

The Rio Tinto logo consists of the words "RioTinto" in a white, sans-serif font, centered within a solid red rectangular background.

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3 September 2021

Hon Peter Tinley MLA  
Chairperson  
Economics and Industry Standing Committee  
Parliament House  
PERTH WA 6000

Dear Chair

**INQUIRY INTO INTERGENERATIONAL CHALLENGES AND OPPORTUNITIES FOR THE WESTERN AUSTRALIAN ECONOMY**

Rio Tinto appreciates the opportunity to provide a submission to the Economics and Industry Standing Committee's (**the Committee**) inquiry into intergenerational challenges and opportunities for the Western Australian economy (**the Inquiry**).

Mining is Western Australia's most significant industry, with iron ore the biggest of Western Australia's world-class extractive industries.

Rio Tinto is Western Australia's largest producer of iron ore, with this privilege enabling us to create jobs and business opportunities for tens of thousands of Western Australians and invest in important community projects and initiatives across the State.

Rio Tinto is proud to be part of the Western Australian community, as well as the contribution we make to the State. However, continuing to meet international demand for our iron ore comes with many challenges.

The most immediate challenge is COVID-19, where Rio Tinto continues to support our employees, communities and suppliers through the pandemic, and we continue to engage closely with our industry counterparts and the Western Australian Government. Recently, Rio Tinto and the State Government collaborated to set up COVID-19 vaccination hubs at Perth Airport and Tom Price to support Western Australia's vaccination efforts.

We aspire to be a trusted local mining company that we are all proud of. Innovation, skills development and local engagement are key areas of focus, as we work to develop new mines to meet existing and future demand, drive improved performance, and work with industry as we decarbonise to address climate change.

The events of Juukan Gorge revealed that Rio Tinto had a narrow focus on business performance and was not sufficiently building our relationships with our people, our partners, and the

communities in which we operate. This is an event that we unreservedly apologise for. We are focusing on rebuilding trust by changing the way we do business and improving our culture, and acknowledge we have much work to do.

This submission provides an overview of the importance of mining and iron ore to the Western Australian economy, as well as Rio Tinto's place in that industry. It provides some detail on the challenges we face, and how we are meeting those challenges.

Through this submission, I would like to invite the Committee to visit Rio Tinto's Remote Operations Centre at Perth Airport. This would provide a deeper understanding of the mines of the future being developed and operated by Rio Tinto to meet international demand for iron ore, as well as the jobs of the future they are creating for Western Australians.

Yours sincerely

A handwritten signature in black ink, appearing to read 'S. Trott', with a long horizontal stroke extending to the right.

Simon Trott  
**Chief Executive - Iron Ore**

# Submission

## Parliamentary Inquiry into Intergenerational Challenges and Opportunities for the Western Australian Economy

### Introduction

Rio Tinto appreciates the opportunity to make a submission to the inquiry into intergenerational challenges and opportunities for the Western Australian economy being undertaken by the Legislative Assembly's Economics and Industry Standing Committee.

This submission has three parts:

- **Part A** - An overview of Rio Tinto;
- **Part B** - Rio Tinto's responses to the Inquiry's terms of reference; and
- **Part C** - Closing remarks.

### Part A:

#### ***About Rio Tinto***

Globally, Rio Tinto operates in 35 countries, with operations in Australia spanning more than a century. Rio Tinto produces iron ore, bauxite, alumina, aluminium, borates, copper, lithium, diamonds, and salt.

Across its global footprint, five core values underpin the way Rio Tinto works – respect, safety, teamwork, integrity and excellence. To truly live and enable these values, Rio Tinto must have a safe, respectful and inclusive workplace, every day, for everyone.

Rio Tinto's Western Australian operations include Rio Tinto Iron Ore (RTIO), Dampier Salt Limited, Argyle Diamonds and Rio Tinto Exploration, which was responsible for the recent Winu copper discovery in the Patterson region. RTIO is Australia's largest iron ore producer. Its Pilbara operations have been operating for more than 50 years, and encompass a network of 16 mines, four independent port terminals, a 1,700-kilometre rail network, and related infrastructure.

### Part B:

#### ***Terms of reference (i) The current structure of the WA economy***

Western Australia is the largest iron ore supplier in the world, accounting for 39 per cent of global supply in 2020, followed by Brazil (16 per cent). Asia accounted for 80 per cent of global iron ore demand in 2020, with China (63 per cent), India (8 per cent), Japan (4 per cent), and South Korea (3 per cent) having the largest shares. In 2020, Western Australia accounted for the majority of iron ore imported by China (59 per cent), Japan (52 per cent) and South Korea (75 per cent)<sup>1</sup>.

Over the past five years, Rio Tinto's iron ore exports from Western Australia have averaged 331 million tonnes per year, making the company Western Australia's largest producer of iron ore. The volume of Western Australia's iron ore sales was 846 million tonnes in the 2020 calendar year<sup>2</sup>.

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<sup>1</sup> [Western Australia Iron Ore Profile – July 2021](#)

<sup>2</sup> [Western Australia Iron Ore Profile – July 2021](#)

Goods-producing industries accounted for 56 per cent (\$175.7 billion) of Western Australia's Gross State Product in 2019-20, with mining constituting 43 per cent, or \$135.3 billion. This compares with construction (five per cent or \$17.3 billion), manufacturing (four per cent or \$12.9 billion), and agriculture, forestry, and fishing (two per cent or \$5.4 billion)<sup>3</sup>.

Rio Tinto provided significant returns to the Western Australian economy in 2020, with its Western Australian assets generating US\$1.9 billion in State Government royalties and taxes, on top of the US\$4.6 billion in corporate income taxes paid by Rio Tinto to the Commonwealth Government.<sup>4</sup>

Rio Tinto's Western Australian workforce comprises more than 16,000 employees, of which 2,901 were FIFO workers from regional centres, such as Geraldton, Broome, Derby, Busselton and Albany in July 2021.

Through focused investment and initiatives, Rio Tinto has seen an increase in female participation in its operations from 19.2 per cent in January 2019 to 21.7 per cent in July 2021. Rio Tinto is also one of Australia's largest private sector employers of Aboriginal and Torres Strait Islander people. Aboriginal people comprise 12 per cent of our residential Pilbara workforce.

The total number of contractors working on Rio Tinto sites is, on average, almost 30,000 people each year.

In 2020, Rio Tinto Iron Ore procured \$7.5 billion worth of goods and services with more than 2,000 local businesses based in Western Australia<sup>5</sup>.

Rio Tinto is committed to increasing opportunities for Indigenous Businesses in Western Australia. In the first half of this year (2021), Rio Tinto Iron Ore spent \$135.6 million with 56 Indigenous businesses. This is an increase of 38 per cent from the same time last year (2020) and includes an additional 11 Indigenous businesses.

***Terms of reference (iv) Actions being undertaken by relevant stakeholders to plan for identified trends in demand for WA exports***

This section outlines the steps Rio Tinto is taking to meet customer requirements now and, in the future, to remain internationally competitive, create jobs and business opportunities for Western Australians and invest in the Western Australian community.

**Developing new mines to meet current and future demand**

Sustaining production to meet current and future demand for iron ore requires the ongoing development of new mines.

Rio Tinto has invested more than \$10 billion over the last three years on replacement mine projects and sustaining capital projects. This includes the development of our most technologically advanced mine, Gudai-Darri, as well as expansion projects at West Angelas C and D, Mesas B, C and H, and Western Turner Syncline Phase 2 project.

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<sup>3</sup> [Western Australian Economic Profile](#)

<sup>4</sup> [Taxes Paid Report](#)

<sup>5</sup> [Investing local in Western Australia, Rio Tinto](#)

## *Gudai-Darri*

Gudai-Darri is a US\$2.6 billion project, located around 110 kilometres north-west of Newman. Rio Tinto is working in close partnership with the Banjima and Yindjibarndi people as the Traditional Custodians of the land on which the Gudai-Darri project and operations, including rail, are located.

The construction phase of Gudai-Darri has a strong focus on supporting local businesses.

Contracts at Gudai-Darri valued at more than \$2.3 billion have been awarded to local Pilbara Aboriginal and Western Australian businesses, including Primero Group, NRW, DTMT, Pindan, White Springs, Hicks Civil & Mining, and Karratha Earthmoving & Sand Supplies.

These contracts have supported approximately 2,000 jobs in the construction phase and the mining operation is expected to support about 600 jobs on an ongoing basis.<sup>6</sup>

## *Western Turner Syncline Phase 2 Project*

Rio Tinto's \$1 billion investment in Western Turner Syncline Phase 2 (WTS2) will sustain production capacity of the company's iron ore business in the Pilbara. The investment allows for the mining of existing and new deposits at WTS2 and includes construction of a new crusher and a 13-kilometre conveyor, which will help lower greenhouse gas emissions from the mine by 3.5 per cent compared to road haulage.

Construction of the WTS2 expansion commenced in early 2020 and, to date, more than 85 per cent of spending on the project (valued at over \$500M) has been awarded to Western Australian and Pilbara Aboriginal businesses, directly through Rio Tinto or principal contractor Mondium.

At peak construction, the development has supported a workforce of more than 1,000 people with the majority employed by Western Australian businesses, including Guma Warnii, Monadelphous, Mondium, Kerman Contracting, Whittens, North West Mining & Civil, MACA Civil, Linkforce, and Aerison.<sup>7</sup>

## *Robe Valley*

In 2018 Rio Tinto and our Robe River Joint Venture partners Mitsui & Co and Nippon Steel committed US\$967 million to the development of deposits Mesas B, C and H at our existing Robe Valley operations.

The project is expected to deliver first ore this year and is a critical part of our replacement mine process for ongoing operations.<sup>8</sup>

## *West Angelas*

In 2018 Rio Tinto and our Robe River Joint Venture partners Mitsui & Co and Nippon Steel committed US\$579 million to the development of deposits C and D at our existing West Angelas operations.

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<sup>6</sup> [Gudai-Darri Project](#)

<sup>7</sup> [Western Turner Syncline 2 Project](#)

<sup>8</sup> [Robe Valley Project](#)

Rio Tinto awarded contracts with a combined value of more than A\$250 million to leading Western Australian suppliers BGC Contracting and Monadelphous Group in 2019. The project is expected to deliver first ore this year and is a critical part of our replacement mine process for ongoing operations.<sup>9</sup>

### Innovation and the Mines of the Future programme

Innovation is critical to maintaining international competitiveness, as well as improving health, safety and environmental performance. The resources sector in Western Australia is recognised globally as a leader in innovation and adoption of new technologies. Through focusing on new approaches and technologies the resources sector contributes to the development of the industries of tomorrow in Western Australia.

In 2008, Rio Tinto launched its Mines of the Future programme to implement step-change technologies, including a Remote Operations Centre at Perth Airport, as well as autonomous truck haulage, autonomous drilling and autonomous train operations (AutoHaul).

Spanning Rio Tinto's entire Pilbara rail network and associated rolling stock, AutoHaul is now recognised as one of the world's largest robots.

Every day, Rio Tinto's automated drills, trucks, shovels, conveyors, trains and ships produce huge amounts of valuable data. By combining this data with integrated analytics, artificial intelligence, machine learning and automation, Rio Tinto is improving safety and increasing productivity. These innovations were industry leading and have created the foundation for the next phase of step changes.

Rio Tinto has set up Centres of Excellence focused on analytics, automation, asset management, energy and climate change, orebody knowledge, underground mining, surface mining, and processing. They bring together Rio Tinto's foremost technical experts to work with its operations around the world. These smart mining teams help the company make the right technical judgements and decisions to help it manage its major hazard risks and assure the safety of its assets and operational excellence.

Gudai-Darri is set to be Rio Tinto's most technologically advanced mine, powered by its own solar plant and leveraging newly developed technology. Similarly, Rio Tinto is working on technology solutions to enable dry stack tailings for utilisation at the Winu project, which will enable it to extract minerals from its previously classified waste streams, maximising the mineralogy resource.

Historically, Rio Tinto has invested approximately \$200 million per year on Research and Development and had over 400 people working on new technology. Rio Tinto is expanding its approach beyond the productivity focus of the last decade - which was largely centred around automation - to also focus on technology and innovation to deliver Health & Safety improvements, address Environmental, Social and Governance (ESG) challenges, reduce carbon emissions, and drive growth. The move to greener technologies will help drive future export technologies and industries within Western Australia. Rio Tinto also partners with universities across Australia to fund research in a variety of areas. Rio Tinto presently has several multi-year partnerships valued at more than \$15 million with Western Australian universities to support research and development that further supports the Western Australian economy and drives important research and technological advances.

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<sup>9</sup> [West Angelas Project](#)

Rio Tinto has long been committed to supporting local businesses in Western Australia to grow and develop. An example of this is local company 4CDA, which uses information that Rio Tinto collects about production, shipments, and even the weather, to create predictive models that help Rio Tinto maximise productivity and minimise risk. 4CDA is now expanding internationally, working on the planning and execution of the Oyu Tolgoi underground copper mine in Mongolia.<sup>10</sup>

Through our partnerships with universities as well as with our suppliers, Rio Tinto supports the commercialisation of research and technological advancements that come as a result of our collaboration, which further supports diversification of the Western Australian economy.

Consistent with the goal of the Western Australia Government to encourage the diversification of the economy, efforts such as those outlined above facilitate Western Australia's progress to be a significant regional and global technology partner, with technological advances in mining driving innovation in other sectors, such as agriculture and defence.

### Skills development and the jobs of the future

Sourcing and developing the skilled workforce Rio Tinto needs, for today and tomorrow, will be critical to meeting current and future international demand for the minerals we produce in Western Australia.

Rio Tinto recognises the need for a diverse pool of current and new employees, where clear pathways into and within the mining industry are fundamental.

Our priority is investing in providing its existing and future workforce with contemporary, relevant and critical skills and knowledge for today and tomorrow.

Rio Tinto provides significant in-house learning and development activities that provide extensive training for its Western Australian workforce.

In 2021, Rio Tinto is investing \$70 million in learning and development initiatives to support new and existing employees in development roles (graduates, trainees, apprentices, and vacation students).<sup>11</sup>

Rio Tinto aims to maintain a programme of around 500 development roles within the business. This year's Western Australian intake has exceeded 250 new recruits with 42 per cent female and 35 per cent Aboriginal and Torres Strait Islander. Plus, we will offer more than 100 vacation student placements. We have a strong focus on ensuring that we increase female and Indigenous participation through our development pathways.

The jobs of tomorrow will increasingly require science, technology, engineering and mathematics (STEM) skills.

Rio Tinto is partnering with and supporting Western Australia's world-class schools, TAFEs, and universities to support the initiatives which will help develop the highly educated and skilled people needed to fill these jobs.

To ensure young people are engaged with STEM and encouraged to study in these areas, Rio Tinto supports a range of important programmes, including:

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<sup>10</sup> <https://www.riotinto.com/en/news/stories/rio-tinto-buy-local>

<sup>11</sup> <https://www.riotinto.com/en/news/releases/2020/Rio-Tinto-investing-in-skills-development>

- Girls in Engineering (University of Western Australia);
- Emerging Leader Scholarships and Indigenous Emerging Leader Scholarships;
- School of Indigenous Studies; and
- Children's University

In addition, Rio Tinto's university graduate programme covers disciplines across Mining, Mechanical and Control Systems Engineering along with Data Science and Environmental Science.

Recognising the increasing role of automation in the resources sector and among broader sections of the economy, Rio Tinto has partnered with the State Government and South Metropolitan TAFE to develop Australia's first nationally recognised vocational qualifications in automation.

This followed Rio Tinto and the Government's formation of the Resource Industry Collaboration, through which a group of mining and energy companies come together with the Government and educators to identify the future skills needs of industry, invest in upskilling the workforce, and develop new qualifications relevant to all industries experiencing technological change.

Rio Tinto committed funding of up to \$2 million to South Metropolitan TAFE to develop Certificate II and Certificate IV qualifications in automation, as well as a micro credential. Rio Tinto employees, members of the public, along with Year 11 and 12 students in selected high schools across Western Australia, are now completing these qualifications, providing a pathway not only into mining, but also building critical skills needed in the State's agriculture and defence industries.

Rio Tinto is committed to improving Indigenous training and employment and has various programmes in place to achieve this. We have recently launched a US\$50 million initiative to attract, retain and support the development of Indigenous employees across Australia, reflecting our continued commitment to growing Indigenous leaders.

We are also committed to working with our contract partners to improve Indigenous engagement and opportunities. We have partnered with Monadelphous to establish an Indigenous Employment Pathways Programme. This three-year partnership will focus on creating meaningful and sustainable employment for Aboriginal and Torres Strait Islander peoples. Supported by dedicated coaching and mentoring, the Programme aims to increase the number of skilled and tertiary qualified Aboriginal and Torres Strait Islander peoples in the resources industry. It will be open to prospective apprentices, trainees and tertiary cadets in a variety of fields, including mechanical fitting, electrical, boiler making and welding, as well as traineeships in civil construction, crane operations, rigging, business administration, and health, safety and environment.

Rio Tinto recently participated in the Premier's Skills Summit and looks forward to engaging with the Government and broader industry to continue to work together to address the issues identified. While industry and Government work to address skills shortages, there will be a need for some interstate and international skilled specialists in the short to medium term. Covid-19 has significantly impacted movement and access of some skilled people and created some critical shortages. Enabling the identification of a sustainable avenue to meet this skills demand will be critical as well to ensure industry is able to continue to grow and support the economy.



## Buying local and supply chain security

Supply chain security and the safe, responsible, innovative, and reliable sourcing of goods and services will be critical to ensuring Rio Tinto can continue to develop and operate the mines required to meet current and future international demand for iron ore. Rio Tinto's commitment to buying local is a key part of its strategy for achieving this.

Through its Buy Local programme, Rio Tinto maximises opportunities for Western Australian suppliers to be part of the business' supply chain and strengthen the capability of local suppliers to further develop local industry. The company is committed to making it easier for local suppliers to compete for contracts and maximise local economic participation benefits.

Rio Tinto also looks to support these businesses to engage with it through:

- Promoting sustainable business growth and supporting business capability enhancement programmes to build local industry strength;
- Providing visibility of upcoming work opportunities, enabling suppliers to express interest;
- Engaging with local suppliers regarding registration on Rio Tinto's Buy Local Portal and submitting interest for work packages;
- Offering small and regional Australian suppliers faster payment terms of 20 days or less.
- Australia wide, Rio Tinto is seeking to reduce our payment times for Indigenous businesses to ensure their ongoing viability and consistent access to capital. By the end of the year we aim to have all of our Indigenous suppliers on faster payment terms of 7 days.

## Addressing climate change through decarbonisation

As Rio Tinto works hard to meet current and future international demand for iron ore, the business will need to also address the challenges of climate change through decarbonisation.

In 2018, Rio Tinto completed divestment of its coal business, meaning it no longer extracts fossil fuels and is well-positioned to transition to a low-carbon economy.

Rio Tinto has set itself a net zero emissions target from its operations by 2050 and it has committed over US\$1 billion in investment towards its climate change targets.

Rio Tinto released its 2020 Climate Change report earlier this year. This report outlines Rio Tinto's progress to reducing its emissions and transition to a low-carbon future. It has outlined a series of targets setting a pathway for 2030 and 2050. Rio Tinto's targets for 2030 are:

- A further 30 per cent reduction in Rio Tinto's emissions intensity from 2018 levels; and
- A further 15 per cent reduction in Rio Tinto's absolute emissions from 2018 levels

Rio Tinto has outlined a three-stage pathway to reduce the emissions of its iron ore operations. Currently it is commencing the process to execute stage one of the Pilbara renewables pathway and advance individual stage two studies and projects, including new wind power options; in parallel with exploring commercial partner options to accelerate the energy transition across the Pilbara system; and continuing to develop low-emission alternatives for mobile fuel use in load, haul, and rail. <sup>12</sup>

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<sup>12</sup>[Rio Tinto 2020 Climate Change Report](#)

As part of this focus, Rio Tinto has awarded Perth-based civil contractor NRW Holdings the engineering, procurement and construction contract to deliver its 34 MW solar and battery energy storage system at Gudai-Darri.

This \$60 million project will comprise an estimated 100,000 solar panels accompanied by a 12 MWh lithium-ion battery energy storage system.

The solar plant and battery are estimated to lower annual carbon dioxide emissions by about 90,000 tonnes compared to conventional gas-powered generation. This is the equivalent of taking 28,000 cars off the road.<sup>13</sup>

Copper also plays a critical role in the transition to a low-carbon economy. The development of Winu, a copper-gold project in the Paterson Province of Western Australia, will help meet the growing global demand for this critical mineral and potentially use leading edge technology solutions. This project potentially presents several exciting opportunities for Western Australia and will further build on Western Australia's reputation as a leading resources province. The Winu discovery also reflects Rio Tinto's longstanding commitment to exploration in Western Australia which helps underpin new discoveries and generate further investment in exploration and potential developments by others.

Rio Tinto recognises that climate change and decarbonisation will not be achieved by working alone and is committed to working in partnership with local and global industry partners to find ways to tackle these issues.

Rio Tinto has entered into a number of partnerships to explore ways to improve environmental performance across the steel value chain, including collaborative projects with the largest steel producers in China and Japan to jointly explore, develop, and demonstrate technologies to transition to a low-carbon emission steel value chain.

Rio Tinto is also partnering with Austmine, BHP, and Vale as part of the 'Charge on Challenge', which is an innovation challenge to develop concepts for large-scale haul truck electrification systems. To complement this, Rio Tinto has also partnered with Komatsu to fast-track development of zero-emission haulage solutions. This demonstrates the commitment of Rio Tinto and the broader industry to tackling climate change.

### Strengthening our connection to community

Maintaining strong connections to the local Western Australian communities in which Rio Tinto operates will be critical to its ability to continue to develop new mines and meet current and future international demand for iron ore.

In addition to the creation of local jobs and training opportunities, as well as business opportunities through its commitment to buying local, Rio Tinto is investing directly in the community.

Rio Tinto is committed to working with the communities it operates in through collaborative partnerships, focusing on both economic opportunities and liveability.

Rio Tinto has a significant longstanding partnership with the Royal Flying Doctor Service (RFDS), which is a crucial support for regional and remote Western Australians. Since 2004, Rio Tinto has committed almost \$40 million to the RFDS, including \$10 million towards the purchase of two new

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<sup>13</sup> <https://www.riotinto.com/en/news/stories/First-solar-plant>

PC-24 LifeFlight jets, and a commitment of a further \$15 million to fund the purchase of a third LifeFlight jet as part of a six-year partnership extension with the RFDS to improve healthcare for regional Western Australian communities<sup>14</sup>.

Earlier this year, Rio Tinto entered into partnership with the State Government and committed \$20 million to help fund the construction of a new \$32.8 million hospital at Tom Price. The new hospital, including an emergency department, inpatient ward, and consulting rooms for visiting services, will replace the existing 54-year-old Tom Price District Hospital which had originally been constructed by Rio Tinto. In addition, the provision of new medical imaging equipment and state-of-the-art telehealth technology will connect locals with Perth-based medical specialists by phone or video, ensuring they get the best care while reducing the need to travel long distances.<sup>15</sup>

Rio Tinto is also committed to working within the Pilbara to increase the capacity for economic diversification through enabling access to new markets for Pilbara-based businesses. In 2021, Rio Tinto commenced importing freight directly to the Pilbara via Dampier Port, reducing the reliance on road freight from Perth.

Direct shipping into Pilbara ports is gaining momentum and is open to local businesses operating in the Pilbara for their own import/export needs, eliminating 3.8 million kilometres of road train travel and 3 million litres of diesel each year, providing a strong opportunity for broader economic development in the region as well as delivering environmental and safety benefits.<sup>16</sup>

## **Part C:**

### **Concluding remarks**

Rio Tinto appreciates the invitation to make a submission to this Inquiry. Rio Tinto looks forward to welcoming the Committee to visit the Remote Operations Centre, should its schedule permit. Rio Tinto looks forward to the Committee's report, once finalised.

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<sup>14</sup> [Rio Tinto, 18 February 2020](#)

<sup>15</sup> [Tom Price Hospital announcement](#)

<sup>16</sup> [Direct Shipping Dampier Port](#)