

# SUSTAINABILITY UPDATE

SEPTEMBER  
2022





# WE'RE **CHANGING** THE FACE OF BREWING







**BRICK LANE IS  
COMMITTED TO  
BUILDING A DYNAMIC  
AND SUSTAINABLE  
APPROACH TO  
BREWING AND IS  
INVESTING IN AND  
SHARING WITH THE  
BEER COMMUNITY  
GLOBALLY LEADING  
INNOVATION**



The beer industry has always held a special place in the fabric of Australia... from farmers, process technology, packaging innovations, design and marketing and through to some of the greatest, freshest and exciting beers available for all occasions.

At Brick Lane we take the responsibility of continuing to develop our heritage in brewing and importantly advance the industry through an unwavering commitment to invest in and develop Australia's leading independent sustainable brewer.

We can only achieve this outcome with the full commitment of our team, our suppliers, the industry and importantly the support of our customers.

Since we began in 2018, every decision and investment in the business has had sustainability as a non-negotiable. Not only for our own business, but also to pass on and support those in our community, including our suppliers and others in the industry that use our brewery for their own production.

Brick Lane has a genuine goal of building and supporting a like minded community dedicated to sustainability and continuing to put the Australian brewing industry at the forefront of innovation and sustainability.



# AUSTRALIA'S SUSTAINABLE BREWING LEADER

Brewing has traditionally been an energy and water-intensive industry.

At Brick Lane Brewing, we are determined to lead positive change and direct action, to help Australia's brewing industry do better.





**AS THE LARGEST  
BREWERY TO BE BUILT  
IN AUSTRALIA SINCE  
OPENING IN 2018,  
BRICK LANE HAS  
LED THE INDUSTRY  
IN TAKING DIRECT  
ACTION TO INNOVATE  
AND INVEST IN LONG  
TERM SUSTAINABILITY  
PROJECTS FOR THE  
BENEFIT OF THE BROADER  
BEER COMMUNITY  
AND DIVERSITY WHILE  
REDUCING AUSTRALIA'S  
BREWING FOOTPRINT.**

## **WE ARE FIRMLY ALIGNED TO THE FOLLOWING UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS**

ENSURE AVAILABILITY AND  
SUSTAINABLE MANAGEMENT OF  
WATER AND ENERGY FOR ALL.

BUILD RESILIENT INFRASTRUCTURE, PROMOTE  
INCLUSIVE AND SUSTAINABLE BUSINESS  
PRACTICES AND FOSTER INNOVATION.

ENSURE SUSTAINABLE CONSUMPTION  
AND PRODUCTION PROCESSES.

WE HAVE AMBITIOUS PLANS TO  
DECARBONISE OUR PROCESS AND  
REDUCE OUR SCOPE 1&2 EMISSIONS  
TO 'TRUE ZERO' BY 2025<sup>1</sup>.

WE HAVE A NUMBER OF INITIATIVES ROLLING  
OUT TO REDUCE OUR SCOPE 3 EMISSIONS,  
SUCH AS REDUCING SUPPLY CHAIN EMISSIONS  
THROUGH INVESTING IN OUR OWN WAREHOUSING  
AND LOGISTICS OPERATIONS AND POLICIES TO  
SUPPORT REDUCTION OF EMPLOYEE COMMUTES.



ZILCH  
NADA  
NONE

ACHIEVING

“TRUE  
ZERO”

ZIP  
NILL  
NAUGHT

We understand that some parts of the economy will need tools like carbon offsets. However, we believe we can achieve ‘true zero’ emissions – decarbonisation of Scope 1 & 2 emissions – in 2025 with direct investment in renewable technologies.

SINCE COMMENCING OPERATIONS IN 2018, WE HAVE MADE CONSIDERABLE STRIDES IN EMBEDDING SUSTAINABILITY IN EVERY PART OF OUR BUSINESS.

**BASED ON INDUSTRY BENCHMARKS,  
WE ARE LEADERS IN OUR SECTOR.**

WATER TO BEER OF 3.7  
(litres of water to litres of beer)

ELECTRICITY TO BEER OF 11.6  
(kWh to hl of beer)

NATURAL GAS TO BEER OF 125:1  
(MJ to hl of beer)

IN AUGUST 2022, WE RECEIVED B CORP CERTIFICATION, ONE OF THE VERY FEW BREWERS IN AUSTRALIA TO HAVE ACHIEVED THIS INTERNATIONALLY RECOGNISED MILESTONE.







# BRICK LANE BREWERY

**B CORP**

***BLOODY  
BRILLIANT***

Certified



Corporation

This company meets the  
highest standards of social  
and environmental impact



# WE ARE COMMITTED TO DELIVERING:

**100%  
RENEWABLE  
ELECTRICITY**  
IN 2023

**REDUCTION  
OF WATER**  
BEER RATIO TO  
3.4:1 IN 2023

**100% REUSABLE,  
RECYCLABLE, OR  
COMPOSTABLE  
PACKAGING**  
WITH ALL PACKAGING  
MATERIALS CONTAINING AT  
LEAST 50% RECYCLED  
CONTENT BY 2023

**CERTIFIED  
CARBON  
NEUTRAL**  
IN 2023

**50%  
REDUCTION**  
in fugitive CO2 emissions by 2024  
(with CO2 recovery and reuse)

**DIRECT DISTRIBUTION**  
SUPPLY CHAIN / SCOPE 3

Achieve direct distribution to national retail in 2022, eliminating superfluous truck movements. By 2023 ensure all approved suppliers have committed to decarbonising their operations in line with UNFCCC and Paris Agreement targets.

**HYBRID WORK**  
ARRANGEMENTS TO HELP  
EMPLOYEES REDUCE  
COMMUTE TIME

**REDUCE  
LANDFILL**  
BY 50% BY 2023

**PROVIDE  
SALARY  
PACKAGING**  
OPTIONS FOR EMPLOYEES  
to purchase electric vehicles for charging onsite  
from our solar plant





# OUR JOURNEY SO FAR...





“  
**AT BRICK LANE  
BREWING, WE ARE  
PROUD OF WHAT WE  
DO, THE BRANDS WE  
BUILD AND THE ROLE  
WE PLAY WITHIN  
OUR COMMUNITY.**  
”

In 2018, we broke ground on the build of our state-of-the-art brewery in Melbourne Victoria. We purposely designed the facility to reduce the environmental impact of brewing, investing in world class technology and automation to increase efficiency and reduce energy and emissions.

Initiatives such as improved passive thermal efficiency and lower summertime temperatures, to the optimisation of slab thickness to reduce concrete consumption in building construction. Our shift structure means the plant never stops, maintaining maximum thermal and process efficiency while reducing the ratio of commuting time to working time by our frontline staff.

Sustainability is built into the very fabric of our business.



At Brick Lane Brewing, we are proud of what we do, the brands we build and the role we play within our community.

We know our goals would not be achievable without our incredible people who are essential to our mission.

We invest in industry-leading initiatives such as community giveback and volunteer programs, and meaningful L&D programs, including key accreditations, diplomas and the opportunity for all team members to work across different business functions, broadening their skills further.

From day one, we built an ecosystem of local partnerships to loop waste produce back into the local supply chain. Importantly, we focus on our team's physical and mental wellbeing through flexibility, a wide range of health and wellness programs and our partnership with Converge International.

Finally, we know the importance of recognition, so along with our regular awards, we offer large beer and gear allowances and an incredible opportunity for employees with long tenure to go on a company-funded overseas study tour.

**L&D PROGRAMS INCLUDING KEY ACCREDITATIONS, DIPLOMAS AND THE OPPORTUNITY FOR ALL TEAM MEMBERS TO WORK ACROSS DIFFERENT BUSINESS FUNCTIONS, BROADENING THEIR SKILLS FURTHER.**

**FLEXIBILITY**

**HEALTH & WELLNESS**

**COMMUNITY GIVEBACK  
& VOLUNTEER PROGRAMS**

**LOCAL PARTNERSHIPS**

**REWARD &  
RECOGNITION**





**FROM THE START,  
WE COMMITTED TO  
NO PLASTIC  
IN PACKAGING.  
ALL PACKAGING IS  
100% RECYCLABLE.**

**IN 2018, THE FIRST  
CANS ROLLED OFF OUR  
PRODUCTION LINE.**

At the same time, our circular waste stream kicked into gear when we transported our first spent grain shipment to farmers as a nutritious source of stock feed.

While reducing our CO2 emissions, we also need CO2 to bring our brews to life. As of 2019, we source 100% of purchased CO2 from sustainable/fermentation derived sources. We do not use CO2 derived from natural gas, ammonia, or fossil fuel.

In 2020 we installed our deaerated water plant, reducing our CO2 consumption in water deaeration by 95%, compared to our previously manual method. Since installation, **THIS HAS SAVED 978 TONNES OF CO2.**

In 2022 we commenced the installation of a 375kW solar project, the largest of any independent brewery in Australia. This supplies 27% of our total electricity requirement and reduces CO2 emissions by 374 tonnes per year, the equivalent of removing 81 cars from the roads.

**IN 2022 WE COMMISSIONED  
OUR SECOND BREWHOUSE,**  
a 100hl line designed for 12 brews/day – this included world-leading energy efficiency and water saving measures, including steam mass flow control for measuring energy use and a vapour condenser for recovering thermal energy.

**IN 2021,** we removed freon refrigeration from the site and moved to natural refrigerants only with zero ozone depletion and GHG potential while increasing the overall efficiency of our refrigeration plant.

In 2022, we introduced an in-house designed CO2 Vaporiser, **SAVING 32 TONNES OF CO2E** per year by recovering energy from liquid CO2.

**AS OF JUNE 2022, WE HAD  
DIVERTED 99.31% OF SOLID  
WASTE FROM LANDFILL.**

In 2022 our water reduction projects have saved 23.9 million litres of water. Our Water: Beer ratio has reduced from 6.1:1 to 3.8:1 – **A 40% REDUCTION** from our 2019 baseline.

In 2022 we commissioned consumer research showing that 45% of Australians already consume no-and-low-alcohol drinks, a valuable insight shaping our future production in line with consumer demands.

**AND  
WE'RE JUST  
GETTING  
STARTED!**

**IN AUGUST 2022, WE  
BECAME THE LARGEST  
INDEPENDENT BREWER  
IN AUSTRALIA TO BECOME  
B CORP CERTIFIED.**

In August 2022, we installed custom-designed thermal jackets on valves, filters and steam traps in our steam distribution pipework, reducing thermal loss, **SAVING 30 TONNES OF CO2E** per year, and reducing natural gas requirements by 5.2%.

Our new onsite warehouse, opened in 2022, **ELIMINATES 880 TRUCK MOVEMENTS PER YEAR,** shortening our finished goods supply chain from Brick Lane to our customers.





# HOW WE'RE BREWING A BETTER WORLD





## KEEPING THE BEER & THE PLANET COOL

**52%**  
IMPROVEMENT  
ON OUR 2019  
BASELINE.

We have 100% natural NH3 refrigeration.

Using natural refrigerants means zero ozone depletion and no global warming potential compared to traditional freon refrigerants.

The new refrigeration system has been coupled with innovative energy recovering liquid CO2 vaporiser – a first for Australian independent breweries and developed in-house – turning liquid CO2 into a gaseous state we can use while simultaneously cooling our process.

The quality of our beer is top-notch, and we've reduced energy requirements at the same time, reducing our electricity KWh: hl beer ratio from 24:1 to 11.6:1 – a 52% improvement on our 2019 baseline.

## MORE BEER, SMALLER FOOTPRINT

Our brewery can produce 10,000L every two hours. As any beer aficionado or home brewer knows, the “hot” side of beer production involves boiling unfermented wort – the most intensive thermal energy consumption in the brewing process.

Our new external wort boiler and steam mass flow meter precisely controls the application of thermal energy and reduces our evaporation rate from 7% to 4%. This saves 940gJ of primary energy each year. That's the same as the annual energy consumption of 8 average Australian homes.



**SAME ANNUAL ENERGY  
CONSUMPTION OF 8 AVERAGE  
AUSTRALIAN HOMES.**



## NO GRAIN GOES TO WASTE



Brewers' spent grain is every brewer's most significant solid waste stream. However, this waste product has a valuable future as stock feed. Our upgraded spent-grain handling system incorporates a new bunker with a dewatering press and blower for pneumatic conveyance of spent grain to a spent grain silo.

This means we can remove the water from the spent grain, substantially reducing the weight before adding protein and hops from the brewing process to increase the nutritional value of the feed.

Using air instead of water to push the spent grain into the outloading silo saves 0.55 million litres of water per annum. Of course, reducing the weight of the spent grain means fewer trucks on the road transporting our product to local Victorian farmers, like Wesley Webb, who has received over 1.5 million kgs of spent grains to the delight his very happy cows.

**.55** MILLION LITRES  
OF WATER SAVED  
PER ANNUM.

## THE BEST QUALITY WATER

Quality water is essential for a quality beer.

To preserve freshness, flavour and shelf life, water used in the brewing needs to be deaerated – or stripped of dissolved oxygen.

This is usually a carbon, energy and timeintensive process. We have installed a state of-the-art deaerated water plant, which uses a hot-column to dramatically cut CO2 usage while still producing the best-in-world dissolved oxygen levels. Naturally, we specified high energy regeneration rates in the machine, achieving over 90% thermal recovery.

OVER  
**90%**  
THERMAL  
RECOVERY





## LIKEMINDED BRANDS MAKE THE BEST PARTNERS

We are proud to partner with Orora Beverages for our aluminium cans. Orora uses 60% recycled content in their can manufacturing, and 80% of Orora's electricity requirements comes from renewable energy sources.

As virtual next-door neighbours in Dandenong, we've also dramatically reduced truck movements between our facilities. Our most recent project eliminated the use of plastic pallet wrap from our supply chain, saving 1005kg of plastic over 12 months.

**1005KG**  
OF PLASTIC SAVED  
IN OVER 12 MONTHS



At Orora, sustainability is our promise to the future.

Orora has proudly worked side-by-side with the Brick Lane team to support their growth, while cultivating a partnership that is based on a solid foundation of shared sustainability principles.

Our sustainability pillars of Circular Economy, Climate Change and Community guide our passion, our energy and our future investments. Our pillars have strong alignment with Brick Lane's sustainability goals as we share a strong focus on reducing energy and water requirements.

Orora has committed almost \$200m to capability and capacity expansion for its growing cans business, including increased sustainable capacity at its Dandenong and Ballarat facilities. This will support the sustainability of the products delivered to Brick Lane as we work towards reducing the impact of transport across the eastern seaboard - with greater multi-size can capacity located nearer to Brick Lane's recently expanded operations in Dandenong.

We are also working with Brick Lane on many initiatives to improve our joint sustainability outcomes, including the removal of plastic from our pallets to further reduce the environmental impact of our products.







WE UNDERSTAND  
**SUSTAINABILITY  
IS A  
PATHWAY,  
NOT A  
DESTINATION**

Our ambition is to continually push the boundaries as the sustainability leader of Australia's craft brewing industry.

The support we've received from partners, suppliers and consumers has been phenomenal. We are part of a larger movement to be more sustainable, inclusive and responsive to the world around us. We are proud to use the resources and scale at our fingertips to continue pushing for positive change.





