adbri's
Safety Step Change program

41%

reduction in TRIFR since 2019

◀ Steven Marshall, Premier of South Australia, with Adbri's Group Manager – Health, Safety & Environment, Kellie Collins at the 2021 Premier's Awards



Positive contribution to communities

In 2022, Adbri will celebrate 140 years of being part of Australian communities. Being a socially responsible company requires us to manage community and government expectations actively and effectively. Through continuous engagement, we aim to understand their aspirations and concerns, provide timely and appropriate responses, and invest in community projects that matter.

Responding to our stakeholders’ concerns and making meaningful contributions to our communities helps to deliver on our commitment to be a socially responsible company.

Our management approach

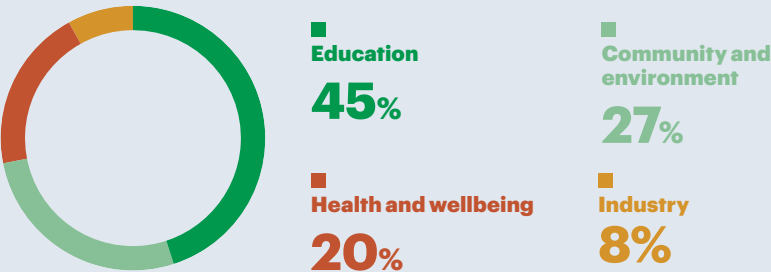
We engage with our neighbours in many ways, including community websites, providing news and information, and holding group and one-on-one meetings. We analyse the data from neighbourhood feedback hotlines to identify and map operational areas for improvement. Local community engagement plans guide activities at our Birkenhead and Munster sites. The plans are reviewed every year and updated in response to community feedback.

Our partnerships, sponsorships, in-kind support and donations help schools, sporting clubs, care agencies and community services to improve local people’s quality of life. We contribute to regional development by supporting and facilitating programs that link our industry with local schools and universities.

Buying goods from regional suppliers and employing local people are also important as a direct demonstration of our community commitment. We apply a sustainable procurement approach to supplier sourcing policies and practices so we can assess the impact of our choices across the supply chain.

Ultimately, our approach is to address any concerns early, be a valued regional employer and purchaser, and make meaningful contributions to our communities.

Community investment spend by focus area



	2021	2020	2019
Community investment	\$246,161	\$203,204	\$263,221

2021 achievements

Engaged frequently with our communities

To provide our local communities with easy-to-access information and community engagement platforms, Adbri launched new community websites in 2021: Adelaide Brighton Cement, Cockburn Cement, Angaston and Morgan Cement. All four contain information about our operations and environmental performance, invite feedback and allow users to subscribe to regular electronic mail-out updates.

Representing six stakeholder groups, the Birkenhead Community Liaison Group (CLG) has been an important two-way communication channel for a decade. During 2021, it held five virtual and in-person meetings, with a focus on alternative fuels and raw materials, Birkenhead's Environmental Improvement Plan, and day-to-day operational updates.

Munster in Western Australia is a key operational site for Adbri's cement and lime businesses. During 2021, we engaged with the local community and key stakeholders by providing regular updates on key projects for Munster, including removing the redundant clinker kiln chimney stacks to improve visual amenity, and the future consolidation of the cement milling manufacturing to Kwinana. For further details on our Munster operation refer to page 47.

The Munster and Kwinana sites partnered with the Kwinana Industries Council to deliver a range of educational programs to students, which included educational operational site tours throughout the year for over 100 local high school students.

Progressed our reconciliation journey

Engaging with Aboriginal and Torres Strait Islander peoples is an important part of our approach to diversity and inclusion. In 2020, we released Adbri's *Reflect Reconciliation Action Plan* (RAP) which focuses on building opportunities for Aboriginal and Torres Strait Islander communities in employment, education, empowerment and economic development. Reconciliation Australia extended the RAP deadline by six months in 2021 so we could complete actions that were delayed by pandemic restrictions. Our RAP is available at www.adbri.com.au/sustainability/people/.

Adbri continued to support Aboriginal and Torres Strait Islander students through a scholarship at St Peter's College in Adelaide and by contributing to the Aurora Education Foundation's culturally immersive High School Program, as well as supporting an Indigenous program in a local primary school in Western Australia. Adbri also donated to Curtin University in Western Australia to support the five-year Moorditj Yorga Scholarship. The scholarship helps First Nations women to enter and succeed at the university so they can return to their communities as strong leaders and role models.

As part of our Indigenous procurement strategy and commitment to economic development, we established a panel of Aboriginal and Torres Strait Islander suppliers during 2021. This aligned with Adbri's 'buy local' strategy and our RAP.

Yira Yarkiny ('Standing Tall') is one supplier that applied successfully following a formal process based on competitive pricing and qualitative criteria such as compliance. A 100% Aboriginal owned and operated company in Western Australia, Yira Yarkiny was appointed in May to supply Adbri's on-demand requirements for static security guards at our Munster and Kwinana sites.

To improve our people's cultural awareness at work and in the community, we invested in additional training during NAIDOC week.

Embedded modern slavery commitments

Adbri is committed to helping our regional small and medium business partners become responsible employers so they can positively impact their communities. Strengthening their key governance areas also mitigates supply chain risks for Adbri.

With the *Modern Slavery Act 2018* increasing expectations and obligations around corporate behaviour, we began consulting with the majority of our joint venture partners in 2021. We aimed to raise awareness, outline our approach, and discuss how we can work together to meet these commitments.

We also extended our modern slavery training to include operational employees, integrated it into the induction program for new employees, and provided regular employee updates about key activities. We want to ensure everyone at Adbri understands what modern slavery is and feels empowered to report breaches. Our commitments are detailed in Adbri's 2020 *Modern Slavery Statement* www.adbri.com.au/sustainability/sustainable-future/.

Enhanced customer experience measurement

Outstanding service is integral to Adbri's brand promise. We actively identify and manage global and national supply chain risks, tailoring our operations to changing circumstances. To ensure Adbri's high-quality customer experience keeps improving, we invested in a major engagement and satisfaction measurement program with robust tools and performance metrics.

Positive contribution to communities continued

Case study

Supporting future scientists and engineers

Adbri is involved in several community programs that address the chronic shortage of people with science, technology, engineering and maths (STEM) skills across the industry.

In June, Adelaide Brighton Cement was the major sponsor for the South Australian 2021 Science and Engineering Challenge. Held every year, the Challenge aims to increase student numbers and success rates for tertiary level science and engineering courses by changing perceptions of these subjects. More than 1,200 students and 104 teachers from 51 schools attended to experience aspects of these disciplines they would not see at school.

Our Kwinana site team hosted 30 students from the Kwinana Industries Council (KIC) iSCIENCE program in November. The program is a Senior Secondary Pathway for Year 10 students who intend to follow ATAR STEM subjects in Years 11 and 12 and are considering applying to university. The students learned about cement and lime manufacturing and gained an insight into local STEM-based career opportunities.

1,200

students

104

teachers

51

schools

attended the South Australian 2021
Science and Engineering Challenge

◀ Encouraging students to build STEM skills will
assist in growing our industry's future talent



Case study**Meeting a community need**

Rapid Bay on the Fleurieu Peninsula in South Australia is a popular diving, fishing and camping destination. As local landowners, Adbri has a long association with the community.

In 2021, the District Council of Yankalilla partnered with us to apply for funding under the Australian Government's Building Better Regions Fund (BBRF) to develop Rapid Bay's first purpose-built public amenities block. The BBRF aligns strongly with Adbri's commitment to build a better Australia as it helps to create jobs, drive economic growth and strengthen regional communities.

The Fund provided a grant of \$210,000 and in October, we announced Adbri would match that contribution. With a unique design that reflects the coastal location, the amenities block will provide visitors with family friendly changing rooms, toilets, showers, benches, storage and fish-cleaning facilities.

The District Council of Yankalilla partnered with us to apply for funding under the Australian Government's Building Better Regions Fund

\$420k

total cost of the project

\$210k

contribution from Adbri in 2022

◀ Rapid Bay is internationally known as a dive site to view the rare Leafy Sea Dragon



Reduce adverse environmental impacts

Adbri has a strategic goal to reduce adverse environmental impacts. We do this in a number of ways, including adopting a circular economy approach to minimise waste generation and diverting waste from landfill. We seek ways to use industrial by-products as alternative fuels and SCMs to reduce our reliance on natural resources and reduce our carbon footprint.

As a significant landholder, we adopt sustainable short-term and long-term land use strategies and identify opportunities for protecting and enhancing the biodiversity our land supports. We also recognise our role in the responsible consumption and discharge of water. Details on the risks and opportunities associated with climate change are covered in the *Responding to climate change* section of this report. See page 49.

Our responsible use of water and land resources and circular economy approach to waste management will reduce adverse environmental impacts.

Our management approach

Environmental management is an essential part of maintaining our social licence to operate. We adopt a systematic approach to mitigate risk and identify management strategies to ensure that our operations do not result in unacceptable environmental impacts. Our Obligation Management System and HSEMS supports the environmental commitments outlined in our Health, Safety and Environment Policy. This policy outlines the responsibilities of employees and contractors, and our HSE objectives including to avoid, reduce or control waste and pollutants to reduce adverse environmental impacts.

We embed environmentally sustainable awareness and practices throughout our business, invest in continual improvement, and collaborate with government, academia and our industry on solutions. To ensure our people understand Adbri's obligations, commitments and expectations, we provide regular training.

Metrics

	2021	2020	2019
Alternative fuel use in South Australia ¹ %	25	25	23
Process waste to landfill ² (t)	179,335	177,703	204,723
Mains potable water usage (ML)	1,091	1,206	1,327
Number of reportable environmental incidents	0	1	1
Number of fines in relation to environmental licences	0	1	1
Penalties	Nil	\$15,000	\$15,000

1. Alternative fuels used at clinker and lime production facilities are sourced from recovered materials that displace a portion of traditional virgin fossil fuels and reduce waste to landfill.

2. Process wastes are wastes produced through clinker and lime production that are sent to a final disposal destination.

2021 achievements

Diverted waste from landfill

A \$2 million investment in 2021 means we now have the capacity to recover 75% of cement kiln dust at our Birkenhead plant and repurpose it for products and offsite civil works. In Western Australia, our Dongara team diverted 9% of lime kiln dust (LKD) from disposal to reuse in agriculture, while we also conducted trials with Munster LKD with the road construction industry.

Investing a further \$8 million allowed us to fully recover hot clinker process dust and redirect it back into production. We can now reuse 20,000 tonnes of this valuable resource a year that would otherwise be directed to landfill.

Rehabilitated quarries

We progressively undertake landscaping and planting to rejuvenate the natural landscape around our quarries to protect native flora and fauna and improve visual amenity. During 2021, we progressively rehabilitated approximately 2.6 hectares of land at Penrice and Austen quarries with tree planting. We also continued to evaluate the visual amenity and flora/fauna health of previously rehabilitated sites against required rehabilitation criteria.

Limestone from Adbri's Klein Point quarry in South Australia that does not meet the chemical specification for clinker production is used in the quarry's rehabilitation. The area is then covered with topsoil to return the terminal areas to a landform that supports future agriculture.

Our Batesford quarry joint venture is also well advanced in land rehabilitation with the quarry to be converted to a 30m deep lake covering 164 hectares. The 5km lake perimeter will become part of a link to three significant local waterways and a future recreational asset for the community. We are progressing the planting of 120,000 plants and spreading 120,000m³ of mulch. When completed, over 168,000 plants will cover the 30 hectares of green space.

Similarly, when quarrying began at our South Australian Moculta site in 1981, agricultural land clearing had removed the original vegetation. In 2021, we updated the extensive native vegetation rehabilitation plan for the quarry and its surrounds and began implementing Stage 1. This will enhance tracts of remnant native vegetation and improve opportunities for fauna habitat.

Reduced potable water in industrial processes

Industrial water is a major contributor to the manufacturing of concrete. Efficient water use is therefore a focus area for all our concrete plants, with the aim of creating a closed water loop onsite. During the year, Adbri's Queensland concrete team designed site processes that capture and reuse recycled water for all concrete batching, with minimal loads requiring fresh potable water. To support our efforts in improving water efficiency we continually look for ways to achieve savings. This has seen us implement a range of initiatives including using non-water alternatives for dust suppression and designing our site layout and operations to minimise wind erosion and dust generation.

Across the Group, Adbri's use of potable water decreased by 9.5% compared to 2020 and by 17.6% compared to 2019.

Cockburn Cement, Munster operations

Our Cockburn Cement Ltd (CCL) facility at Munster was established in 1955 to supply cement and lime to the Western Australian market. Today, residential growth means the Kwinana industrial area, where CCL's Munster site is located, operates in close proximity to the communities of Munster, Beeliar and Yangebup. This presents unique challenges; with emissions, dust and energy source key areas of interest for the community.

In 2019, to help understand odour concerns we undertook independent investigations. These identified that an odour can be generated in the stacks when shell sand, the raw material for lime production, is heated between 400°C and 600°C. We have since developed an engineering solution that has shown approximate odour removal efficiencies of between 70–90% in laboratory scale trials. In February 2021, we applied to DWER for approval to trial the solution at full-scale, with a Works Approval obtained in August 2021. Global supply chain challenges and subsequent impact on the supply of components, combined more recently with defects with supplied manufactured components discovered when being installed onsite, have delayed the trial. We look forward to commencing the trial in Autumn 2022 and sharing the results with the community.

Disappointingly, on 29 July 2020 DWER commenced a prosecution against CCL relating to alleged unreasonable odour emissions from our Munster plant between January and April 2019. CCL asserts that it operates within applicable requirements, denies the charges and has entered a plea of not guilty to each of the 15 charges pursuant to section 49(5) of the *Western Australian Environmental Protection Act 1986* (WA) of causing an unreasonable emission (odour) from CCLs operations at Munster. On 24 January 2022, CCL received a second prosecution notice charging it with six charges of the same offence, alleged to have occurred in the period from 21 January 2020 to 3 April 2020. Refer to the *Directors' Report* for details.

At our 2020 AGM, we announced our intention to phase out coal at Munster by early 2021. In our *2020 Sustainability Report*, we noted significant progress in reducing the amount of coal we use at Munster and complete transition from coal to gas had been delayed following the loss of the Alcoa lime contract and subsequent changes in our production profile at the Munster kilns. In the 2021 calendar year, coal represented approximately 50% of our fuel mix at Munster, a significant reduction from 2017 when it peaked at above 80%. The use of coal is close to the minimal technical limit of our kiln when using the dual fuel mix.

In early 2022, we secured a one-year agreement to supply some of the previously lost Alcoa volume. In light of this we are reassessing our fuel mix and continue to assess options to reduce and phase out coal in line with our aspiration to have net zero emissions by 2050.

We remain committed to engaging with the community; keeping them informed on our progress and ensuring we are a considerate neighbour. We also remain committed to working constructively with DWER on delivering practical outcomes for the community.

Reduce adverse environmental impacts continued

Case study

Trialling hybrid plant

With the anticipated growth of sustainable transport options in Australia and our commitment to reducing Adbri's energy consumption, we are identifying opportunities to improve transport efficiency and decarbonise our fleet. Finding alternatives to diesel, such as hydrogen and renewable electricity, is a major priority to reduce our reliance on fossil fuels.

In 2021, our Tinda Creek quarry in regional New South Wales invested in a hybrid electric Komatsu excavator. Designed to reduce fuel consumption and consequently lower CO₂ emissions, it combines a diesel internal combustion engine with a generator and electric motors.

Compared to a traditional excavator the hybrid used 3.4 l/h less fuel on average over a six-month period while operating under more difficult conditions. Following this success, we are further evaluating Adbri's fleet options.

We are identifying opportunities to improve transport efficiency and to decarbonise our fleet.

3.4 l/h

less fuel than a traditional excavator

◀ The Tinda Creek quarry team trialling a new hybrid excavator



Responding to climate change

Adbri operates two emissions-intensive and hard-to-abate processes – the integrated manufacture of clinker and cement and lime production. We have demonstrated a strong performance over the past decade in reducing our operational emissions. In 2021 we announced our aspiration to achieve net zero emissions by 2050, with our NZE Roadmap to be released prior to our 2022 Annual General Meeting.

The key challenge is associated with our process emissions as a result of the calcination process required to produce both cement and lime. The technologies needed to decarbonise our process emissions are not yet commercial at scale. We are committed to focusing in the near-medium term on using conventional approaches to abate our fuel-related emissions, while we work in collaboration with key partners to demonstrate emerging technologies to reduce our process emissions.

Our approach

Our Position on Climate Change outlines our acceptance of the climate change science, the role of lime, cement and concrete in the transition to a low carbon economy and our commitment to collaborative action. Collaboration is the key to commercialise at scale breakthrough technologies that are required to decarbonise our value chain by 2050 in line with the Paris Agreement goals.

We are a supporter of the Task Force on Climate-Related Financial Disclosures (TCFD) and are working to align our disclosures with the TCFD's recommendations across the four areas of Governance, Strategy, Risk Management and Metrics & Targets. We are reviewing the TCFD changes made in October 2021 and plan to address additional requirements in future disclosures.

We actively engaged with investors and stakeholders on our approach to climate change, including industry organisations and Climate Action 100+. We also provided support to the Cement Industry Federation and Manufacturing Australia in the development of their roadmaps.

Governance

The Adbri Board has accountability for determining the strategic direction of the Company and oversees our response to climate change, including strategy discussions, investment decisions, risk management and performance against our commitments. To ensure a focused approach, climate change is a standing item for the Board's SHES Committee meetings. For the first time this year's Directors' skill matrix includes climate change.

Climate change is one of our most material risks, and includes risks associated with physical climate change impacts and the transition to a low carbon future. The Audit, Risk & Compliance Committee supports the Board with the oversight of climate-related risk management, although the Board retains overall accountability for Adbri's risk profile. Our Corporate Governance Statement outlines more information about our Board Committees.

During 2021, the Board engaged on climate change issues including:

- Board readiness check to self-assess current and intended target state for climate change risk governance and identify actions required to be a leader across its value chain
- discussions on energy supply, technology developments and investor, shareholder, industry association and government views on climate change issues as presented by expert advisers to inform Board decision making
- regular briefings and engagement on the NZE Roadmap
- considered sustainability impacts on strategy and investment decisions.

Adbri's Position on Climate Change

Adbri accepts the Intergovernmental Panel on Climate Change's evidence that warming of the planet is unequivocal, that human influence is the main driver and physical impacts are unavoidable.

We believe:

- The world must pursue the Paris Agreement goals with increased collective ambition to accelerate action to limit the impacts of climate change
- Business has a critical role to play in responding to scientific evidence and addressing the risks and uncertainties of climate change
- The challenge of significantly cutting global emissions will require transformations across the economy, including the built environment
- Cement, concrete and lime products have a critical role to play in the transition to a low carbon economy
- Lime and cement manufacturing are both hard-to-abate processes, however there are energy-related abatement actions available in the short and medium-term
- Technologies required for our net zero emissions goal are not yet commercial at scale, but we anticipate can be developed through innovation, investment and cooperative partnerships
- Government policies will play a critical role in enabling action aligned to the Paris Agreement.

We are committed to:

- Identifying and integrating commercial responses to climate change into our strategies as we plan for sustainable growth
- Reducing our operational greenhouse gas emissions in line with our public targets as we transition to a low carbon future
- Listening to our employees and communities and collaborating with our suppliers, JV partners and customers
- Producing lower carbon products for our customers to support their sustainability goals
- Adapting to the potential physical impacts of climate change by working with experts to build our knowledge and enhance the resilience of our assets
- Partnering with others to develop technologies and solutions to ensure our business remains profitable and market leading
- Building our capacity and resourcing across the business through training and skills development to support our journey to net zero emissions
- Engaging with governments to adopt appropriate policies to support sustainable manufacturing in Australia
- Transparently reporting our performance against our commitments using international frameworks, including the Task Force on Climate-Related Financial Disclosures.

Responding to climate change continued

The Managing Director & CEO is responsible for converting Board strategy into implementation plans. Management is accountable for implementing these plans, with a linkage between targets and executive remuneration.

Climate strategy

In May 2021, we announced our aspiration to achieve net zero greenhouse gas (GHG) emissions by 2050 and committed to releasing our NZE Roadmap prior to the 2022 Annual General Meeting.

During 2021, we made good progress and have benchmarked ourselves against NZE roadmaps in other regions, including the United Kingdom, European Union and United States of America, as well as contributing our expertise to local association roadmaps developed by the Cement Industry Federation and Manufacturing Australia. The Intergovernmental Panel on Climate Change's (IPCC) Sixth Assessment Report has also helped inform our thinking. We also referenced the Science Based Target initiative (SBTi) guidelines in our approach to target setting.

As an energy-intensive business, our NZE Roadmap will build on our track record of reducing GHG emissions and outline interim targets on the pathway to net zero emissions by 2050. Collaboration, research partnerships and future developments in technology will all have a role to play in Adbri's transition to a lower carbon future.

Scenario analysis

A key element of the TCFD Strategy recommendations is to describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a scenario based on an average global temperature increase of 2°C or lower.

Adbri disclosed its first climate change scenario analysis in our 2020 Sustainability Report, including an assessment of three scenarios, drawing on scenario analysis from the IPCC and the International Energy Agency (IEA):

- No action scenario – 4.0°C
- Stated Policy Scenario – 2.7°C
- Sustainable Development Scenario – 1.7°C.

We have continued to review the IEA's reports to understand developments in the World Energy Outlook and technology pathways which inform the core scenario analysis. IEA's flagship report Net Zero by 2050 – A Roadmap for the Global Energy Sector, released in 2021, has also been very helpful in assessing international trends impacting on the transition to net zero emissions in line with the Paris Agreement goals.

Risk management

Adbri has identified climate change as a strategic risk and opportunity for our business. Our risk assessment is aligned with the TCFD approach and includes an analysis of transitional and physical risks.

Transition risks

Policy and legal

- Regulations for Australian carbon pricing schemes
- Regulatory changes which limit our strategic choices
- Lack of policy harmonisation across governments
- Slow progress on the approval of new standards for lower carbon cement and concrete products
- More stringent resource regulations, such as the use of alternative fuels
- Greater competition for water
- Tighter limits on regulatory permits

Technology

- Electricity market rules and/or lack of infrastructure build-out of transmission create congestion in the pipeline of new renewable generation which limits the availability of competitive renewable Power Purchase Agreements
- Rate of progress and investment in technology to support the transition to a low carbon economy
- Risks associated when integrating new technologies with existing systems
- High investment costs today of carbon capture and storage technologies and alternative fuels such as hydrogen

Market

- A substitute for Portland clinker-based cement becomes commercially viable
- Supply risks associated with SCMs including slag and fly ash
- Energy market conditions lead to higher fuel costs
- Slow customer uptake for lower carbon products

Reputation

- We cannot prove alignment with Paris Agreement goals and meet stakeholder expectations
- Shareholder actions if investors lose confidence
- Limits on external funding and insurance
- Inability to attract and retain employees

Physical risks

Acute

- More intense weather events, e.g. storms, flooding, fires and extreme heat days

Chronic

- Slow-onset climate risks (rising sea levels, changing rainfall patterns) that can impact on our assets

To manage our climate change transition risks, we are developing our NZE Roadmap, investing in the development of lower carbon products and advancing research in lower carbon cement and lime through key partnerships. We will continue to work to better understand our exposure to physical risks.

Metrics and targets

Our five-year targets from a FY19 baseline are a 7% reduction in GHG emissions; and for 50% kiln fuel to be sourced from alternative fuel in SA. In FY21, Adbri further reduced our total operational GHG emissions, Scope 1 and Scope 2, by 43,104 tonnes CO₂e (2%) vs our FY20 performance. This represents a total of 4% reduction against our FY19 baseline. Since FY10, Adbri has reduced our Scope 1 and Scope 2 GHG emissions by 32%.

Our overall energy consumption in FY21 reduced year-on-year against FY19 and FY20. Our improved thermal efficiency and electrical efficiency in our integrated clinker/cement manufacturing has been a positive factor in our lower energy use. Lower emissions from our Birkenhead site (9% below FY20)

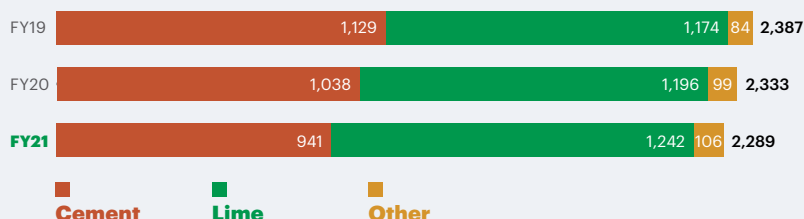
were largely offset by the increased emissions at our Munster site (6% above FY20). Overall, our clinker and cement production was slightly down, while lime production was up slightly in FY21 compared with FY20.

Clinker and lime production generated 92% of Adbri's total operational emissions, with the remaining 8% attributed to electricity and diesel usage downstream in cement, concrete and lime activities.

	FY21	FY20	FY19
Total operational GHG emissions (Scope 1 and 2) †CO₂e¹	2,289,449	2,332,553	2,387,020
Scope 1 GHG emissions †CO₂e¹	2,092,331	2,125,121	2,156,481
Scope 2 GHG emissions †CO₂e¹	197,118	207,432	230,539
Scope 3 GHG emissions †CO₂e	1,012,808	N/A	N/A
Total energy consumption (GJ)¹	14,175,950	14,286,867	14,782,120

1. GHG emissions and energy consumption are measured and reported in line with the Australian National Greenhouse and Energy Reporting Act 2007.

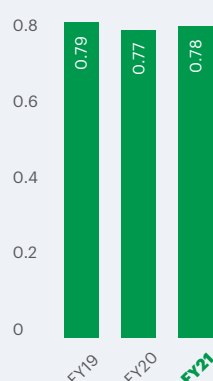
CO₂e emissions by product¹ (kt)



Emission intensity by product^{2,3}

	FY21	FY20	FY19
Cement	0.64	0.62	0.68
Lime	1.13	1.14	1.06

Clinker to cement ratio



Thermal efficiency

GJ/t clinker⁴



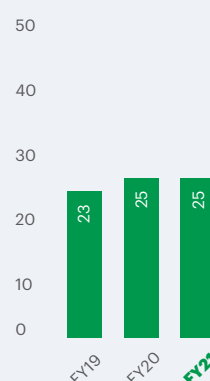
Electrical intensity

kWh/t cement⁴



Alternative fuel usage

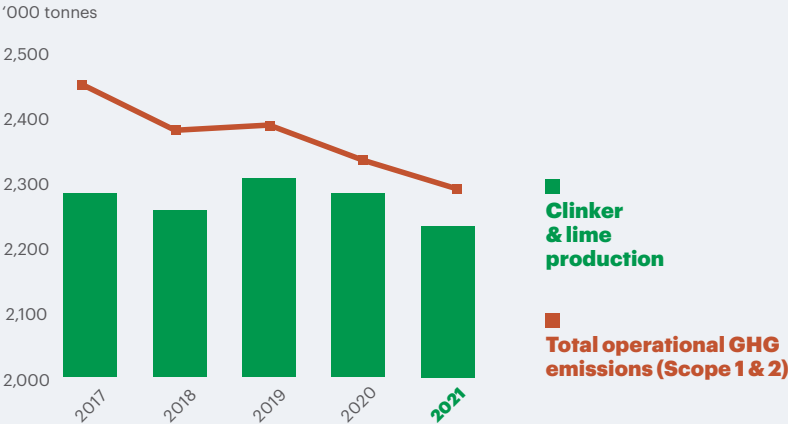
% of thermal energy⁵



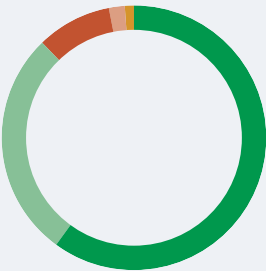
1. Scope 1 and Scope 2 kt CO₂e.
2. Scope 1 + Scope 2 tonnes CO₂e/tonne product.
3. Emissions intensity of cement from locally produced clinker.
4. South Australian integrated clinker/cement plants only.
5. South Australia clinker and lime kilns.

Responding to climate change continued

Operational GHG emissions (Scope 1 + Scope 2)



Operational GHG emissions (Scope 1 + Scope 2) by source



■ Process emissions (lime and clinker)

60%

■ Kiln fuels

28%

■ Electricity

9%

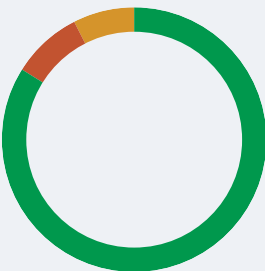
■ Non-kiln onsite fuels

2%

■ Transport fuels

1%

Scope 3 GHG emissions



■ Purchased goods

84%

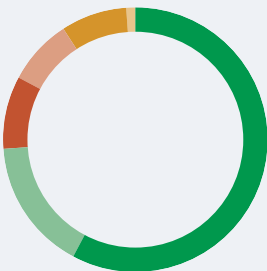
■ Upstream fuel & energy-related activities

9%

■ Upstream transportation & distribution

7%

Energy consumption by source (TJ)



■ Natural gas

58%

■ Electricity

9%

■ Liquid fuels

8%

■ Coal

16%

■ Refuse derived fuel

8%

■ Recovered waste oil

1%

2021 achievements

Advanced towards net zero emissions goals

In 2021 we announced our aspiration to achieve net zero emissions by 2050. We progressed our NZE Roadmap and developed Adbri's Position on Climate Change.

Improved energy and process efficiency

As outlined in the *Cement and Lime update* we are reviewing our end-to-end cement manufacturing process in South Australia. This involves accessing international experts to benchmark our operations globally to reduce the cost per tonne of cement, as well as GHG emissions.

In October we also turned the ceremonial sod for our new cement facility in Kwinana, Western Australia which will provide greater efficiencies in our Western Australian cement operations, with reduced electricity and diesel use, and lower greenhouse gas emissions, compared to the existing operations.

Entered technology research partnerships

Partnering on technology development is key to unlocking decarbonisation solutions. In March 2021, Adbri entered into a Heads of Agreement with industrial process technology company Calix. The agreement covers the co-development of a Calix calciner for lime production with CO₂ capture.

We also became a core partner of the Heavy Industry Low-carbon Transition Cooperative Research Centre (HILT CRC) which is a leading collaboration to transform the heavy industry sector for a low carbon economy. We also joined the Material and Embodied Carbon Leaders Alliance (MECLA) in NSW which brings together a wide range of industry, government, research and NGO representatives. These initiatives support and build on our existing SmartCrete CRC partnership to deliver breakthrough advancements in the cement and concrete products market.

Reduced our GHG emissions

Throughout 2021, we sought new ways to reduce operational emissions. For example, the Group's Hy-Tec business replaced two smaller secondary plant generator set units with a single larger engine unit that uses less fuel. This saves 100,000 litres of diesel a year and reduces annual CO₂ emissions.

Aligned with our short-term target to reduce our operational emissions, we have now invested \$942,000 in solar PV installations behind the meter at six Masonry and five Concrete sites. The total installed capacity at the end of 2021 was 7.9MW. These investments reduce our Scope 2 emissions, as well as energy costs.

Accounting for Scope 3 emissions

Scope 3 emissions include all indirect emissions across our value chain (excluding emissions from purchased electricity which are considered as Scope 2), including imported clinker and cement, upstream emissions associated with production and supply of energy (e.g. production and transportation of gas to our sites), embedded carbon in the inputs to our operations, and transportation of our inputs and outputs.

We are disclosing our known Scope 3 emissions for the first time in this report. This reporting forms part of our commitment to increased disclosures in line with TCFD recommendations. We continue to work through the process of Scope 3 emission data collection and have not yet achieved our aspirational level of engagement with our suppliers and customers. As a result, the Scope 3 emissions data reported for FY21 contains the material sources of emissions but is not comprehensive. The biggest gaps are Scope 3 categories: purchased goods – sourced within Australia; capital items; JV contributions; and downstream transportation and distribution associated with contractors who deliver products to our customers.

Our total Scope 3 emissions for FY21 were 1,012,808 tonnes CO₂e. The main contribution was from the emissions from purchased goods, dominated by the importation of clinker. We have also included the upstream transportation and distribution emissions for imported products. The remaining category that we have included for FY21 was the upstream fuel and energy-related activities, with the main contributions from upstream activities associated with natural gas production and fossil fuel electricity generation.

We will continue to collaborate with our suppliers and customers as they seek opportunities to reduce their emissions and we strive to improve our data management systems to capture the full range of Scope 3 categories. This work will lay the foundation for us to set Scope 3 targets in the future.

Lower carbon products

Innovation in our production processes enables Adbri to produce lower carbon products that help our customers to meet their decarbonisation targets. Customer demand for lower carbon products is increasing, driven by industry, consumer and government expectations.

Our management approach

Technology developments and innovative thinking, as well as industry, government and research partnerships are all playing a critical role in our ability to meet customer demand for lower carbon choices. Adbri is investing in research and development for lower carbon raw materials, product substitutes and alternative fuel sources.

Metrics

Adbri’s Sustainability Framework has previously set a target to increase the tonnage of alternative raw materials used in our products. However, we acknowledge the overall target will not be met by 2024 as it requires significant technological advances and market acceptance. These have not yet been forthcoming, and therefore our ability to increase the use of these materials has been limited without risking our ability to deliver the highest quality products.

In recognition of the available opportunities and current efforts to decarbonise our product range, Adbri has developed a replacement target of 24% SCMs as a proportion of final cementitious product sales. This includes sales of both cement products which incorporate SCMs as part of their composition, as well as stand-alone ‘ready to use’ SCM sales such as fly ash and ground-granulated blast furnace slag.

Case study

Lower carbon cement shows promise

General purpose limestone cement (Type GL) is an AS3972 compliant product that is manufactured with up to 20% of limestone mineral addition substituting for clinker, the emissions-intensive component of cement. Type GL cement can be used as an alternative to Type GP (general purpose) and Type SL (shrinkage limited) cements for most forms of construction. It is being used extensively in Europe and North America.

In 2021, Adbri trialled GL cement in pre-mix concrete products to see if we could meet growing market expectations without compromising product performance or AS3972 standards compliance.

Laboratory tests on a batch of Adbri-produced GL cement showed it performed similarly to our GP and SL cement products. For in-field trials, we supplied ready-mixed concrete containing our GL cement in varying strength grades to 40 construction customers who were open to product innovation. These were used to build driveways, kerbs, piling works and other common applications as our researchers observed and undertook various tests. The workability, pumpability, placement and finishability were equal to that of our SL and GP cements and customer feedback was uniformly positive.

Using the learnings of these initial trials, we are planning further field trials to determine the performance of Type GL cement in more demanding concrete applications such as precast and post tensioned concrete.



◀ Lower carbon GL cement trials were held during the year

Metrics

	2021	2020	2019
Supplementary cementitious materials as a proportion of final cementitious product ¹	20%	21%	21%

1. This replaces the ‘Alternative raw materials’ metric used in 2019 and 2020. In 2021, we achieved a 1% improvement against the discontinued metric.

2021 achievements

Focused on lower carbon products

Research, technology and collaboration are central to lower carbon product development in our industry. During 2021, Adbri continued to be an engaged partner in the SmartCrete Cooperative Research Centre (CRC), which facilitates research for the concrete supply chain, including sustainable concrete development. Adbri is reviewing several potential projects of interest that will provide the opportunity for active involvement during 2022.

We built on our geopolymer capability during the year and its potential application in producing lower carbon binders, investigating specific applications and lodging one provisional patent.

Comprehensive tests and trials during October proved that Type GL cement has great potential for our lower carbon product portfolio – see the case study on page 54.

Progressed our SCM ambitions

Adbri uses SCMs as an alternative to emissions-heavy Portland clinker in cement and concrete production. Adbri has continued to bolster its supply chain of these materials from post-industrial recycled content such as ground-granulated blast furnace slag and fly ash, as well as investigating new novel SCM sources. In 2021, we refreshed our SCM strategy, which is designed to meet our Company's needs through to 2030.

Influenced standards

As one of the lead authors, Adbri made a significant contribution in 2021 to the formation of a new Australian Standard (AS3582.4) that allows the use of new and emerging SCMs. In addition, we continued to invest significant resources into the research and application of these new materials.

Built our sustainability credentials

To provide greater transparency to our customers regarding the environmental impacts of our products, we progressed work on EPDs. We will continue to advance this work in 2022.

During the year, Adbri applied to join the Australian Packaging Covenant Organisation and register all our brands. This will help Adbri to meet our National Environment Protection Measure obligations and Australia's 2025 national packaging targets. We also investigated some new sustainable packaging initiatives to action in 2022.

Adbri was the first company to use RDF for Australian cement manufacturing to reduce our reliance on traditional fossil fuels. We further improved our RDF usage rate after gaining additional approvals from SA EPA.

Case study

Proud to be a RDF pioneer

Refuse derived fuel (RDF) is produced by a third party who processes industrial waste products to produce an alternative fuel source. As well as reducing demand for fossil fuels, it diverts waste from landfill. RDF use has the added benefit of being a key efficiency driver by reducing fuel costs and providing recyclable by-products.

Adbri started using RDF at our Birkenhead plant in 2003. Since then, we have used 1.3 million tonnes of RDF, which has significantly reduced the Group's GHG emissions and the cost per tonne to produce cement.

The SA Environment Protection Authority (SA EPA) licence allows Adbri to use 25 tonnes per hour of RDF, which displaces on average 40% of the total Birkenhead plant clinker manufacturing process natural gas requirement across the calciner and the kiln. From 2020 to 2021, our RDF substitution rate at Birkenhead increased from about 28% to about 35% in 2021. In 2022, our target is up to 40% kiln fuel replacement at Birkenhead and we have a target of 50% alternative fuel by 2024.



▲ RDF has been used at our Birkenhead plant since 2003

Building a better Australia

In 2022, we will be half-way through delivering Adbri's Sustainability Framework. We have a solid foundation to build on as Adbri continues making a positive economic and social contribution to Australia and its people.

The health and safety of our people will remain our priority as we continuously **embed our 'Work Safe, Home Safe' culture**. We will increase our activities to support mental health and shape a workplace that values inclusivity.

The Framework and our material risks – particularly climate change and decarbonisation – will shape Adbri's future sustainability activities.

Stakeholder expectations will also play an increasingly significant role, with customers and other key groups being included in our materiality survey in 2022 so we can capture their views.

As we progress towards building a consistent way of doing business, we will focus on **creating a shared culture and values across the Group** that aligns with our purpose and pillars.

Reducing our GHG emissions will be a major driver as Adbri works towards medium and long-term targets in the **NZE Roadmap**. To be released in 2022, it will build on the emissions reduction target in our Framework. We will also continue to enhance our environmental management systems as we work towards ISO 14001 accreditation.

As part of Adbri's local employment focus priority, and to mitigate modern slavery risks in our supply chain, we will **work with suppliers to strengthen relationships** and define our 'local' spend to track our performance. This will include identifying opportunities for more Indigenous businesses to join the Adbri supplier panel. We will also **progress our reconciliation journey** by submitting an Innovate RAP to Reconciliation Australia for endorsement.

The **Kwinana Upgrade project** will move to the major construction stage, representing a significant step in our core strategy of improving operational efficiency and lowering GHG emissions, compared to our existing operations. We will continue to consider sustainability impacts when making investment and capital decisions.

Throughout 2022, we will continue to assess our sustainability risks and opportunities across our operations and make progress against our targets. Our people are key to generating and implementing ideas that make a difference to our operations. We will continue to foster our employee-led Green Team as one of the ways we harness ideas that can make an impact on our operations, with solutions shared across Adbri.

Key focus areas

Embed our 'Work Safe, Home Safe' culture.

Create a shared culture and values across the Group.

Release our Net Zero Emissions Roadmap.

Work with suppliers to strengthen relationships.

Progress our reconciliation journey.

Kwinana Upgrade project construction.

Feedback

Adbri welcomes all feedback on the 2021 Sustainability Report. If you have any questions or comments, please email info@adbri.com.au. For more information about specific topics, see the Adbri website at www.adbri.com.au.



Helping to close the gap

Located near Adbri's Munster plant on Whadjuk country, Beeliar Primary School has one of Perth's highest populations of primary-school-aged Aboriginal students. In 2021, Cockburn Cement helped the school to launch Mooditch Koolingar Wadi ('Strong Children Club') to provide after-school homework and activities sessions for Noongar children. The Club engages the students through cultural activities, reading, homework support, outdoor play and healthy afternoon snacks. It is a priority activity for Adbri's RAP as it is connecting Aboriginal students with the wider school community.