



RioTinto

Weipa Operations

2017 Sustainable Development Report

Message from the General Manager

I am pleased to present Rio Tinto Weipa's Sustainable Development report for 2017. We celebrated another successful year in Weipa with a number of achievements and records, which are detailed in this report.

The Weipa operation continues to be one of Rio Tinto's safest sites globally, however we did have two potentially fatal incidents in 2017, where our employees were exposed to critical risk. We ended the year with an All Injury Frequency Rate (AIFR) of 0.33 where five of our colleagues experienced preventable and minor lost time injuries. While the AIFR is an important indicator, we know that our culture of safety is our number one priority.

We successfully continued the roll out Critical Risk Management (CRM) and Human Performance (HP) training across the whole of our operations, and have extended the opportunity to our contracting partners. Currently, more than 2,000 employees and contractors are training in HP. These two important systems go hand in hand to help our people identify those very real risks that can cause a fatality along with the ability to recognise human error traps.

As the global demand for bauxite continues, there has been a deliberate focus on the delivery of steady tonnes. In 2017, a record 31 million dry product tonnes of bauxite was shipped as a direct result of the pioneering, innovative and transformational approach of our people, which you can find out more about on pages 18 and 19.

With the Amrun project's total progress almost three quarters complete and construction progress half way, we have started making significant headway on transition plans. In 2017, 848 operational employees had a 1:1 conversation with their leader in light of the Amrun transition. The process, call 'My Future Plan', saw us fill 82% of Amrun roles with existing employees, with the remainder working at Andoom and East Weipa. By the end of 2017, approximately 640 employees had visited Amrun for a first look and feel.

During 2017, several of our employees were recognised at a local, state and national level to further demonstrate that success lies strongly in the great efforts of our people. 26% of our workforce are female as well as 25% being Indigenous – meaning that 40% are either Indigenous and/ or female. These are industry-leading numbers, of which we are very proud.

Working collaboratively with our Traditional Owner and community partners is fundamental to our approach of partnering to operate. Integrating traditional culture into the design of our new Amrun operations has been a focus during project and construction, with successful activities resulting in the naming of Amrun mining blocks covering the first five years of operations, and infrastructure around the mine being named in language such as the tailings facility, dam and export facility. We also finalised construction on a traditional area named 'Chivarri' within the accommodation village.

Weipa truly is a world class operation as a result of our great people, our partnerships and our ingenuity. I am excited about our future and the strong contribution we can make locally to our communities and the broader region.

As always, we welcome your feedback on this report or our activities generally. Please contact us via our community hotline 1800 707 633 or email RTAWeipafeedback@riotinto.com

Thank you for your continued support, and I look forward to continuing to work together in the future.



Stay safe.

Daniel van der Westhuizen
General manager
Rio Tinto Weipa Operations



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Governance

Our approach

Our reputation for acting responsibly plays a critical role in our success as a business and our ability to generate shareholder value.

That reputation stems from our five core values: safety, teamwork, respect, integrity and excellence. The way we work, our global code of business conduct, supported by our global policies, standards and guidance notes – in conjunction with the requirements of local law and our voluntary commitments – forms the basis of our governance systems.





The way we work

Rio Tinto's Weipa operation, as with all Rio Tinto businesses globally, adheres to a statement of business practice known as *The way we work*.

This document outlines how Rio Tinto's delivers its purpose, strategy and values of safety, teamwork, respect, integrity and excellence.

The way we work includes policies covering human rights, communities and environment, business integrity, group assets and information management, the workplace; and government, media and investor relations.

Sustainable development

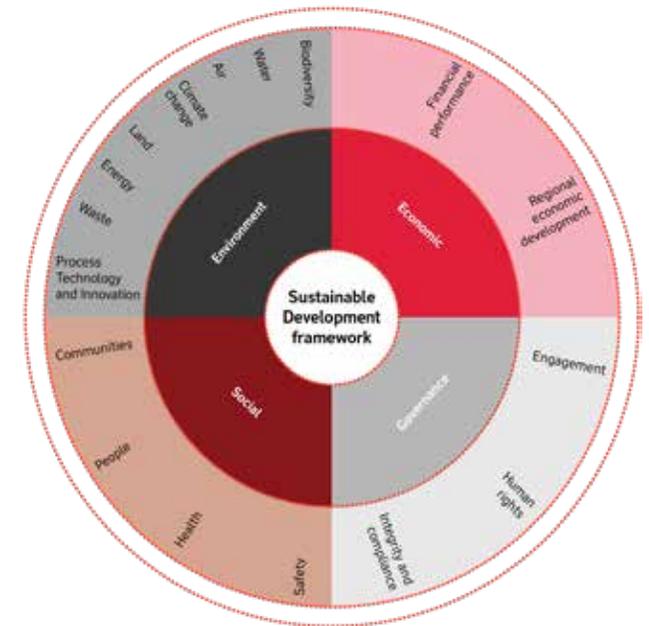
At Rio Tinto, we recognise that sustainable development principles underpinning how we work makes good business sense.

It is central to our vision of being the industry's trusted partner and we seek to develop the resource through the creation of mutual value for the long term, and by not compromising the ability of future generations to meet their needs.

Our continued operations rely on gaining access to the land, people and capital we need. Leveraging our economic, social, environmental and technical expertise in the way we operate ensures that the prosperity generated is shared amongst stakeholders – from shareholders, to local communities, Traditional Owners, governments and business partners. Aligning to our business interests and motivations with our stakeholders, we create value that extends beyond the life of our operations.

Under our global Communities and Social Performance standard, operations publish an annual local report summarising our operations and their approach to sustainable development.

This report published by Rio Tinto Weipa provides our neighbouring communities, employees and other stakeholders with a more detailed understanding of our activities on the Western Cape, and is structured to address the sustainable development key focus areas: governance, social, environment and economic.



Our Agreements

We recognise that mining occurs on Aboriginal land, and acknowledge the unique and special connection Traditional Owners have to their country.

Three Aboriginal Agreements underpin all operations and activities for Rio Tinto Weipa – the Western Cape Communities Co-existence Agreement, the Ely Bauxite Mining Project Agreement and the Weipa Township Agreement.

These agreements capture the aspirations of the business and Traditional Owners to work together based on mutual values. They lay the foundation for intergenerational benefits and aim to provide outcomes across multiple areas including sustainable economic development, cultural awareness, social and environmental outcomes, improvement in education, employment and training outcomes and cultural heritage management.

Pictured: Ely Coordinating Committee members and guests during the 100th meeting of the Committee in March, 2017.

2017 at a glance

- > 20 years of the Ely Bauxite Mining Project Agreement celebrated with Traditional Owners
- > 100th Ely Coordination Committee meeting held
- > Tour of Amrun site for Western Cape Communities Co-existence Agreement Traditional Owner elders and Wik-Waya Traditional Owner families
- > 425 Traditional Owners involved in on-country engagement and works
- > First report developed identifying Traditional Owner aspirations for post mining land uses at East Weipa operations.





20 years of the Ely Bauxite Mining Project Agreement

In September 1997 the first agreement between Aboriginal people and the mining sector of the Western Cape York was finalised.

The Ely Bauxite Mining Project Agreement was signed between Alcan and the Dulhunty, Taepithiggi, Thanakwith, Tjungundji, Warrangku, and Yupungathi peoples, the Aboriginal communities of Mapoon, Napranum and New Mapoon and the Cape York Land Council. When Alcan became a part of Rio Tinto in 2007, Rio Tinto committed to upholding the Agreement.

2017 saw the 100th Ely Coordination Committee meeting being celebrated where present and former members and business representatives reflected on the important contributions past and present community members have made to implementing the Ely Agreement.

Rio Tinto general manager, Weipa Operations, Daniel van der Westhuizen said “We continue to grow our partnership in employment and training, cultural heritage protection and awareness that is a testament to the foresight and wisdom of the people and communities who built this Agreement.”

On 2nd September 2017, Rio Tinto representatives, alongside Traditional Owners, Aboriginal communities and Council signatories to the Agreement travelled to a place known as Ely Dam for the 20th Anniversary of the signing of the Ely Agreement.

Pictured (left to right): Senior Thanawithi Traditional Owner Richard Barkley, Mapoon Council deputy mayor Peter Guivara, Rio Tinto's general manager, Weipa operations Daniel van der Westhuizen and Yupungathi Traditional Owner Ray Ahmat.

Pictured opposite: (left to right) Yupungathi Traditional Owner Teddy Barkley, and Taepithiggi Traditional Owner Rhonda Parry.



> Six Traditional Owner Groups are represented in the Ely Bauxite Mining Project Agreement:

- Warrangku
- Dulhunty
- Tjungundj
- Taepithiggi
- Yupungathi
- Thanakwith

Developing Amrun in partnership with the Western Cape Communities Co-existence Agreement

In 2001 the signing of the Western Cape Communities Co-existence Agreement (WCCCA) took place between eleven Traditional Owner Groups, Comalco (now Rio Tinto), four Aboriginal Shire Councils, the Queensland Government and the Cape York Land Council with the Agreement registered as an Indigenous Land Use Agreement (ILUA) under Native Title legislation.

One of our commitments under the WCCCA for developing the Amrun Project was the collaborative creation and implementation of the Communities, Heritage and Environmental Management Plan (CHEMP) with the Wik-Waya Traditional Owners. The CHEMP captured the aspirations of both Traditional Owners and Rio Tinto for land, sea and cultural heritage management in relation to Amrun part of the lease, some 40km south of Weipa.

One of the key commitments under the Amrun CHEMP was for Wik-Waya history and culture to be recognised through the village design and construction.

In December 2017, WCCCA representatives, Rio Tinto representatives and Wik-Waya Traditional Owners celebrated the official opening of the Amrun Traditional Owners' area in the village, which has been named "Chivarri." Over 100 people attended the event which included traditional song, dance, speeches and a meal together in the new dining facility.

Senior Wik-Waya Traditional Owner, Tony Kerindun said "We named the area Chivarri because it is a shared word between many traditional groups and means 'ancient warrior'. Chivarri gave us our language, and many names for our sacred placed."

"This is a special space for us which will help us to share our connection to the land with those involved in the project and the new mine."

The Traditional Owner's area was completed through collaborative efforts by Wik-Waya people, Rio Tinto and Amrun Project employees. It is important that Local Aboriginal People maintain the significant cultural knowledge and identity to their land, and that the insights provided by Traditional Owners through the construction phase of Amrun are recognised and are carried through to operations.

Pictured: Young Wik-Waya Traditional Owners dance at the official opening of Chivarri.



> 11 Traditional Owner Groups signed the WCCCA:

- Alngith
- Anathangayth
- Ankamuthi
- Peppan
- Taepadhighi
- Thanikwithi
- Tjungundji
- Warrangu
- Wathayn
- Wik and Wik-Waya
- Yupungathi

50 years on, Weipa is a town with a mine not a mining town

The Weipa community celebrated a significant milestone in 2017, with the recognition of 50 years since the township was officially opened.

After the discovery of bauxite in the 1950's, a small 'top camp' was established neighbouring the first pieces of mine infrastructure, which grew alongside the operations until it was officially established as a township in 1967.

To recognise the significant milestone of 50 years, the Weipa Town Authority hosted a fun-filled family event that attracted local residents and tourists.

Activities over the weekend included a Weipa reunion, a Rio Tinto vs Weipa Town cricket match, a historical guided bus tour, gala dinner and a whole community festival to close out the celebration which had John Williamson perform at, of which Rio Tinto was a major sponsor.

The Weipa Town Authority governs the town on behalf of Rio Tinto, and the Weipa Township Agreement was signed with Alngith Traditional Owners and covers land within the Weipa town boundaries. It also appoints a Traditional Owner representative onto the Weipa Town Authority, alongside elected members and two Rio Tinto members.

This Agreement has enhanced the town's growth and has allowed for freeholding and the pathway for sustainability, with Weipa now being known as a town with a mine, not a mining town. A decade ago, 80% of the houses in Weipa were owned by Rio Tinto and only 20% privately owned.

Today, it is the reverse with more than 80% being privately owned by residents who may or may not work for the mine. Of the approx. 4,000 town residents only 1,400 are Rio Tinto employees. Weipa also now attracts more than 30,000 visitors each and every year and the tourism market in the region has grown.

As a major employer and with responsibility for the administration and maintenance of the town, Rio Tinto makes a significant, annual contribution to regional economic development which continued in 2017. We continued to invest in our regional infrastructure and services in Weipa and the Western Cape, with over \$75 million having been invested in the Weipa community since 2007.

In 2017 a number of projects were delivered by the Weipa Town Authority for the community including water and sewerage upgrades, playground improvements and a new canteen at the sports oval. The Weipa Town Authority has big plans for 2018 to continue to increase the liveability and strength of the region, which Rio Tinto will continue to support in the interests of the community.

Pictured: Weipa community pride shown through Rio Tinto's t-shirt painting stall at the community festival celebrating 50 years.



- > Weipa township celebrated 50 years in 2017
- > More than 80% of houses now privately owned
- > Approx. 4,000 people call Weipa home
- > 30,000 visitors to Weipa annually

Weipa Operations

Rio Tinto owns and operates the Weipa bauxite mine located on Western Cape York Peninsula. Our mining operations occur on mining leases ML7024 and ML7031, spanning 3,860 square kilometers.

Our operations consist of two continuous mining operations at East Weipa and Andoom, two beneficiation plants, 19 kilometers of railway to transport bauxite to the port area and two ship loaders.

We also operate two diesel power stations (26 and ten megawatts at Lorim Point and Andoom) supplying the mine, the Weipa town and neighbouring community of Napranum. The main administration, warehouse, laboratory, ship loading and port facilities are also located at Lorim Point, on the Embley River near Weipa.

The Amrun Operations will include an additional beneficiation plant, ship loader, power station and two river terminals upon completion at the end of 2018, for the safe transfer of freight and people across the Embley River.

Last year 31 million tonnes of metal grade bauxite was shipped on 485 vessels to both domestic and international alumina refineries, including Rio Tinto Yarwun and Queensland Alumina Limited, both in Gladstone, Queensland.

The Traditional Owner Groups on this map are connected to both the Ely Bauxite Mining Project Agreement and Western Cape Communities Coexistence agreements. Areas are indicative only.

Pictured (opposite): Sun setting over Gonbung, Weipa.



2017 at a glance:

- > 31 million tonnes shipped
- > \$163 million in employee contributions *
- > \$110 million spent in taxes and royalties**

* Includes salaries, wages, benefits and superannuation contributions. Does not include training and recruitment costs.

** Includes payroll tax, fringe benefit tax, royalties paid to the Queensland Government and payments for Indigenous Agreements. Excludes income tax.



Shipping constraints challenged with Mini Cape Vessels

The global bauxite market continues to be competitive, and as a leading bauxite producer we are always looking to push the envelope and set new production and shipping records.

Through innovative and pioneering efforts it was identified that the utilisation of Cape-sized vessels would increase the ship loading capacity of the Lorim Point export facility by up to 10,000 tonnes per ship – an idea previously thought as unachievable due to the wharf being tide restricted.

To further understand the challenge, an engineering study was carried out with various digital simulations to find a way that the Cape-sized vessels would be able to dock within the port of Weipa and at the Lorim Point export facility.

The simulations applied localised data and conditions including environment, tidal data, weather conditions and depth of the ocean along with other engineering and structural data of the wharf. By using this information and setting different scenarios with ambitious parameters, the ship simulations were the key to unlocking how the team could tackle the challenge.



Pictured: The Orient Cavalier docked at the Weipa Operations Lorim Point wharf.

With a way in mind, our local shipping team engaged with other internal Rio Tinto departments including Commercial and Shipping teams in Singapore and Brisbane, as well as various port authorities. Having all relevant stakeholders on board to be able to trial the new shipping approach enabled the MV Orient Cavalier (pictured) to leave the Weipa port in September 2017 with 90,366 tonnes of bauxite on board – setting a new record for the Lorim Point export facility.

Rio Tinto's general manager, Weipa Operations, Daniel van der Westhuizen said "In this competitive environment, we continue to challenge ourselves. Innovative thinking such as this allows us to leverage our existing assets the best we can."

- > Loading capacity increased by 10,000 tonnes per ship
- > 96,366 tonnes loaded on the first Mini Cape vessel, MV Orient Cavalier in 2017

Andoom Plant records achieved through innovation and automation

Rio Tinto's Andoom Plant is one of our two existing beneficiation plants, and is situated 15 kilometres north of the Weipa Township. Since the plant was commissioned in the mid-2000's, the Andoom team have been completing incremental year-on-year improvements to address processing bottlenecks and increase capacity.

The plant is now achieving almost double nameplate capacity having originally been designed to process nine and a half million tonnes per year. In 2017 the team processed 17.6 million tonnes, 193% above nameplate.

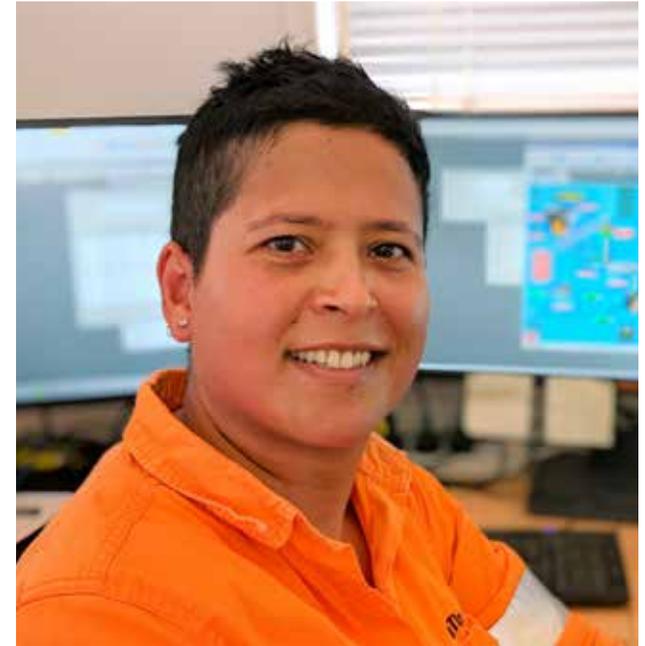
One of the bottlenecks and issues the team faced to achieve this level of production was to address the issue of 'rejected bauxite product surges', which saw potential bauxite product being disregarded as overburden and ejected from the plant.

In 2017, the Andoom team followed a Lean Six Sigma process to determine the root cause of the issue, and come up with an innovative solution. The rejected surges were found to be the

result of sensors on the plant, which sorts product from the overburden, which was found to be impaired by discrepancies in the water to product mix ratio.

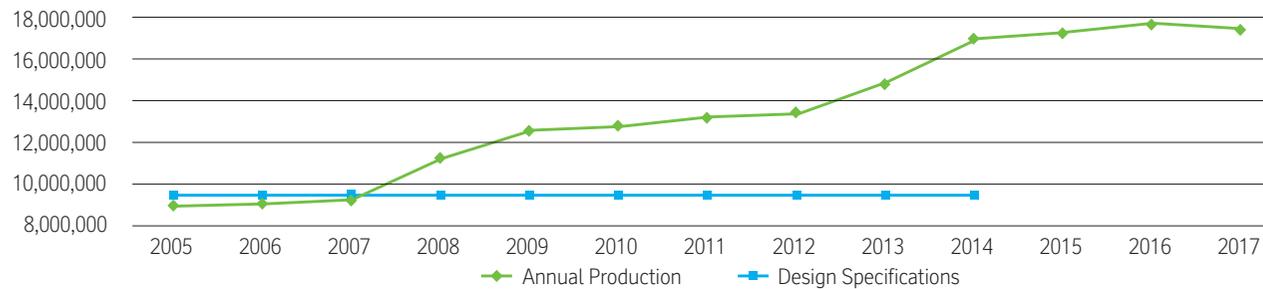
Demonstrating the value in collaboration, control systems, mechanical, process engineers and plant operators worked together to design a control point for the sensor, removed some of the manual ratio adjustments, and implemented automatic ratios based on the product that was being processed.

Not only are the team delivering well above nameplate capacity, but the Andoom Plant also processed a record breaking 409,000 tonnes in a single week due to this innovative work.



Pictured: Disha Saxena, systems electrical and control systems engineer, Andoom operations.

Andoom Bauxite production (Dry product tonnes)



- > Processing 193% of nameplate capacity
- > New weekly processing record set at 400,000+ tonnes

Amrun Project

The Amrun project was approved by Rio Tinto in late November 2015. The project involves construction of a bauxite mine and associated processing and port facilities approximately 40 kilometres south of the Embley River near Boyd Point on Cape York Peninsula.

Once operational, Amrun will replace production from our existing East Weipa mine and increase annual bauxite exports. Planned output is 22.8 million tonnes per year with a range of options for future expansions up to 50 million tonnes per year.

First shipment of bauxite is scheduled to occur in the first half of 2019.

Pictured: Amrun Indigenous employee, Mary Ratucoke.



Almost 80 per cent of the Amrun workforce are Queenslanders. We are proud of the supplier and employment opportunities we have created for Australians.



2017 at a glance:

- > 75% overall project progress and 62% construction completed
- > 1,250 construction employees at peak with 80% of workforce sourced from Queensland
- > Five recordable injuries with 0.31 All Injury Frequency Rate



Pictured: Chith Export Facility, Amrun.



Pictured: Accommodation Village, Amrun.



470 Australian jobs created through Amrun processing facility contract

In 2017, the Amrun Project created 470 Australian jobs with just one contract that included the fabrication of key components of the Amrun processing facility made with 95 per cent Australian steel.

West Australian supplier Cimtec was awarded a A\$160 million contract to construct a processing facility including a beneficiation plant and associated water, electrical and lighting systems for Amrun.

Approximately 350 employees including subcontractors were employed to work at Cimtec's Henderson facility in Perth, with a further 120 on module assembly.

Amrun project director, Marcia Hanrahan, said "Almost 80 per cent of the Amrun workforce are Queenslanders. We are proud of the supplier and employment opportunities we have created for Australians."

Pictured: Beneficiation modules in place at the main infrastructure area, Amrun.

Premier praises \$900m for Amrun Queensland contracts

By year-end 2017, \$1.3 billion in contracts for the Amrun project had been awarded to Queensland suppliers, which made up almost two thirds of the \$1.9 billion in contracts awarded to Australian suppliers.

This contribution was recognised by Queensland Premier, Anastacia Palaszczuk, who said “Rio Tinto’s significant investment in local and regional suppliers has provided a tremendous boost to the economy of Queensland.”

“It is a best practice example of encouraging local and Indigenous participation with substantial employment targets already agreed with many key suppliers.”



- > \$1.3 billion worth of contracts awarded to Queensland suppliers by end 2017
- > \$1.9 billion contracts awarded to Australian suppliers on the project by end 2017

Pictured: Employees disembarking the passenger ferry at the Hey River ferry terminal at Amrun.



Pictured: Beneficiation modules, Amrun.



Social

Our people

We are committed to providing a safe and healthy workplace for our employees where their rights and dignity are respected.

We set out to build enduring relationships with our neighbours that demonstrate mutual respect, active partnership, and long-term commitment.

In the long-run, the trust that is engendered by these solid relationships will reinforce our ability to gain preferential access to resources.





2017 at a glance

- > 1,420 employed as part of Weipa operations
- > 25% (358 FTE) of Weipa employees represented by Indigenous Australians, including 12% (174 FTE) Local Aboriginal People
- > 13 Indigenous frontline team leaders and six Indigenous superintendents/specialists
- > 26% female representation
- > 30 apprentices on site
- > 11 school-based trainees

Rio Tinto's Indigenous workforce reaches 574 across Cape York

At the end of 2017, more than 570 Aboriginal and Torres Strait Islanders, including 243 local Aboriginal people, were employed as part of Rio Tinto's operations on Cape York.

In 2017, the existing Weipa workforce was bolstered by onsite construction jobs at the \$2.6 billion Amrun Project development.

The recruitment figure reinforces Rio Tinto's commitment to providing employment opportunities for local Aboriginal people as agreed under our Aboriginal Agreements.

Rio Tinto's general manager, Weipa Operations, Daniel van der Westhuizen said "We recognise our mines operate on traditional land and our strong Aboriginal and Torres Strait Islander workforce is a reflection of this."

Paid work experience, STEM (Science, Technology, Engineering and Mathematics) activities, Indigenous apprenticeships and school based traineeships are all methods used to increase Indigenous employment, participation and retention for Weipa operations.

Pictured: Miles Kerindun, land and sea advisor, Amrun.



Across Weipa and Amrun:

- > 574 Aboriginal and Torres Strait employees across Weipa and Amrun
- > 243 of which are Local Aboriginal People from signatory communities under our Agreements

Electrical tradeswoman wins prestigious NAIDOC award

Sharee Yamashita, an Aboriginal and Torres Strait Islander woman and electrical tradesperson was awarded 'Apprentice of the Year' at the prestigious NAIDOC awards ceremony in July 2017.

Sharee successfully completed her electrical apprenticeship and graduated from her studies in February 2017, securing a full-time role shortly after.

Rio Tinto's general manager, Weipa Operations, Daniel van der Westhuizen said "During Sharee's apprenticeship, we were impressed with her worth ethic and her dedication to doing the best job possible. Sharee's commitment to safety has been evident, and has been recognised by her team leader and peers."

"We are very pleased that Sharee has won this award. A fantastic achievement and role model," Mr van der Westhuizen said.

Sharee acknowledged her determination to succeed had been driven by workplace mentors and strong family role models including her father. She was also interviewed and featured on NITV to share her story with other Australians.

The NAIDOC awards are an opportunity to recognise outstanding contributions Aboriginal and Torres Strait Islander Australians make to improve the lives of Indigenous people. The event is also an opportunity to promote issues to the wider community and share excellence in their chosen fields.

Pictured: Sheree Yamashita, electrical tradeswoman and recipient of the 2017 NAIDOC apprentice of the year award.



- > NAIDOC apprentice of the year award winner
- > Local Aboriginal Person and female tradesperson
- > Former bursary recipient under the Ely Bauxite Mining Project Agreement
- > Role model for the Western Cape region and beyond

Indigenous Employment and Development program awarded top gong at QRC Indigenous Awards

Our operations won the 'Best Company Indigenous Employment and Training Initiative' award at the Queensland Resources Council (QRC) Indigenous Awards in May 2017.

Indigenous Employment and Development superintendent, Weipa Operations, Lee Darvell was also Highly Commended in the overall category for 'Exceptional Indigenous Person'.

Ms Darvell was recognised for her dedicated work fostering strong relationships with Traditional Owners who are signatory to the operation's Aboriginal Agreements, and overseeing the business' Indigenous employment and development initiatives.

"I'm so proud of the work we do creating employment opportunities for Local Aboriginal People and feel fortunate to be in the position where I can help make such a positive contribution," Ms Darvell said.

Rio Tinto Weipa's Indigenous Employment and Training Strategy defines its long-term sustainable commitment to increasing the participation, retention and advancement of Local Aboriginal people. The QRC award recognised the successful delivery of the strategy – including development, inclusion, diversity and school to work pathways.



Pictured: Lee Darvell, Indigenous Employment & Development superintendent discussing career plans with a local trainee.

Rio Tinto's general manager, Weipa operations, Daniel van der Westhuizen said "Since inception of the strategy, a quarter of the site workforce has been consistently represented by Indigenous or Local Aboriginal people. This positive shift can be directly attributed to the hard work and dedication of the Indigenous Employment and Development Team."

Rio Tinto was also Highly Commended in the 'Best Company Indigenous Procurement Award' for its work setting objectives to maximise Indigenous business and employment opportunities and expectations for contractors as part of Amrun's development.

- > Awarded 'Best Company Indigenous Employment & Training Initiative' at QRC Indigenous Awards
- > Lee Darvell – Highly Commended in Exceptional Indigenous Person category

Building ambition in youth to pursue science, technology, engineering and maths

We make an ongoing significant investment in our people's training and skill development as part of our people development focus. This also extends to the surrounding schools that neighbour the operations, to help encourage and build ambition in the next generation, our future workforce.

Our work with Weipa's Western Cape College is formalised in a partnership, which is over 12 years strong. The partnership which was formed in 2005 following a shortage of skilled local workers sees both parties meeting quarterly to seek ways to increase the employability of our local students. Involved in these discussions are senior management representatives from both organisations. In 2015 the partnership was awarded the Queensland Government's Showcase Award in October for "Excellence in Industry Partnerships" category.

The Building Local Talent strategy was established by the partnership to implement structured school-to-work pathways and was expanded in 2011 to better link local school-based programmes with core industry requirements. This provides students with opportunities to learn about employment, education, career advice and training.



Pictured: Students work through activities as part of a STEM Workshop at the Aurukun school.

In addition to hosting school-based trainee and apprentices, there were several activities undertaken throughout 2017 at the Western Cape College to promote STEM-related (Science, Technology, Engineering and Maths) career pathways under our Building Local Talent strategy.

A number of career talks by Rio Tinto employees were held, and also regular volunteer tutoring sessions at the Western Cape College's residential campus, which houses Indigenous students from surrounding communities that have had to relocate for schooling.

In Aurukun, our work with the Aurukun school is governed by the Ambition Strategy, which is focused on supporting the schooling pathways of local Aboriginal school students from an early age through to the critical education transition points of Year 6 into secondary education, and the transition into tertiary education or employment.

We recognise the significance of ensuring quality educational outcomes for students in the Western Cape York region to ensure there is a sustainable pipeline of talent for the future of the operation. Because Aurukun students need to relocate to either Weipa's Western Cape College (or another boarding school further afield for high school), the Ambition Strategy work focuses on these students. In 2017, the strategy broadened beyond Aurukun to also include local Aboriginal students living in Mapoon, Napranum and Weipa who have also relocated for senior schooling.

School-to-work activities in 2017 included:

- Supporting 36 Year 7 students departing Aurukun for boarding school in the form of providing 'starter packs' to support their transition to living away from community;
- The provision of career education packages to assist boarding schools that host students from the Western Cape with having a better understanding of mining, and appropriate subject selection;
- STEM (Science, Technology, Engineering and Maths) school events with Year 5 and 6 classes in Aurukun (16 students);
- Three-day engagement workshop with contracting partner Sodexo in Aurukun to promote future employment and training opportunities, including visits to the Aurukun primary school to encourage students to study science or engineering;
- Career talks with ten local Aboriginal students from Aurukun;
- Weekend hosting in Weipa for Aurukun-based teachers to gain a better understanding of the mining industry and bauxite mining process;
- Four local Aboriginal students from Aurukun hosted on site for work experience;
- Western Cape College's (WCC), International Women's day STEM activities with female Year 11 and 12 students;
- WCC careers expo with specialist sessions for Years 10, 11 and 12 students;
- Careers market at Thursday Island for primary and high school students focusing on employment opportunities in the mining sector;
- Development and implementation of the Bauxite Curriculum aligned to the Australian curriculum framework for use in schools;
- Hands on Trade programme delivered twice at WCC.



Pictured: Students work through activities as part of a STEM Workshop at the Aurukun school.

Social

Health and Safety

Safety is Rio Tinto Weipa's number one priority.

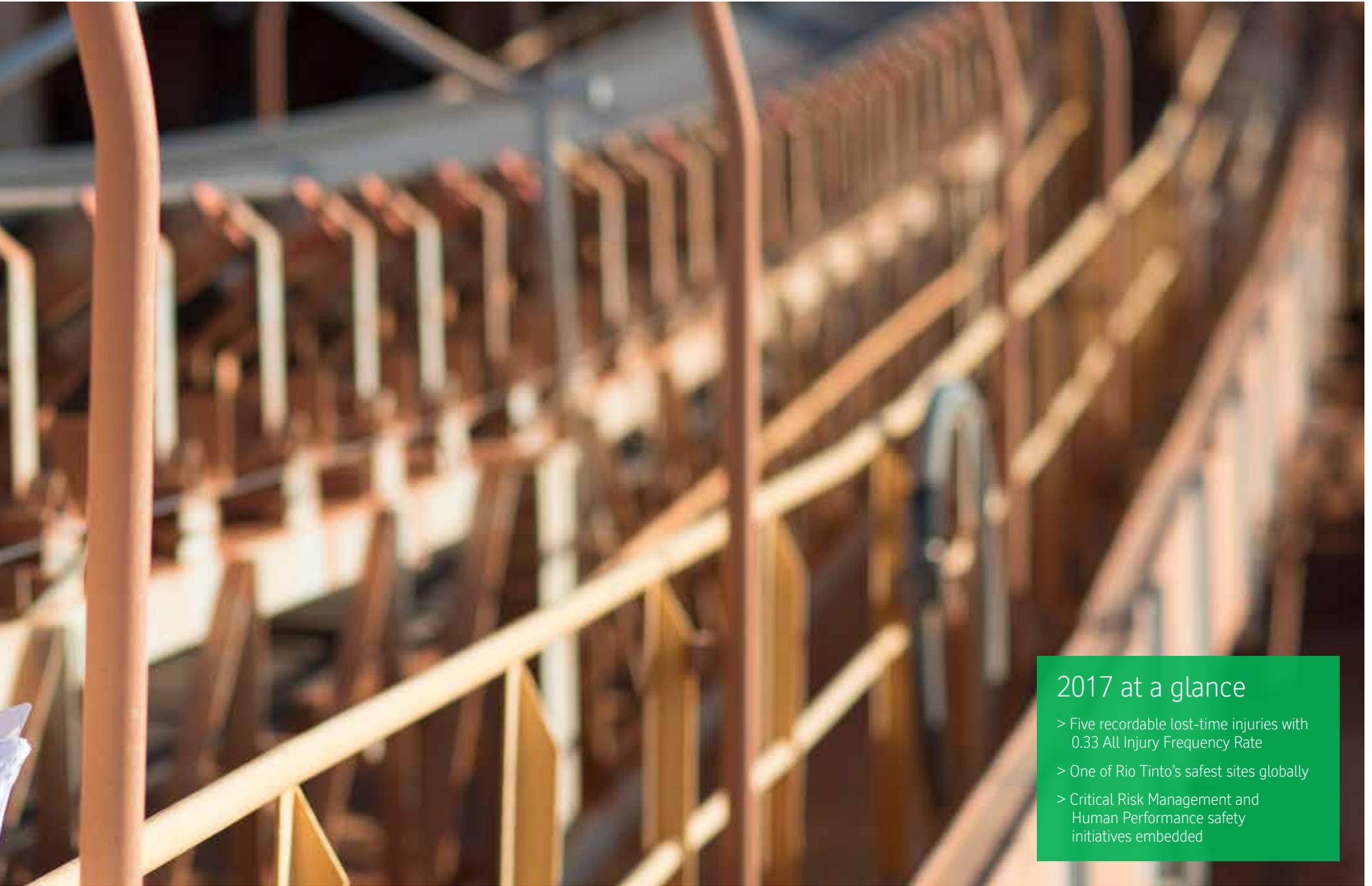
Nothing is more important than every one of our employees and contractors returning home safely after their shift.

We continue to be one of Rio Tinto's safest sites globally, however we did have two potentially fatal incidents where our workers were exposed to critical risk. We ended 2017 with an All Injury Frequency Rate (AIFR) of 0.33 where five of our colleagues experienced preventable and minor lost time injuries. While the AIFR is an important indicator, our culture of safety is our number one priority.

We commenced a leader coaching programme where managers and superintendents coached crew leaders in the field to verify controls are in place for tasks where a risk or fatality exists.

Our Health and Safety team also rolled out a series of large critical risk posters into all operational areas to visually reinforce safety messaging. We also implemented a newly redesigned Intranet and smart mobile apps that allowed for ease of accessibility, along with leaders ability to use a checklist-style approach to confirm controls for in field safety verifications.





2017 at a glance

- > Five recordable lost-time injuries with 0.33 All Injury Frequency Rate
- > One of Rio Tinto's safest sites globally
- > Critical Risk Management and Human Performance safety initiatives embedded

Embedding Critical Risk Management and Human Performance

Across all of Rio Tinto's global operations, a safety system called Critical Risk Management (CRM) is being deployed.

The system was introduced in Weipa in 2016 and each year we continue our journey to sustaining and embedding the CRM tools in all of our work.

In 2017, we continued the rollout of CRM, and complementary Human Performance training, to our workforce and major contracting partners. Human Performance is designed to provide a common language specifically looking at 'human error traps' that are present at work, and identifies tools that can reduce the likelihood of error.

The two safety systems go hand-in-hand to identify the critical risks that can cause a fatality, along with the ability to recognise human error traps, further reinforcing employees to understand their role in safety on site.

To provide a deeper impact, Human Performance training was delivered by 15 Weipa employees ranging from leaders to operational fitters. More than 500 employees and contractors across our operations were trained throughout the year, bringing our total to 2,000 having participated overall in the training.



Pictured: Delivery of Human Performance training to Rio Tinto's Brisbane team.

Internally, a CRM maturity target of 3 was set at the start of 2017 and by the end of the year; we delivered a score of 3.42. A great score that exceeded our target, however two potentially fatal incidents still occurred throughout the year identifying that work to embed and sustain the programme still needs to occur.

- > Continued CRM and Human performance rollout out to over 2,000 employees
- > Exceeded CRM maturity target with 3.42

Rules change on the mine roads to reduce critical risk

In November 2017, mine road traffic rules changed for Rio Tinto Weipa operations, resulting in a significant change for our mine operators. Our mine previously followed gazetted Queensland road rules which towards the end of 2017 moved to a 'hierarchy of heavy machine equipment' approach.

The change was brought forward after looking at previous safety trends between heavy vehicles and light vehicles. The new road rule changes further mitigate the critical risk of interaction that can occur between the vehicles, in turn making it safer for all users of the mine roads. On our mine roads, heavy equipment now will have right away over all light vehicles, with heavy equipment giving away to the left.

Rio Tinto's manager East Weipa operations, Brad Welsh said "The communications leading up to the new mine traffic rules was a critical part in this being a smooth, successful and safe transition."

"To reinforce critical risks, and specifically those things that can severely injure you, we completed a video production on site where we filmed a controlled exercise of the damage that can occur between heavy vehicle machinery and light vehicles," Mr Welsh said.

A controlled safety exercise filmed a heavy vehicle driving over a light vehicle at East Weipa operations, to further reinforce the critical risks involved and the devastating after effects.

"When I was approximately six meters from the light vehicle, I could not even see it", said Morris Soki, East Weipa operator and selected driver of the heavy vehicle involved in the exercise.

"As the front right tyre went over the vehicle, I honestly could not feel a thing. Only after watching the video later on did I see the real damage and the reality sank in," Mr Soki said.

The change has been well-received by our employees.



Pictured: Morris Soki, East Weipa operator.

- > Mine traffic rules will reduce critical risks between heavy vehicle and light vehicles
- > Heavy vehicle operators vision is greatly reduced when interacting with light vehicles
- > Hierarchy of heavy vehicle will make it safer for all persons driving on mine roads

Weipa MoBro's raise \$8,000 for men's health

With three quarters of our workforce represented by males, the risks around men's health are prevalent and further challenged by the remote location of the Weipa town.

To raise awareness of the health issues men face, three teams made up of employees participated in a run and cycle breakfast challenge of more than 5km in support of "moving for men's health".

Almost \$8,000 was collectively raised by the teams with the initiative aimed towards creating further awareness around the benefits of being active and improvements to ones general well-being and mental health.

- > \$8,000 raised by three teams for Movember
- > 5km run and cycle challenge to move for men's health



Pictured: Moving for men's health Movember champions.

Safe at work, safe at home with White Ribbon efforts

More than 50 Weipa employees made a public pledge in 2017 for Respect through White Ribbon Day events.

The activities included East Weipa Operations proudly painting a rear tipper truck in the White Ribbon colours and branding, 116 community members participating in a community Park Run event and 15 employees coming together to participate in a White Ribbon morning tea.

These activities were organised by the site's Inclusion and Diversity committee, which strives to have an inclusive and diverse workforce particularly in operational areas, or non-traditional roles that includes both female and Indigenous representation.

- > 50 employees participate in White Ribbon activities
- > 1 strong statement with a painted rear tipper
- > White Ribbon Park Run raised \$700 with 120 community members supporting the event



Pictured: East Weipa's White Ribbon rear tipper truck with Dennis Blanco and Phil Shorten.

Social

Our Communities

Our reputation for operating responsibly plays a critical role in our success as a business and our ability to generate shareholder value.

Ensuring we uphold our social licence to operate, we strive for transparent, inclusive, and culturally appropriate consultation.

We aim to ensure that our communities are as informed as practically possible of our activities and their possible effects, and welcome two-way discussions about issues and feedback.

By engaging with informed stakeholders we can ensure that the business learns from risks and opportunities to continually improve our operations, and work to achieve mutual value for all stakeholders.

To leave a lasting legacy to the sustainability and vibrant communities of the Western Cape York and Queensland economy, we work in partnership on areas that are win-win for the business and for our stakeholders.

In 2017, Rio Tinto Weipa received no community complaints, rated medium consequence or above. Throughout the year, we receive ongoing feedback from community members via a freecall hotline and email. Community members are also able to speak face-to-face with a member of the Communities team at their centralised office in town.

Pictured: Amrun operations manager, Troy McNamara, Senior Wik-Waya Traditional Owner Stella Owokran and Amrun mining engineer Yhinzu Quan.





2017 at a glance

- > Zero community complaints rated medium and above
- > 302 employees participated in cultural awareness training
- > \$75,500 direct investment into communities
- > Approx. \$8 million in-kind equivalent investment in communities

Supporting community through the 'Lifestyle Roster'

With our first operational activities commencing at Amrun in 2018, one of the transition packages we worked through in 2017 was the continuous shift roster.

Across the Weipa operations, operators/tradespeople/technicians worked on a continuous shift roster of two days, followed by two nights and then four days off.

With Amrun geographically further away from the township (40km south), analysis was carried out to determine what continuous shift roster would be suitable for an operation that required a commute distance of approximately 75 minutes (+/- 15 minutes depending on weather) and involved ferry and bussing transport.

Employee engagement was undertaken to help validate some of the parameters for the new roster. It was fundamental that whatever roster applied to Amrun, it needed to support a healthy work-life balance and maximised time with family.

With employee feedback in mind, commute distances and also fatigue risk assessments, a 4,5,5 roster with straight shifts was selected for Amrun. The roster is commonly known as the Lifestyle Roster as it is commonly used across the industry, including other Rio Tinto sites, and maximises the amount of weekends an employee will have at home (half of the weekends in a year).



Pictured: Scott Tass and his son; Weipa locals.

At Amrun, employees will also finish on a day shift and head straight into their multiple days off, previously not possible on the old roster in Weipa.

With the continuous roster for Amrun selected, further engagement was undertaken to select a suitable roster option for the existing Weipa operation (Andoom and East Weipa) that would maximise days off with the Amrun roster, considering the social networks and family/friends that would work across both mines.

Following this, a slightly different variation of the 4,5,5 roster was selected which will be rolled out in early 2018 in preparation for Amrun to become operational.

Engagement on country supports Amrun's development

Each year Rio Tinto employees and Wik-Waya Traditional Owners come together to camp on country at Amban, a significant meeting place for Wik-Waya Traditional Owners.

The engagement, designed to increase cultural sensitivity, immersion and appreciation, supported a workshop where participants worked together to name 16 Amrun mine blocks in Wik-Waya language, covering the first five years of mining.

The names were discussed in detail by the Traditional Owner family group, referencing old historical language books, and determining the appropriate names that give significant meaning to that particular area of Amrun.

Other activities on the camp included being welcomed to country by a senior Traditional Owner, an opportunity to learn about scarred trees, a beach clean-up and traditional shell-chime making.

Senior Wik-Waya Traditional Owner, Tony Kerindun said "I feel fortunate that my elders have passed on knowledge to me about story and special places around the Amban area. It's important I continue to share this knowledge on country to my family and the younger generations, and holding these camps supports me in doing this."



- > Cultural immersion activities for leaders supported by Traditional Owners
- > Successful language naming session resulting in Amrun's 5-year mine plan receiving traditional names

Pictured: Our Amrun operational readiness team and Amrun Wik-Waya Traditional Owners discussing names for mine blocks on the camp.



NAIDOC and Reconciliation celebrations across Western Cape

In 2017, we supported and participated in a number of NAIDOC and Reconciliation events hosted across the Western Cape.

Supporting the events has been a testament to the values of our Agreements and partnerships with Traditional Owners of the Western Cape region, and to celebrate Aboriginal and Torres Strait Islander values and culture.

Seven cultural events were supported including the Reconciliation breakfast, Mabo march, Amrun NAIDOC, Mapoon NAIDOC, Napranum NAIDOC, Aurukun NAIDOC and Weipa NAIDOC event.

More than 30 employees participated in support of these reconciliation events.

- > Seven community cultural events supported
- > 30 employees participated supporting reconciliation events

Pictured: Mission River Bridge Mabo Day march with Traditional Owners and community members.

Working with our community partners to develop Amrun

With Amrun approaching, we have taken steps to address local challenges, such as childcare and animal welfare.

Rio Tinto, Weipa Town Authority (WTA) and Weipa Community Care (WCC) joined forces to renew the investment in the local Family Day Care Scheme which received an extension of two years and a funding boost of \$50,000 in 2017.

Rio Tinto's finance manager, Weipa operations, Adam Clements said "Our key priority is to support employees, families and the broader community through this transition period. Securing more educators will provide a variety of care options to support those working for Rio Tinto and other local organisations."

With approximately 1,200 registered dogs in Weipa, Rio Tinto has supported the proposal for a new animal welfare facility in partnership with Cape Animal Protection Shelter (CAPS), Goodline, Weipa Town Authority (WTA) and the Napranum Aboriginal Council.

Clearing works were completed for the new facility in 2017, which will include a veterinary clinic supported by a full time vet, boarding and kennelling facilities and the integration of animal pound services.

"Animals play a large role in our lives, and people want to provide their pets with a good life," said CAPS president and founder Tonia May.

Pictured: Representatives from Rio Tinto, CAPS, WTA, Goodline and Napranum Aboriginal Council overlooking the future plans for the animal shelter.



- > \$5,000 Family Day Care Educator starter packs offered which includes:
 - \$2,500 reimbursement for start-up costs, home fit-outs for childcare providers from Rio Tinto
 - \$2,000 educational scholarships for childcare educators on successful completion of studies from Rio Tinto
 - \$1,369 business registration fee waived by WTA
- > Approximately \$80,00 of in-kind support pledged for CAPS development

Environment

Respect for the environment is central to our approach to sustainable development.

Wherever possible, we prevent, or otherwise minimise, mitigate and remediate harmful effects of our operations on the environment.

We have developed a number of practical programmes for environmental management, which includes input from our local communities, as well as from experts in these fields.

Prior to land being disturbed for mining, our Environmental team is required by legislation to survey the area in front of the clearing activities. These surveys help the business understand the presence of flora and fauna in those areas, and specifically look for threatened species.

In addition to surveying, the team also verify environmental buffers on the lease. Environment buffers are in place to help protect areas of environmental significance (including creeks and waterways).





2017 at a glance

- > Seven environmental incidents (high consequence and above)
- > 1.73 kilolitres freshwater withdrawn (per tonne of bauxite produced)
- > 34% water on site recycled
- > 735 hectares of land rehabilitated

World-leading research into Red Goshawk

Three years ago our Land & Rehabilitation team commenced a research programme in partnership with the Queensland Government into the Red Goshawk, Australia's rarest bird of prey, after a nest was located on the lease towards Mapoon.

Since 2014, four nest sites on our mining leases have been discovered and multiple trapping events have been carried out with the Department of Environment & Heritage Protection to attach satellite tracking equipment in order to learn more about this rare species.

This monitoring technology tracks the bird's daily movements, and help us understand what landscapes and habitats are used by the Red Goshawk.

In 2017, our environmental team also progressed a partnership with the Australian Wildlife Conservancy to study the Red Goshawk across the whole of northern Australia, thus broadening the scope and impact of this important research.

The information and data gathered will help to manage high value habitats along with supporting broader conservation efforts for the Red Goshawk beyond our operations.



- > Four Red Goshawk nests discovered
- > Eight Red Goshawk chicks monitored during breeding events
- > \$60k investment by Rio Tinto in partnership with DEHP

Pictured: Chris Maccoll, threatened species research officer holding the endangered Red Goshawk.

95% rehabilitation success rate following Rehabilitation Advisory Panel

Our land rehabilitation efforts are driven by continual improvement through operational learning, consultation with research bodies and finding ways to apply industry-leading practices.

During 2017 Rio Tinto Weipa's Land & Rehabilitation team held two Rehabilitation Advisory Panel (RAP) consultations with the purpose to provide industry leading management of environmental risks associated with rehabilitation and provision of technical advice in the application of rehabilitation management.

Since the inception of the RAP in 2013, rehabilitation outcomes have progressively improved through the implementation and recommendations coupled with operational learnings, the result

has seen a shift from 82% recorded in 2013 to 95% rehabilitation establishment success in 2017.

Rehabilitation is important to environmental sustainability, and involves returning the land to a natural state post mining through strict, well researched strategies of revegetation and the regeneration of natural ecosystems.

121 local Aboriginal people from Napranum, Mapoon and Aurukun collected 785kg of local native seed, contributing to our rehabilitation success.

Working in partnership with local Traditional Owners on Northern Quoll environmental programme

In 2013, our environment team found 24 Northern Quolls occupying an area of the mining lease north of the Embley River. The discovery was very important as it was thought that Northern Quolls in the region had been wiped out by the impacts of poisonous cane toads and feral cats.

Since the find, annual monitoring of the population has been undertaken using motion sensor cameras and tracking studies. Both programs have provided valuable insights into Northern Quoll ecology and how to manage local populations.

Northern Quolls were also discovered on the Napranum Deed of Grant in Trust (DOGIT) land that neighbours Weipa operations mining lease and in 2017, we partnered with the Nanum Wunghim Land and Sea Rangers to work collaboratively to learn more about Northern Quoll populations in the area.

Rio Tinto Weipa's Threatened Species Research Officer, Christopher Maccoll said "It was important that we worked with our neighbours to develop a collaborative strategy to help manage the Northern Quoll populations and ultimately conserve the species throughout the Weipa region."



- > Rehabilitation Advisory Panel (RAP) established in 2013
- > 82% success rate in 2013 improved to 95% success rate in 2017

Pictured: Brad Warner and Simon McVeigh from the environment team.



- > PhD student project 2018 - 2021
- > 24 Northern Quolls found on Weipa operations mining lease
- > Collaborative partnership between Rio Tinto and the Nanum Wunghim Land and Sea Rangers

Pictured: Nanum Wunghim Land and Sea Rangers working on country to learn more about the Northern Quoll populations.

Economic

We believe that sustainable development is underpinned by sustainable economies, of which mining can support.

Continuing to be a world-class operation is based on our ability to secure access to land, people and capital. We use our economic, social, environmental and technical expertise to harness these resources and create prosperity for our shareholders, employees, communities, governments and business partners.

By operating in partnership under our Aboriginal Agreements, the prosperity generated from mining will benefit future generations.





2017 at a glance

- > 10 Indigenous businesses engaged in contracts for Weipa Operations
- > 17 Indigenous businesses and 71 Western Cape York businesses engaged for Amrun Project



- > 71 Western Cape York businesses contracted to the Amrun Project
- > Direct Western Cape York spend (contracts) \$218m
- > 17 local Indigenous businesses contracted

Amrun Local and Indigenous Participation Plan outcomes

Rio Tinto is committed to providing opportunities for local and Indigenous people and businesses to benefit from the Amrun project.

Throughout 2017, the Amrun project extended its economic contributions at local, state and national levels. With all contracts now awarded, the project has strengthened its focus on working with contractors to ensure their Indigenous employment and training targets as detailed in their Local and Indigenous Participation Plans are not only met, but exceeded wherever possible.

The overall economic contribution by the Amrun project at the end of 2017 was:

- \$1.3B in direct spend committed to 704 Queensland suppliers.
- \$218M in direct spend committed to Cape York suppliers.
- 71 Western Cape businesses and 17 Indigenous businesses have supplied goods directly and indirectly through the project.

Other highlights under the strategy include:

- The \$70 million bulk earthworks contract was awarded to Queensland-based civil engineering firm QBirt;
- The project continued to work with ICN to date, with 4 work packages published on the project's ICN gateway website; and
- Weipa-based Aboriginal owned company, NHDS, was awarded the contract to provide site general services and created 25 positions for Local Aboriginal People.

Pictured: Amrun full time employee and Local Aboriginal Person (LAP), Des Pitt.

Western Cape Regional Partnership Agreement supports Indigenous employment beyond mining

The Regional Partnership Agreement is between Rio Tinto, Australian and local Government, Traditional Owners, education and industry members of the Western Cape.

The agreement sits under a national memorandum of understanding, which aims for all parties involved to collectively contribute to the Indigenous economic participation in the broader workforce and enterprise development.

In 2017, the RPA successfully delivered the Indigenous driver licencing open day aimed at addressing barriers Indigenous people in the region face when obtaining their drivers licence. The Indigenous drivers licencing open day saw many attendees receive their learners permits, and this year 86 attendees participated in the event where a number of previous years' open day participants successfully transitioned to their P1 and P2 drivers licences. A number of attendees were also granted their bus, truck and open licences on the day.

The QuickSmart Adult Literacy and Numeracy Programme was also rolled out successfully in 2017 to the Western Cape communities including Weipa, Napranum and Mapoon. Ninety-four participants enrolled with the programme being delivered by MyPathways, a local job find centre service provider in Weipa. The RPA has transferred the roll out of the Quick Smart Programme to the Department of Aboriginal and Torres Strait Islander Partnerships to commence in Aurukun in 2018.

Pictured: A local community member receiving their learners permit driver licence.



- > 86 attendees at the Indigenous Drivers Licencing Open Day
- > 94 Indigenous persons enrolled in the QuickSmart Adult Literacy and Numeracy Programme



