

Yarwun sustainable development

2019 scorecard

SAFETY

Putting the health and safety of people first

16

Recordable injuries

7

Recordable occupational illnesses

1.19

All Injury Frequency Rate (AIFR)

Safety

In 2019, Yarwun embraced a 'Co-Design' process where leaders worked together with team members to understand the factors impacting our performance and culture. Safety routines, hazard identification, coaching and leadership time in the field are the hallmarks of Yarwun's improvement plans, following an intensive program of work examining trends and root causes. This work will continue into 2020.



Employee health and wellbeing

Yarwun's Peer Support Program 'Real Talk' launched in December which trains employees to be a listening ear to colleagues who may be facing challenges that affect their wellbeing.



CASH

Maximising cash to increase our resilience

3.1Mt

Alumina production

\$202M

Local spend on goods and services



\$10M

Taxes and royalties to local, state and Australian governments

\$148.4M

Capital expenditure

\$499M

National spend on goods and services

GROWTH

Growing our business responsibly to benefit future generations

Yarwun 4.0

Our Yarwun 4.0 Lab continued to explore innovative refinery technology initiatives, such as 3D printing, robotics and drones.



Aluminium Stewardship Initiative (ASI)

Yarwun received ASI certification for responsibly produced aluminium—the highest internationally recognised standard. This sets us apart as producers of safer, smarter, sustainable products.

Economic contribution

(includes salaries, partnerships, in-kind support, taxes, total national supplier spend)



\$615M

PARTNERSHIP

Building relationships that enable us to operate and pioneer progress

\$68,432*

Community investment

29

Community organisations supported

1

Significant community complaint

Partnering to operate



We supported the Habits for Habitat Program, run by Gladstone Wildlife Carers, which brings wildlife education into classrooms and communities.

We were once again proud sponsors of the Great Rio Tinto Yarwun Valley Rally, a major annual fundraiser for STEM resources and equipment for Yarwun State School.

Gladstone's premier art event, the 45th Martin Hanson Memorial Art Awards at the Gladstone Regional Art Gallery, was once again supported by Yarwun.

3

Significant environmental incidents

Environmental stewardship

Two major trials were underway in 2019 at Yarwun's Queensland Research and Development Centre (QRDC) to reduce odour and carbon emissions and improve productivity at both the Yarwun and QAL refineries. Both trials will progress into 2020.



*In addition to Rio Tinto's \$126,000 contribution to the Here for Gladstone program

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OUR OPERATION

Construction of our world-class Yarwun alumina refinery in Gladstone, Australia, began in 2002, and the first alumina shipped in late 2004.

An expansion in 2012 doubled production and today, Yarwun produces more than three million tonnes of alumina per year, which is exported to customers in Asia, the Middle East and the Pacific region.

In 2018, Gladstone became the home of innovation with Rio Tinto's Queensland Research and Development Centre (QRDC) relocating from Brisbane to Yarwun Refinery. QRDC is Rio Tinto's global centre for technology, research and development in the alumina refining process.



CASE STUDIES

Celebration of 15 years of operation

We celebrated 15 years in operation this year, looking back to our first 14,270 tonne shipment of alumina from Gladstone Harbour on 18 November 2004 bound for China. Since then, more than 30 million tonnes of Yarwun alumina has been sent to Australian and overseas smelters to be turned into aluminium.

Game-changing research

Our Australian refineries (Gove, QAL and Yarwun) are part of a potentially game-changing research partnership with the University of Queensland that could turn bauxite residue into soil capable of growing plants. This is part of the work being done across Rio Tinto Aluminium to explore uses for red mud. If successful, the research could help transform the way refineries rehabilitate red mud dams and significantly improve the economic and ecological sustainability of the aluminium industry. The research partnership won the "Achieving Resilient Environments and Livelihoods" Award at the 2019 University of Queensland Partners in Research Excellence Awards.

Industry 4.0—the next evolution in Yarwun technology

In 2019, Yarwun launched its integrated refinery program of works, Yarwun 4.0, capturing the transformational technology and mindset required to unlock value for the business. The Yarwun 4.0 Lab provides a space to develop ideas using 3D printing, virtual reality and other digital tools. Some flagship technologies introduced in 2019 to improve safety and efficiency include a fatigue management app, robotic cleaners for flash tanks, the zero-gravity arm that makes lifting at heights easier and using drones to inspect equipment.