Sustainable Development
2025 Report

Safety

6.1 SMM Score
6.1 Target
(an objective assessment of QAL's Safety Maturity Model)

7 Recordable injuries

10 Recordable occupational illnesses
(1 medical treatment case and 9 lost time cases)

0.41 All injury frequency rate

Safety Maturity Model

The Safety Maturity Model (SMM) is an annual external assessment of safety maturity across leadership, risk management, work planning and execution, and continuous improvement. In 2025, QAL improved its overall SMM score, reflecting stronger field leadership, greater ownership of safety, and more consistent safety practices across the site. The assessment also recognised QAL's commitment to identifying, rewarding and replicating improvement initiatives through its Green Banner Program.

Employee Health and Wellbeing

Targeted ergonomic assessments are driving safer, smarter work practices across site operations. The program identifies opportunities to improve manual tasks, strengthen documentation and replicate best practices across teams. At onsite truck wash stations, a review of platform heights led to stations being repositioned, improving posture during refilling activities and reducing ergonomic risk.

People

1,052 Full Time Equivalent (FTE) employees
675 Full Time Equivalent (FTE) contractors

22.78% Female employees
22.20% Gender equity goal
3.92% Indigenous employees
3.5% Target

8.22% (88) Apprentices and Trainees
$148M Salaries and benefits paid

Gender Equity Goals

In 2025, QAL introduced a business-critical Equity, Inclusion and Diversity program to strengthen female participation and build a workforce that better reflects the Gladstone community. Using a decentralised, co-design approach tailored to individual operating environments and supported by site-wide training and transparent performance data, the program has already delivered measurable progress, increasing female participation by 1.5% and setting a higher benchmark for 2026.

Growth

100% Tax compliance checks completed on-time

$1,137.18M Economic Contribution (inc: salaries, partnerships, in-kind support, taxes, total national supplier spend)

Cash

3.48M Alumina (tonnes) produced
$773.39M State spend on goods and services
$74.76M Taxes to local, state and Australian governments
$308.93M Local (postcode 4680) spend on goods and services
$989.21M National spend on goods and services
$167.63M Capital expenditure

Partnership

$950K Rio Tinto Gladstone Aluminium (QAL, Boyne Smelters and Yarwun refinery)

$32,500 QAL Dollars for Doers

Community Investment (includes in-kind support)

66 Community organisations supported
0 Significant environmental incidents
61 Community complaints (Total QAL-related concerns submitted to DETSI)

Partner to Operate

In 2025, QAL strengthened its investment in the Gladstone region through Rio Tinto Gladstone Aluminium, supporting community priorities including the new Patient Transfer Facility at Gladstone Airport, *The Careers Department's* student pathways programs, and *Here for Business*, which helps local businesses grow and build capability.

Hazardous and non-hazardous waste generated from site activities

498t General waste
33t Recycled paper/ cardboard
1,546t Steel
28,717t Process waste

Water risks, water withdrawal source/type

3.686 target: 3.46 Annual water intensity (kL/t)
12.0 target: 11.8 Annual energy intensity (GJ/t)

27 Environmental non-compliances (number of times we have reported non-compliance with our Environmental Authority).

Environmental stewardship

QAL continued its partnership with the University of Queensland's Sustainable Minerals Institute to explore innovative applications for bauxite residue (red mud), a by-product of alumina refining.
See the case study on page 2.



Sustainable Development

Case Studies

Automation Drives Safer Outcomes



A task performed largely unchanged for almost 60 years has been transformed through a world-first automation solution, earning Invention of the Year at the 2025 WorkSafe WA Health and Safety Excellence Awards.

In QAL's Clarification process, Kelly Filter Presses separate alumina-rich liquor from red mud and other impurities. While critical to operations, the equipment traditionally required manual cleaning in hot and challenging conditions. To improve safety and efficiency, QAL partnered with frontline employees and Innovative Mining Services (IMS) to reimagine the process.

The result is a fully enclosed, remotely operated washdown system that has transformed a physically demanding task into a safer, automated operation. By eliminating manual, high-pressure washdowns from elevated platforms, the system removes employee exposure to heat, pressure and chemical hazards while delivering more consistent cleaning outcomes and improved equipment performance.

Operators remain required to run the machine, though the change removes them from the manual task, eliminating 10,000 hours of high risk exposure annually. The innovation demonstrates the power of collaboration, technology and frontline expertise to deliver safer, smarter ways of working. Five presses will be automated in the initial rollout, with further expansion planned across the operation.

Advancing Red Mud Rehabilitation



Through a long-standing partnership with The University of Queensland's Sustainable Minerals Institute (UQ-SMI), QAL is supporting innovative research led by UQ-SMI to transform bauxite residue (red mud), generated during the alumina refining process, into sustainable soil for ecological rehabilitation.

As part of a broader collaboration between QAL, Rio Tinto and UQ-SMI, the research focuses on developing nature-based solutions through Technosol technology, which converts red mud into a soil-like material capable of supporting sustainable plant growth. Having progressed to field-scale trials, the technology is now being piloted at two long-term trial sites at QAL's Red Mud Dam, where results have demonstrated its potential to support the rehabilitation of red mud storage areas. The technology also has the potential to deliver benefits beyond QAL, offering a scalable solution with broad application across the global alumina industry.

In 2025, UQ-SMI, led by Professor Longbin Huang, secured more than $1 million in funding through the Australian Research Council's (ARC) Linkage Program, with QAL participating as an industry partner. The funding supports further research into the long-term performance of Technosol and the development of sustainable solutions to help address topsoil shortages across the mining sector.

This collaboration with Rio Tinto and UQ-SMI reflects QAL's commitment to innovation, advancing sustainable practices, and delivering long-term environmental benefits for the alumina industry.