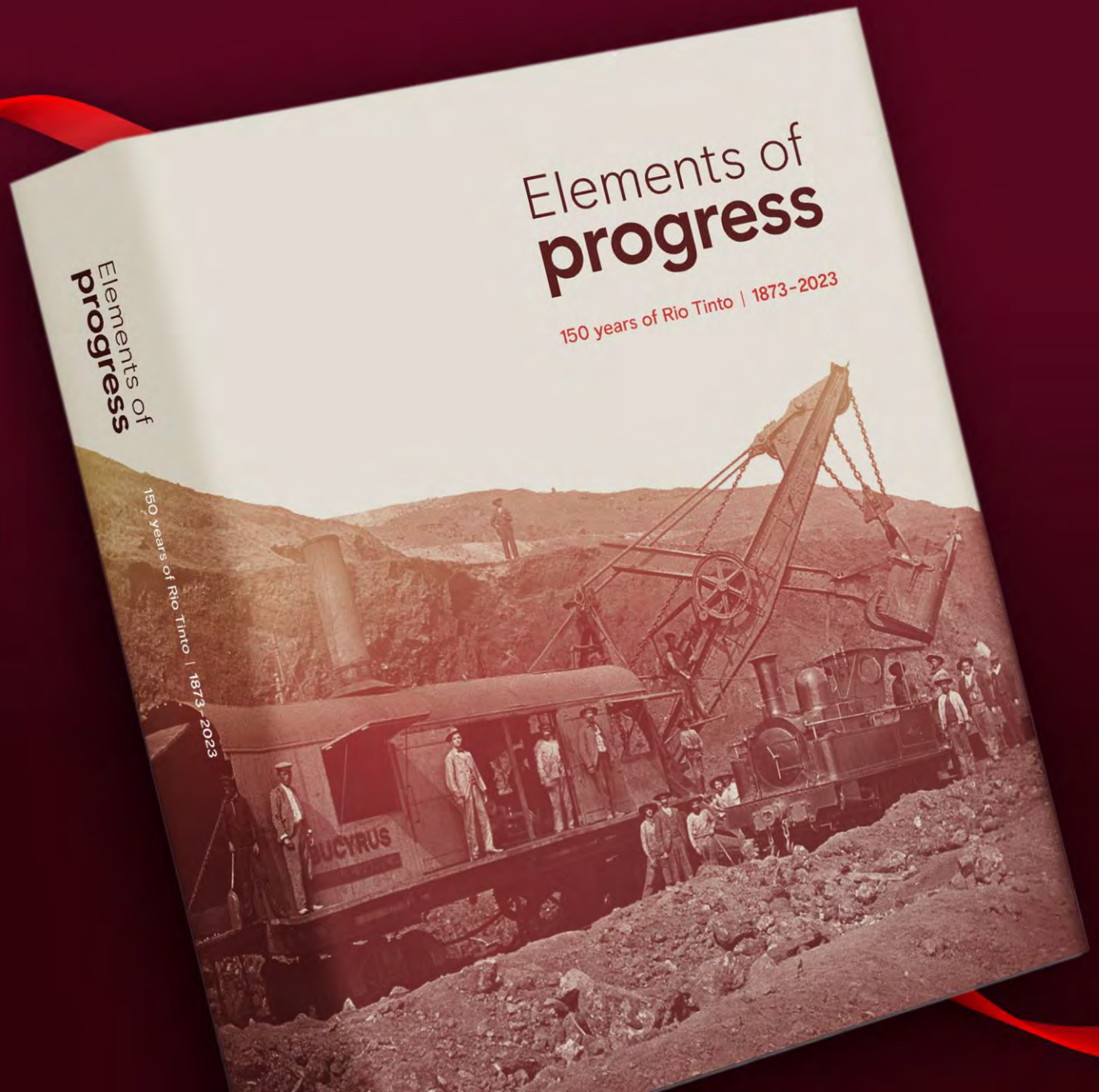
Rio Tinto

Investor Seminar 2023



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This presentation includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts included in this report, including, without limitation, those regarding Rio Tinto's financial position, business strategy, plans and objectives of management for future operations (including development plans and objectives relating to Rio Tinto's products, production forecasts and reserve and resource positions), are forward-looking statements. The words "intend", "aim", "project", "anticipate", "estimate", "plan", "believes", "expects", "may", "should", "will", "target", "set to" or similar expressions, commonly identify such forward-looking statements.

Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Rio Tinto, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements, particularly in light of the current economic climate and the significant volatility, uncertainty and disruption arising in connection with the Ukraine conflict. Such forward-looking statements are based on numerous assumptions regarding Rio Tinto's present and future business strategies and the environment in which Rio Tinto will operate in the future. Among the important factors that could cause Rio Tinto's actual results, performance or achievements to differ materially from those in the forward-looking statements include, but are not limited to: an inability to live up to Rio Tinto's values and any resultant damage to its reputation; the impacts of geopolitics on trade and investment; the impacts of climate change and the transition to a low-carbon future; an inability to successfully execute and/or realise value from acquisitions and divestments; the level of new ore resources, including the results of exploration programmes and/or acquisitions; disruption to strategic partnerships that play a material role in delivering growth, production, cash or market positioning; damage to Rio Tinto's relationships with communities and governments; an inability to attract and retain requisite skilled people; declines in commodity prices and adverse exchange rate movements; an inability to raise sufficient funds for capital investment; inadequate estimates of ore resources and reserves; delays or overruns of large and complex projects; changes in tax regulation; safety incidents or major hazard events; cyber breaches; physical impacts from climate change; the impacts of water scarcity; natural disasters; an inability to successfully manage the closure, reclamation and rehabilitation of sites; the impacts of civil unrest; the impacts of the Ukraine conflict; breaches of Rio Tinto's policies, standard and procedures, laws or regulations; trade tensions between the world's major economies; increasing societal and investor expectations, in particular with regard to environmental, social and governance considerations; the impacts of technological advancements; and such other risks identified in Rio Tinto's most recent Annual Report and accounts in Australia and the United Kingdom and the most recent Annual Report on Form 20-F filed with the United States Securities and Exchange Commission (the "SEC") or Form 6-Ks furnished to, or filed with, the SEC. Forward-looking statements should, therefore, be construed in light of such risk factors and undue reliance should not be placed on forward-looking statements. These forward-looking statements speak only as of the date of this report. Rio Tinto expressly disclaims any obligation or undertaking (except as required by applicable law, the UK Listing Rules, the Disclosure Guidance and Transparency Rules of the Financial Conduct Authority and the Listing Rules of the Australian Securities Exchange) to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in Rio Tinto's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

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Cautionary and supporting statements (cont.)

Oyu Tolgoi - Production Targets

The 500ktpa copper production target (stated as recoverable metal) for the Oyu Tolgoi underground and open pit mines for the years 2028 to 2036 referenced in slides 59 and 60 and the production profiles for the Oyu Tolgoi underground and open pit mines shown in slide 61 were previously reported in a release to the Australian Securities Exchange (ASX) dated 11 July 2023 “Investor site visit to Oyu Tolgoi copper mine, Mongolia”. All material assumptions underpinning that production target and those production profiles continue to apply and have not materially changed.

Copper portfolio - Mineral Resources and Ore Reserves

All Mineral Resources and Ore Reserves referenced on slide 59 are based on the Mineral Resources and Ore Reserves as reported in accordance with the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves, 2012 Edition (JORC Code) and the ASX Listing Rules in Rio Tinto’s 2022 Annual Report released to the ASX on 24 February 2023 (Rio Tinto's 2022 Annual Report) and available at riotinto.com.

The total Oyu Tolgoi Mineral Resources referenced on slide 59 comprise 83 Mt @ 1.44% Cu and 0.53 g/t Au Measured Mineral Resources, 608 Mt @ 1.18% Cu and 0.39 g/t Au Indicated Mineral Resources and 3,688 Mt @ 0.59% Cu and 0.29 g/t Au Inferred Mineral Resources for a total of 4,380 Mt @ 0.69% Cu and 0.31 g/t Au Mineral Resources. The total Oyu Tolgoi Ore Reserves referenced on slide 59 comprise 246 Mt @ 0.53% Cu and 0.39 g/t Au Proved Ore Reserves and 903 Mt @ 0.97% Cu and 0.28 g/t Au Probable Ore Reserves for a total of 1,149 Mt @ 0.87% Cu and 0.30 g/t Au Ore Reserves. The Competent Person responsible for the information in the 2022 Annual Report that relates to Oyu Tolgoi Mineral Resources is Oyunjargal Dendev, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). The Competent Persons responsible for the information in the 2022 Annual Report that relates to Oyu Tolgoi Ore Reserves are Barry Ndlovu and Nathan Robinson, both of whom are Members of the Australasian Institute of Mining and Metallurgy (MAusIMM).

The Escondida Mineral Resources referenced on slide 59 comprise 692 Mt @ 0.48% Cu Measured Mineral Resources, 2,871 Mt @ 0.51% Cu Indicated Mineral Resources and 15,758 Mt @ 0.50% Cu Inferred Mineral Resources for a total of 19,321 Mt @ 0.50% Cu Mineral Resources. The Escondida Ore Reserves referenced on slide 59 comprise 4,640 Mt @ 0.61% Cu Proved Ore Reserves and 2,030 Mt @ 0.55% Cu Probable Ore Reserves for a total of 6,670 Mt @ 0.59% Cu Ore Reserves. The Competent Person responsible for the information in the 2022 Annual Report that relates to Escondida Mineral Resources is Rodrigo Maureira, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). The Competent Person responsible for the information in the 2022 Annual Report that relates to Escondida Ore Reserves is Francisco Barrera Vergara, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM).

The Resolution Mineral Resources referenced on slide 59 comprise 724 Mt of Indicated Mineral Resources @ 1.89% Cu and 1,134 Mt Inferred Mineral Resources @ 1.28% Cu for a total of 1,859 Mt @ 1.52% Cu Mineral Resources. The Competent Persons responsible for the information in the 2022 Annual Report that relates to Resolution Mineral Resources are Hamish Martin, Joanna Marshall and Adam Schwarz, whom are all Members of the Australasian Institute of Mining and Metallurgy (MAusIMM).

The La Granja Mineral Resources referenced on slide 59 comprise 130 Mt of Indicated Mineral Resources @ 0.85 and 4,190 Mt Inferred Mineral Resources @ 0.50% Cu for a total of 4,320 Mt @ 0.51% Cu Mineral Resources. The Competent Person responsible for the information in the 2022 Annual Report that relates to La Granja Mineral Resources is Joanna Marshall, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM).

Rio Tinto confirms that it is not aware of any new information or data that materially affects the information included in the 2022 Annual Report, that all material assumptions and technical parameters underpinning the estimates in the 2022 Annual Report continue to apply and have not materially changed, and that the form and context in which the Competent Persons’ findings are presented have not been materially modified. Mineral Resources are reported in addition to Ore Reserves. Mineral Resources and Ore Reserves are reported on a 100% basis.

Rhodes Ridge - Mineral Resources

The Mineral Resources reported for the Rhodes Ridge Joint Venture between Rio Tinto (50 per cent) and Wright Prospecting Pty Ltd (50 per cent) on slide 67 form part of the Pilbara Mineral Resource estimates reported in accordance with the JORC Code and the ASX Listing Rules in Rio Tinto’s 2022 Annual Report. These Mineral Resources are not materially different to the breakdown of the Rhodes Ridge Mineral Resources reported in Rio Tinto’s 2020 Annual Report released to the ASX on 22 February 2021. The Competent Persons responsible for reporting these Mineral Resource estimates were Mr P Savory, who is a Fellow of The Australasian Institute of Mining and Metallurgy, and Ms N Brajkovich, Mr C Kyngdon, Mr M Judge and Ms A Latscha who are Members of The Australasian Institute of Mining and Metallurgy. Rhodes Ridge contains 6.8 billion tonnes of Mineral Resources at an average grade of 61.6% Fe; comprising 0.8 billion tonnes of Indicated Mineral Resources at an average grade of 62.4% Fe and 6.0 billion tonnes of Inferred Mineral Resources at an average grade of 61.5% Fe. These Mineral Resources include:

- 0.6 billion tonnes of high grade Brockman Indicated Mineral Resources at an average grade of 63.9% Fe and 0.03 billion tonnes of high grade Detrital Indicated Mineral Resources at an average grade of 61.3% Fe.
- 5.3 billion tonnes of high grade Brockman, Marra Mamba and Detrital Inferred Mineral Resources at an average grade of 62.2% Fe.

Rio Tinto confirms that it is not aware of any new information or data that materially affects the information included in the 2022 Annual Report, that all material assumptions and technical parameters underpinning the estimates in the 2022 Annual Report continue to apply and have not materially changed, and that the form and context in which the Competent Persons’ findings are presented have not been materially modified. Mineral Resources are quoted on a 100 per cent basis, as dry in-situ tonnes.

Cautionary and supporting statements (cont.)

Simandou - Mineral Resources and Ore Reserves

Simandou Mineral Resources and Ore Reserves reference on slides 74 and 98 have been reported in accordance with the JORC Code and the ASX Listing Rules in a release dated 6 December 2023 titled “Release of Mineral Resource and Ore Reserve Estimates for Simandou” (Table 1 Release) which is available on Rio Tinto's website at resources & reserves (riotinto.com).

The Simandou Mineral Resources comprise 0.1 Bt @ 67.1% Fe of Measured Mineral Resources, 0.4 Bt @ 66.2% Fe of Indicated Mineral Resources, and 0.8 Bt @ 65.8% Fe of Inferred Mineral Resources. The Simandou Ore Reserves comprise 0.3 Bt @ 66.4% Fe of Proved Ore Reserves and 1.2 Bt @ 65.0% Fe of Probable Ore Reserves.

The Competent Person responsible for the information in the Table 1 Release that relates to Mineral Resources is Kaye Tindale, a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). The Competent Person responsible for the information in that release that relates to Ore Reserves is Michael Apfel, a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Rio Tinto confirms that it is not aware of any new information or data that materially affects the information included in the Table 1 Release, that all material assumptions and technical parameters underpinning the estimates in the Table 1 Release continue to apply and have not materially changed, and that the form and context in which the Competent Persons’ findings are presented have not been materially modified.

Mineral Resources are reported in addition to Ore Reserves. All Mineral Resources and Ore Reserves are reported on a 100% basis.

Simandou - Production Targets

The estimated annualised capacity of approximately 60 million dry tonnes per annum iron ore for the life of mine schedule referenced in slides 74, 76, 78 and 98 is underpinned as to 18% by Proved Ore Reserves and 82% by Probable Ore Reserves as set out in the Table 1 Release. Rio Tinto confirms that all material assumptions underpinning the production target in the Table 1 Release continue to apply and have not materially changed. The financial forecasts shown on slide 73 and 98 are based on this life of mine production target.

Mineral Resources and Ore Reserves – Global Iron Ore portfolio

Rio Tinto’s Iron Ore Mineral Resources and Ore Reserves reported as part of Rio Tinto’s global portfolio on slide 74 include Simandou as shown in the Simandou note on this slide (categorised as “>65% Fe”), together with the Iron Ore Company of Canada (IOC) and Pilbara Operations as reported in Rio Tinto’s 2022 Annual Report.

The 28 Bt of Mineral Resources comprise the Simandou Mineral Resources plus: from IOC (categorised as “>65% Fe” due to the ability to upgrade the feed) 0.2 Bt @ 40.8% Fe of Measured Mineral Resources, 0.7 Bt @ 38.5% Fe of Indicated Mineral Resources, and 0.8 Bt @ 38.3% Fe of Inferred Mineral Resources (for which the Competent Persons were M McDonald (PEGNL), B Power (PEGNL), and R Way (PEGNL)); and from the Pilbara Operations (with all Boolgeeda, Brockman Process Ore, Channel Iron Deposit and Detrital Mineral Resources categorised as “<61% Fe”, and all Brockman and Marra Mamba Mineral Resources categorised as “>61% Fe”) 1.8 Bt @ 59.4% Fe of Measured Mineral Resources, 4.5 Bt @ 60.1% Fe of Indicated Mineral Resources, and 18.6 Bt @ 59.7% Fe of Inferred Mineral Resources (for which the Competent Persons were N Brajkovich (AusIMM), P Savory (AusIMM), M Judge (AusIMM), A Latscha (AusIMM) and C Kyngdon (AusIMM)).

The 5 Bt of Ore Reserves comprise the Simandou Ore Reserves plus: from IOC (categorised as “>65% Fe” due to the ability to upgrade the feed) 0.3 Bt @ 65.0% Fe of Proved Ore Reserves and 0.2 Bt @ 65.0% Fe of Probable Ore Reserves (for which the Competent Persons were R Williams (PEGNL) and P Ziemendorf (AusIMM)); and from the Pilbara (with all Pisolite Ore Reserves categorised as “<61% Fe”, and all Brockman and Marra Mamba Ore Reserves categorised as “>61% Fe”) 1.4 Bt @ 60.7% Fe of Proved Ore Reserves and 1.3 Bt @ 61.2% Fe of Probable Ore Reserves (for which the Competent Persons were P Barnes (AusIMM), R Bleakley (AusIMM), L Vilela Couto (AusIMM) and R Sarin (AusIMM)).

Rio Tinto confirms that it is not aware of any new information or data that materially affects the abovementioned information included in the 2022 Annual Report, that all material assumptions and technical parameters underpinning the abovementioned estimates in the 2022 Annual Report continue to apply and have not materially changed, and that the form and context in which the Competent Persons’ findings are presented have not been materially modified.

Mineral Resources are reported in addition to Ore Reserves. All Mineral Resources and Ore Reserves are reported on a 100% basis.

Agenda

Topic	Duration (mins)	Presenter
Welcome to country	10	Brendan Kerin, Gadigal People of the Eora Nation
Safety share	2	Kellie Parker, Chief Executive, Australia
Our purpose in action	10	Jakob Stausholm, Chief Executive
Panel 1: **Creating options for our future - Exploration and Technology**	20	Isabelle Deschamps, Chief Legal Officer Dave Andrews, Head of Exploration Nigel Steward, Chief Scientist
Our markets and customers	13	Alf Barrios, Chief Commercial Officer Vivek Tulpule, Head of Economics & Markets
Panel 2: **The mindset that's driving performance - Best Operator**	17	James Martin, Chief People Officer Kellie Parker, Chief Executive, Australia Arnaud Soirat, Chief Operating Officer Simon Trott, Chief Executive, Iron Ore
Safety share – culture	5	Molly Singline, General Manager, Iron Ore
BREAK	15	
Our decarbonisation in action	10	Mark Davies, Chief Technical Officer
Aluminium - in focus	10	Jérôme Pécresse, Chief Executive, Aluminium
Copper - in focus	10	Bold Baatar, Chief Executive, Copper
Iron Ore - in focus	8	Simon Trott, Chief Executive, Iron Ore
Simandou	10	Bold Baatar, Chief Executive, Copper Mark Davies, Chief Technical Officer
Capital allocation and financials	10	Peter Cunningham, Chief Financial Officer
Closing remarks	2	Jakob Stausholm, Chief Executive
Q&A session	45	All

Investor Seminar presenters

Bold Baatar
Chief Executive Copper

Alf Barrios
Chief Commercial Officer

Peter Cunningham
Chief Financial Officer

Mark Davies
Chief Technical Officer

Isabelle Deschamps
Chief Legal, Governance and Corporate Affairs Officer

James Martin
Chief People Officer

Kellie Parker
Chief Executive Australia

Jérôme Pécresse
Chief Executive Aluminium

Arnaud Soirat
Chief Operating Officer

Jakob Stausholm
Chief Executive

Simon Trott
Chief Executive Iron Ore

Dave Andrews
Head of Exploration

Nigel Steward
Chief Scientist

Vivek Tulpule
Chief Economist

◯ **Executive Committee**

RioTinto

Welcome to country

Brendan Kerin - Gadigal People of the Eora Nation

Safety share

Kellie Parker

Our purpose in action

Jakob Stausholm

Our purpose makes more sense than ever

Finding better ways to provide the materials the world needs

Care | **Courage** | **Curiosity**

Strategy proving itself in an opportunity-rich world

The opportunity

Traditional demand

Deepening ties with Asia

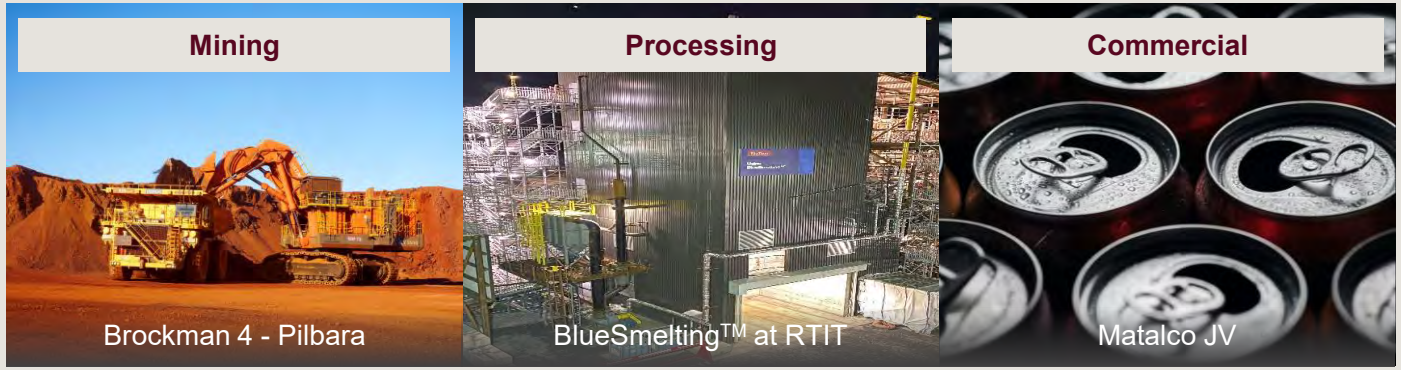
Energy transition

Supply security

Re-industrialisation in the west

Evolving societal expectations

Our advantages



Global presence

Operate across the value chain

Deep technical skills

Strong exploration track record

Closer to customers

Partnerships that create greater value

Investing in the health of our business

Our people | Our ore bodies | Our assets

Care | Courage | Curiosity

Continuous **improvement** mindset

More productive and **resilient** assets

Better operational and financial **performance**

Dampier Port, Australia

RioTinto

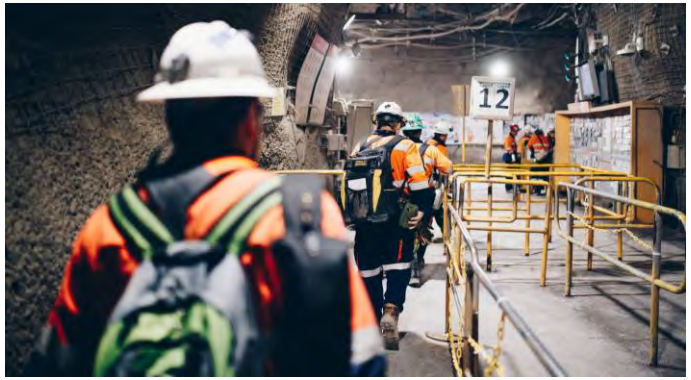
Shaping our portfolio for the future

Simandou – high grade iron ore
Completed bankable feasibility study

Matalco – aluminium recycling
JV completed

AP60 – low carbon technology
Commenced early works

Oyu Tolgoi
Ramping up to 500ktpa (100% basis)[1]



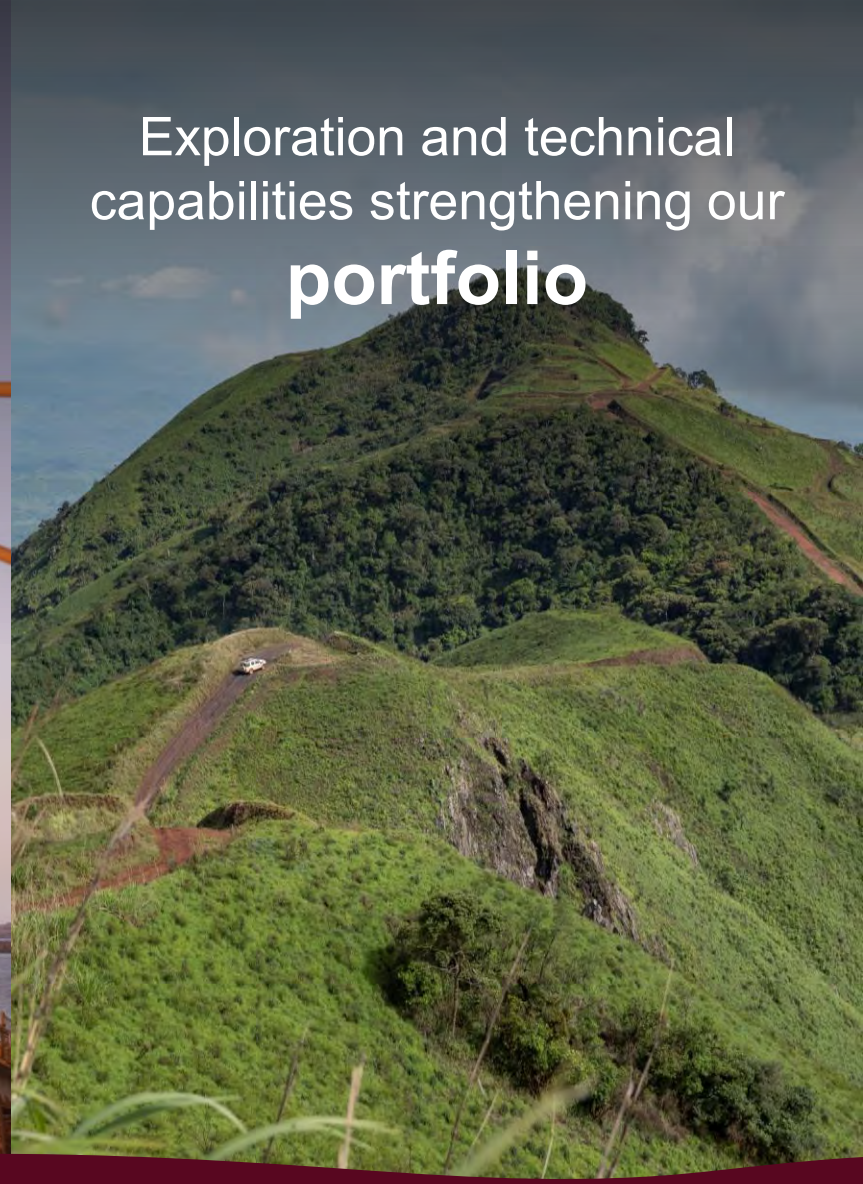
Pilbara renewables
Partnering with Yindjibarndi Energy

Western Range +
Four replacement mines + Rhodes Ridge

[1] See supporting references on slide 3

Investing in our people, asset and orebody **health**

Operational focus and learning mindset driving our **performance**



Exploration and technical capabilities strengthening our **portfolio**

Delivering a stronger Rio Tinto for the long term

Panel 1:
Creating options for our future - Exploration and Technology

Isabelle Deschamps
Dave Andrews
Nigel Steward

Building on our history and enabling growth

World-class Exploration team

~$250m[1]
annual spend

450
employees

18
countries

8
commodities

>100
projects in pipeline

>50%
of spend targeted at copper

>70
years of experience

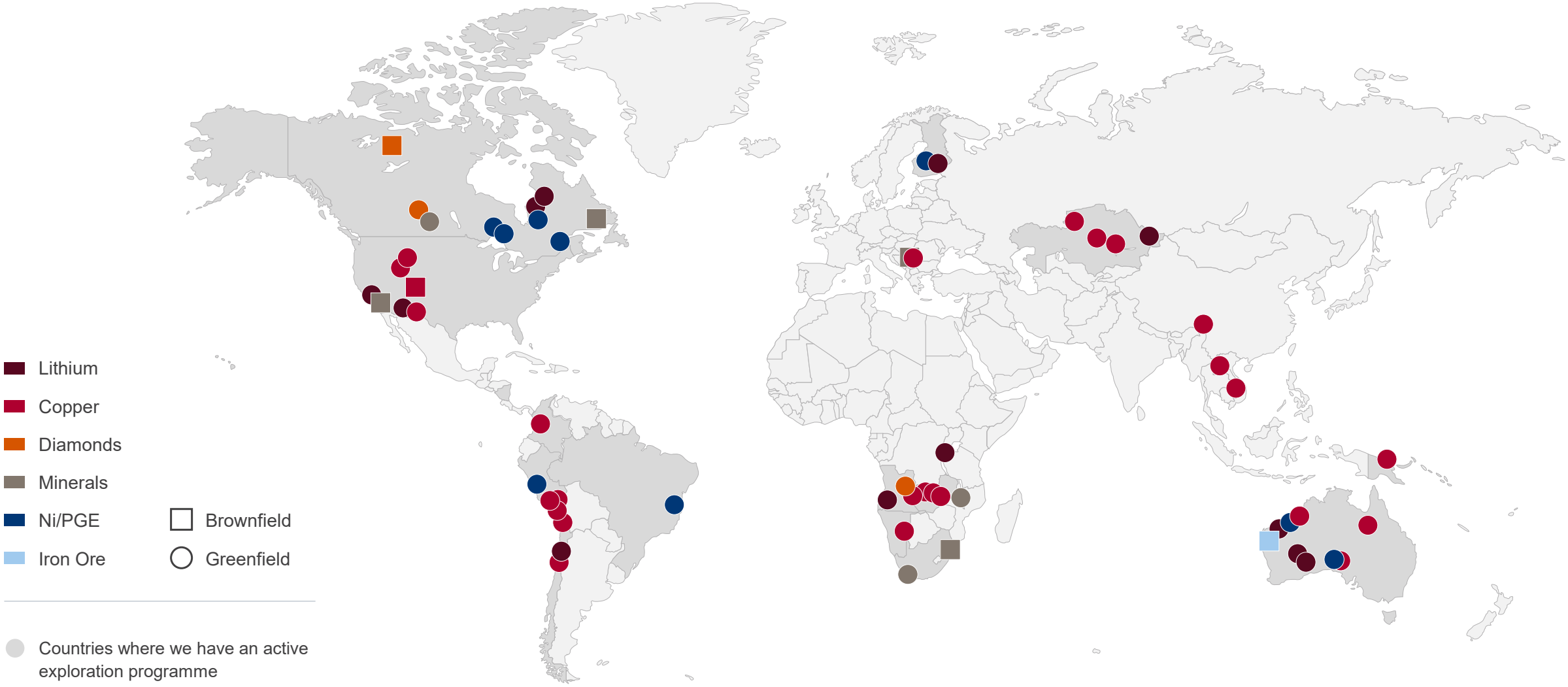
R&D
and data analytics to accelerate discovery

Strong technology and R&D pedigree

- ~$400m annual spend
- 5 key focus areas for R&D
- Extensive network of partners
- Venture Capital investments for agility
- Innovation Advisory Committee
- $150m for Centre for Future Materials[2]

1. Greenfield exploration expenditure
2. Over 10 years

We are exploring for 8 commodities in 18 countries



RioTinto

Our core purpose in exploration is discovery by finding or acquiring high-quality growth options

Dynamic portfolio of projects, broad spread of options

Organically-driven growth options while remaining opportunistic (countries, commodities, partners)

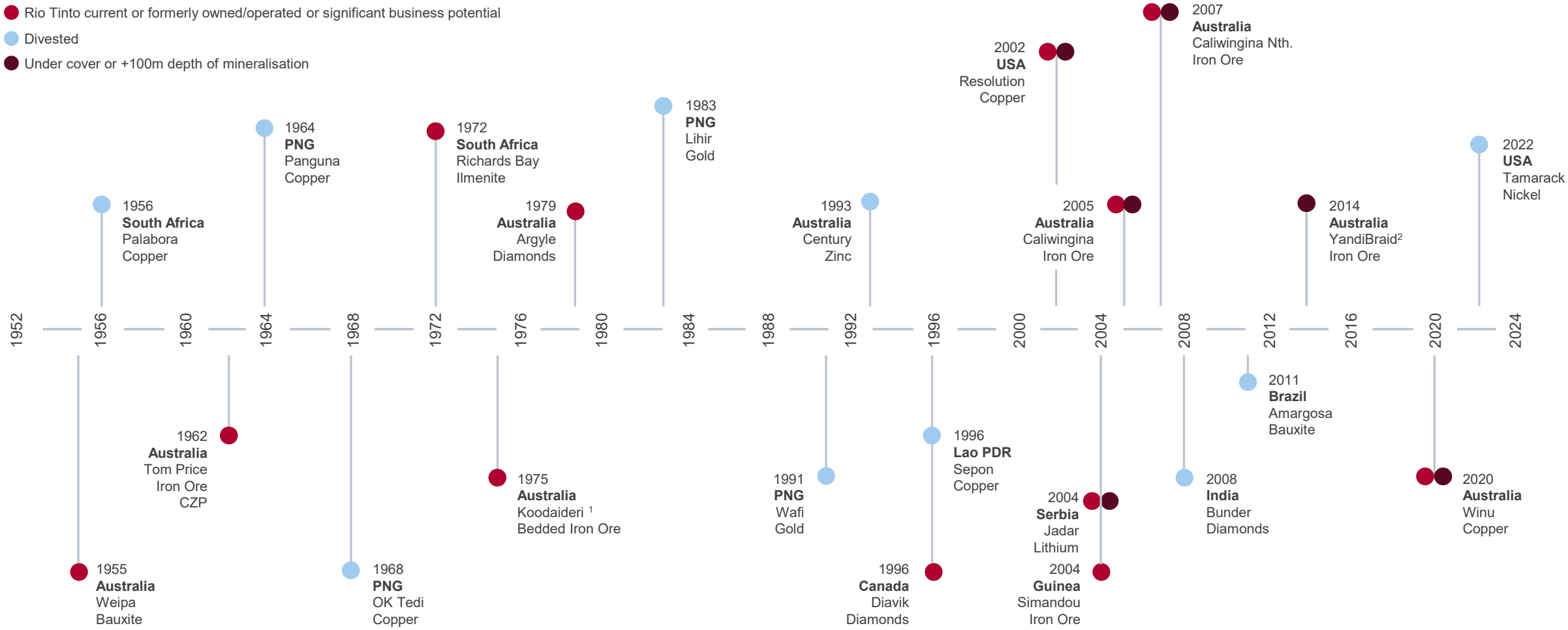
Focus on metals in support of the energy transition (copper, lithium, nickel)

Support for Minimum Viable Projects with growth options, recognising Tier 1 projects grow over time

Innovative, assertive, challenge the norms approach across all exploration terrains

Enhance reputation as a respected, trusted partner by communities, Indigenous groups and local governments

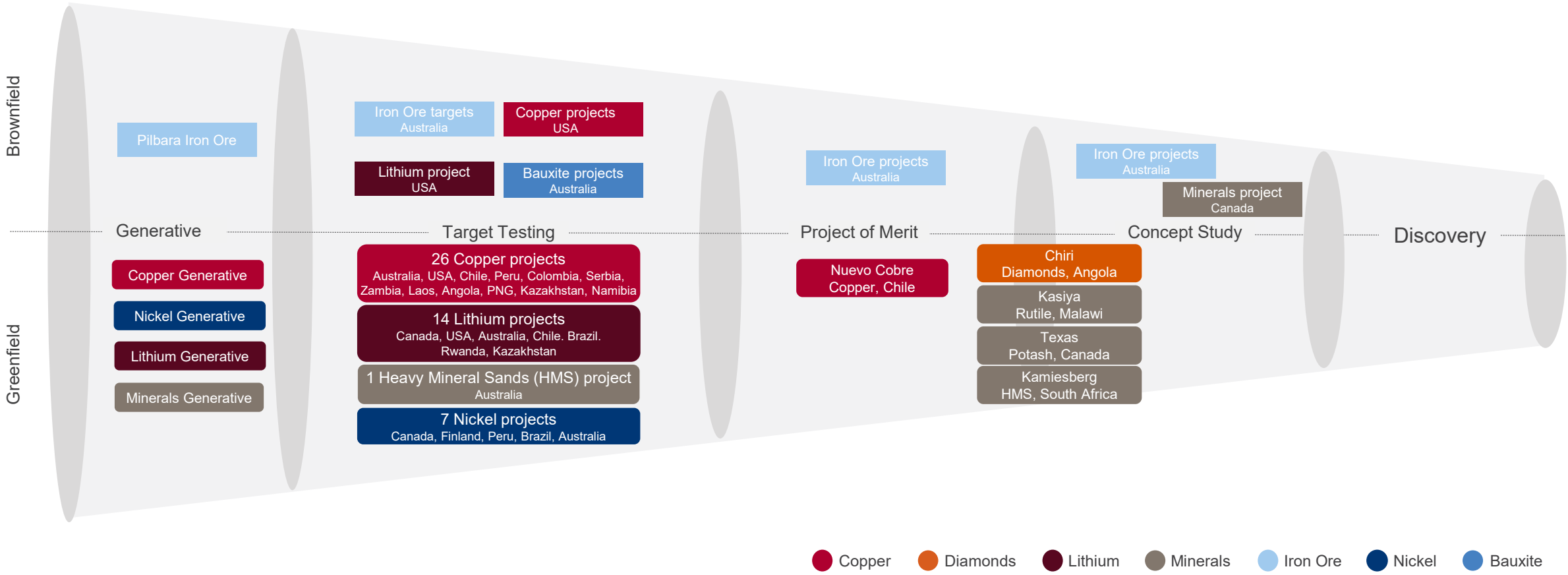
Seven decades of industry-leading discovery and development performance



1. Gudai-Darri
2. Yandicoogina Braid

We have more than 100 projects at varying stages of maturity

Our pipeline focus is on the most promising opportunities



Our new joint venture with Codelco: Nuevo Cobre

World class copper terrain; unique strategic partnership

57.74% Rio Tinto, 42.26% Codelco

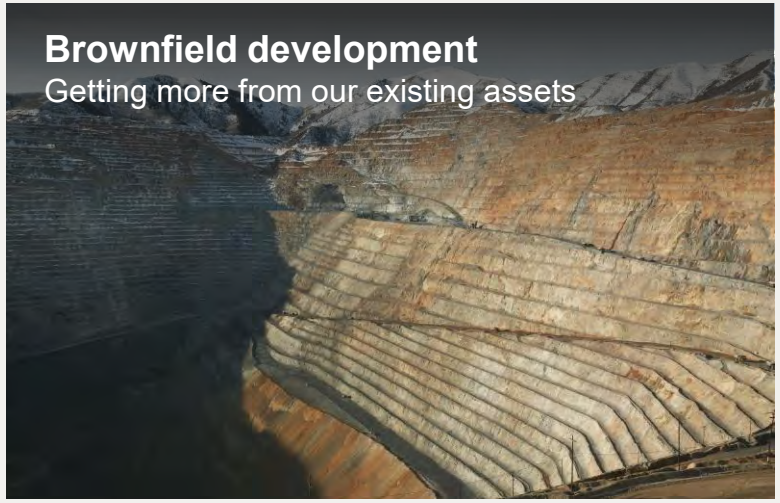
High potential for a significant porphyry discovery in the fourth largest copper district in the world (Atacama region, Chile)

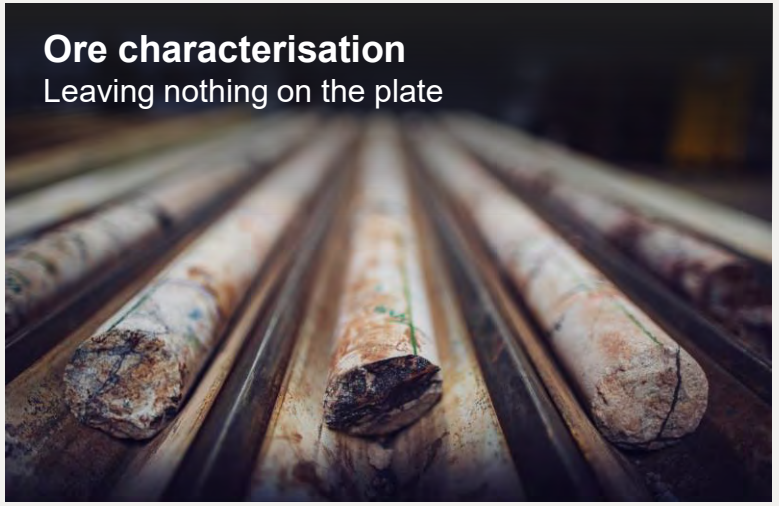
Property previously explored for gold, with existing gold oxide resources present

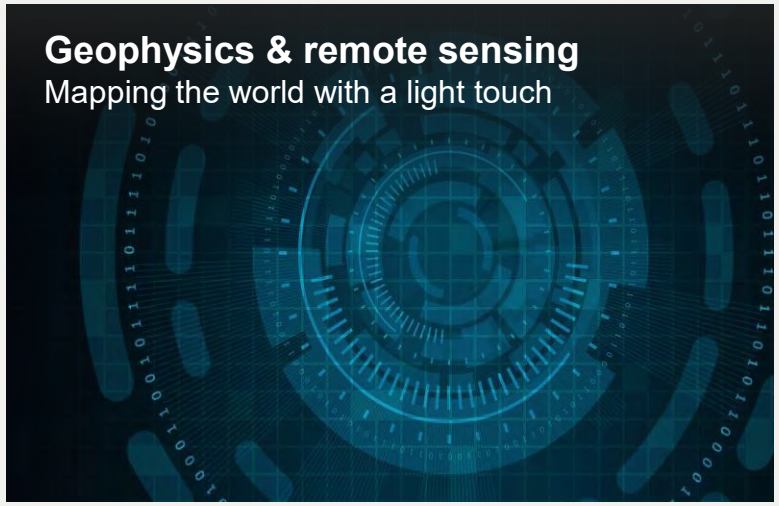
Historical data review has indicated underexplored copper resources as well as upside copper targets - delineation work ongoing

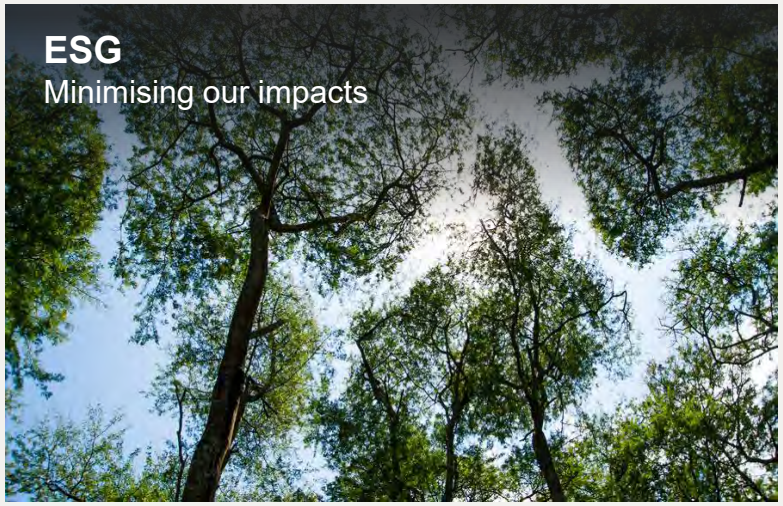
>440 km of drilling completed with ~7% analysed for copper. Environmental baseline monitoring and permitting commenced

Tackling the energy transition together

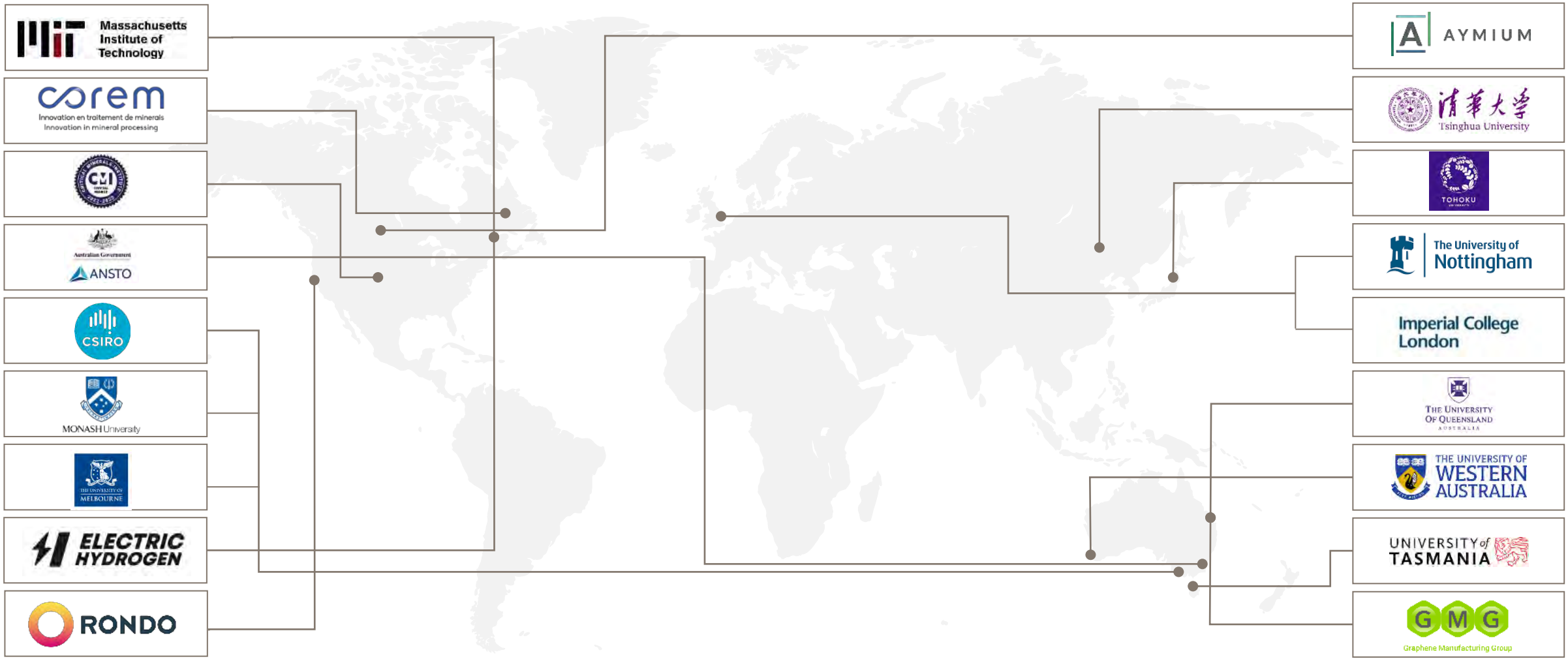








Strong network of technology partnerships



Disciplined technology roadmap

Health & Safety
10 projects

Reducing frontline exposure to hazards

Managing health and wellbeing of our people

ESG
20 projects

Reducing water consumption

Improving water treatment

Dry tailings

Dry processing

Closure

Growth
39 projects

Discovering new orebodies

Reducing capital intensity

Creating new revenue streams

Carbon
24 projects

Green steel and low carbon products

Storage options

Green processing

Green energy

Green fleet

Productivity
27 projects

Maximise value from each ore body

Equipment utilisation

Automation

Energy efficiency

Impeccable ESG

Excel in Development

Best Operator

Social Licence

2023 highlights to evolve into 2024 successes

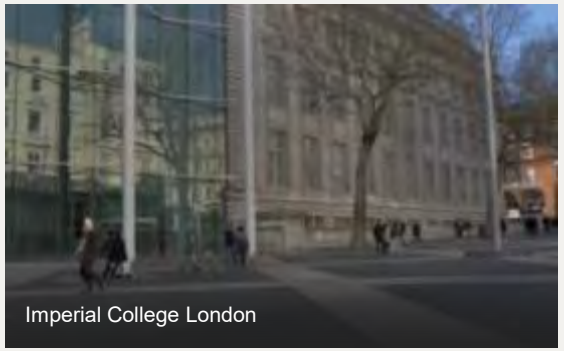
Accelerating innovation by ‘bringing the outside world in’

Innovation Advisory Committee members

Innovation Advisory Committee

Comprised of innovation and R&D experts from around the world

Provides insights on ways we can accelerate our innovation portfolio and offers guidance on emerging and disruptive technologies



Imperial College London

Rio Tinto Centre for Future Materials

Committing $150m to research over 10 years

Tackle challenges faced by our industry in providing materials the world needs for the energy transition

Imperial College London will lead the Centre in partnership with international academic institutions

Investing in technology and start-ups

This year we have invested nearly $40m. Both first time investments and other subsequent investments based on innovation successes

Focus on investing in technology and start-ups to help solve critical business challenges

Advancing key projects

Nuton™ technology pilot plant, Bundoora, Australia

Progressing the portfolio

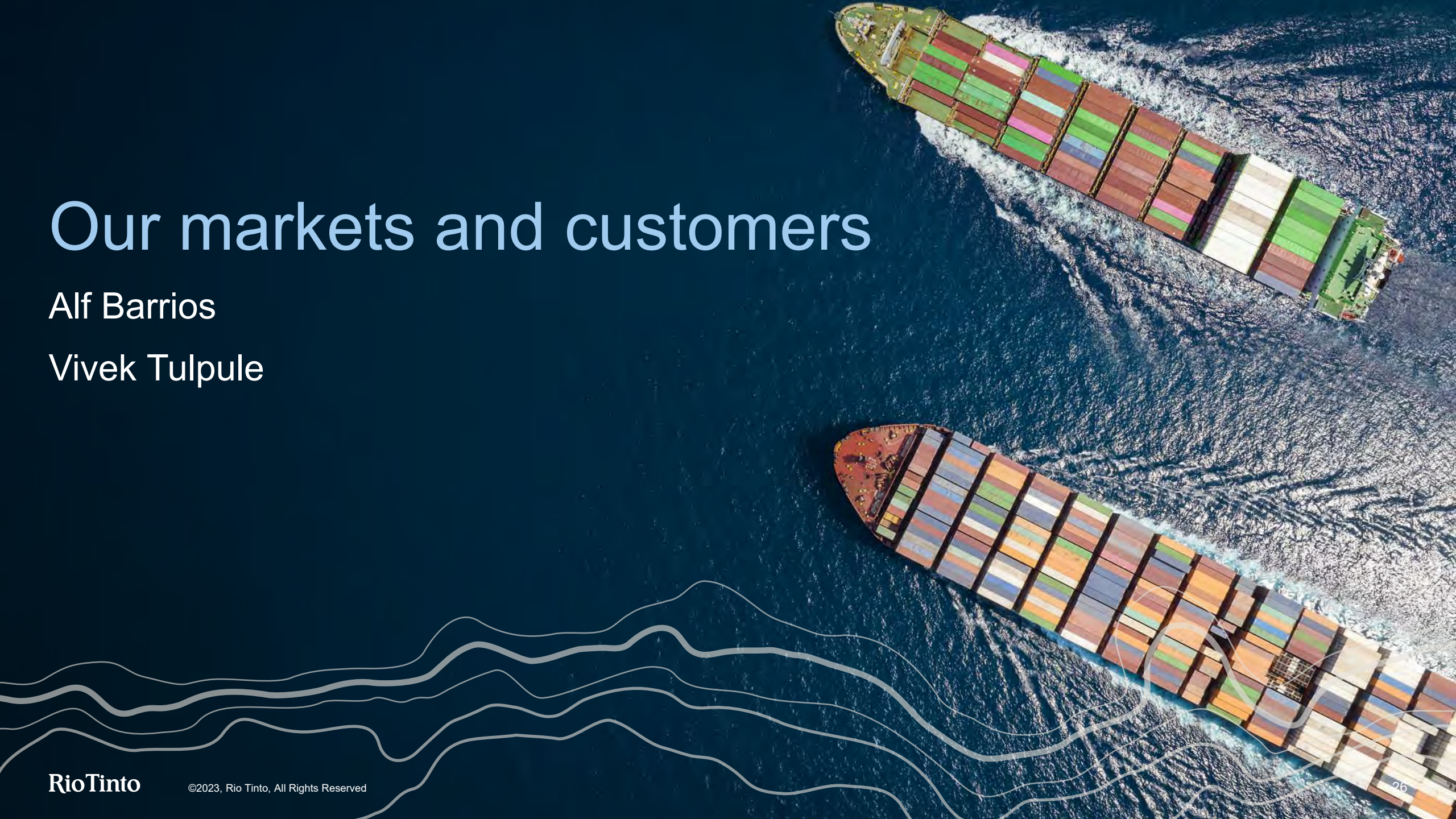
In collaboration with our partners, we are focused on progressing key projects, including:

- ELYSIS™
- Nuton™
- Lumo Analytics
- BlueSmelting™
- Hydrogen calcination
- Steel decarbonisation and BioIron™

Our markets and customers

Alf Barrios

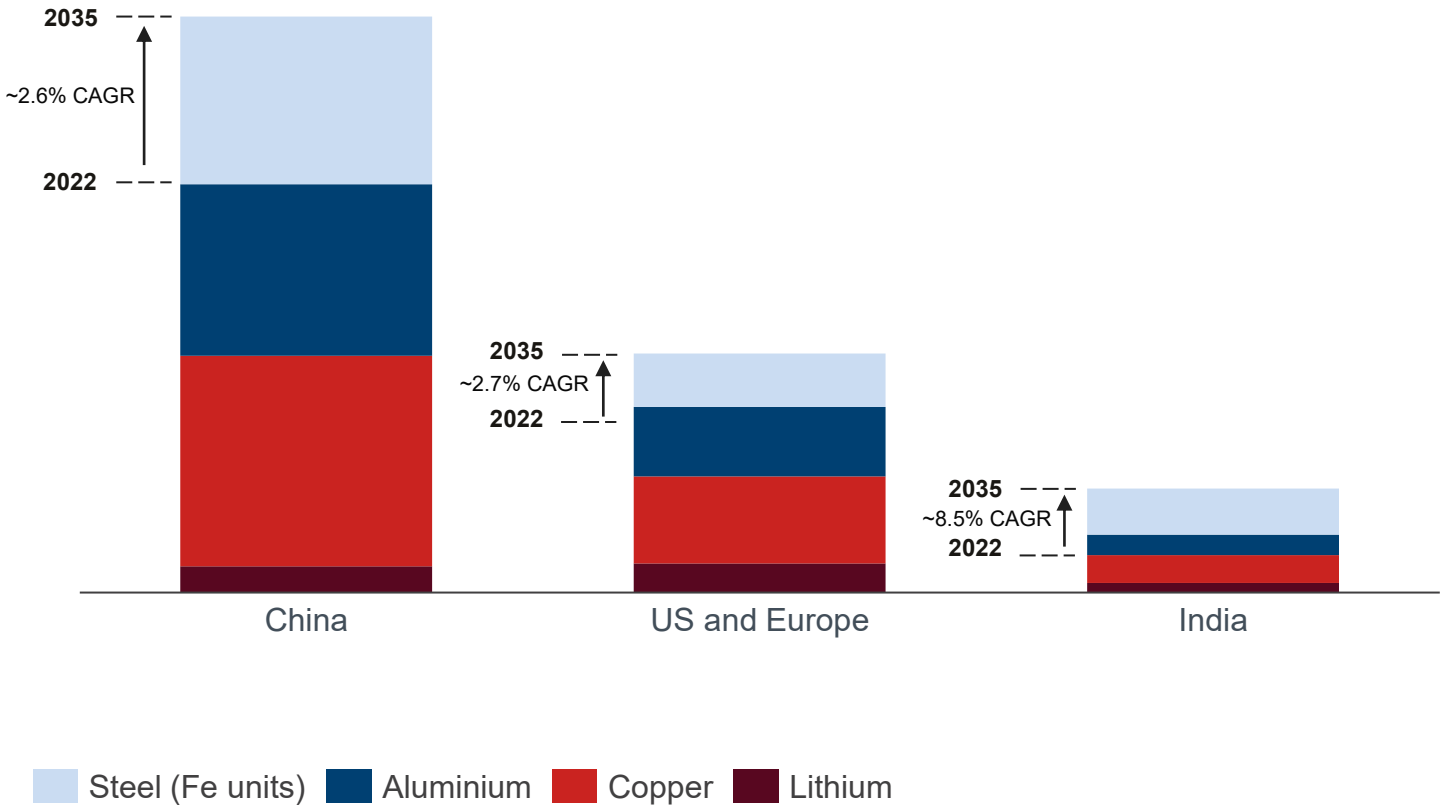
Vivek Tulpule



Global trends driving commodity demand

Global commodity demand to grow by ~4% a year to 2035[1]

<2°C scenario; Copper equivalent basis[2]



- Decarbonisation and the energy transition are expected to fuel sustained commodity demand growth in the next decade
- Regional industrial policies will play a large role amidst rising geopolitical forces, driving demand divergence
- China will continue to underpin global demand for major commodities, accounting for 44% of the global market by 2035
- Surging Indian demand and the continued expansion of Western demand will complement Chinese growth

[1] Copper equivalent demand uses average annual prices from 2018-22 with finished steel demand in iron ore equivalent units. Energy Transition demand calculated on a gross basis. Based on Rio Tinto's Competitive Leadership scenario. The contribution to growth is based on a net basis, for example, electric vehicles generate incremental demand for copper but actually contain less steel than internal combustion engines

[2] Copper equivalent demand uses average annual prices from 2018-22 with finished steel demand in iron ore equivalent units

Decarbonisation drives potential for segmented steel value chains

Western hemisphere
~25% of 2040 iron ore demand

Robust future demand for high grade iron ores

Policy incentives in US, EU[1] supporting decarbonisation and clean energy

Gas → Green H_2 advantages in MENA / Americas

Incentive for DRI-EAF decarbonisation pathway

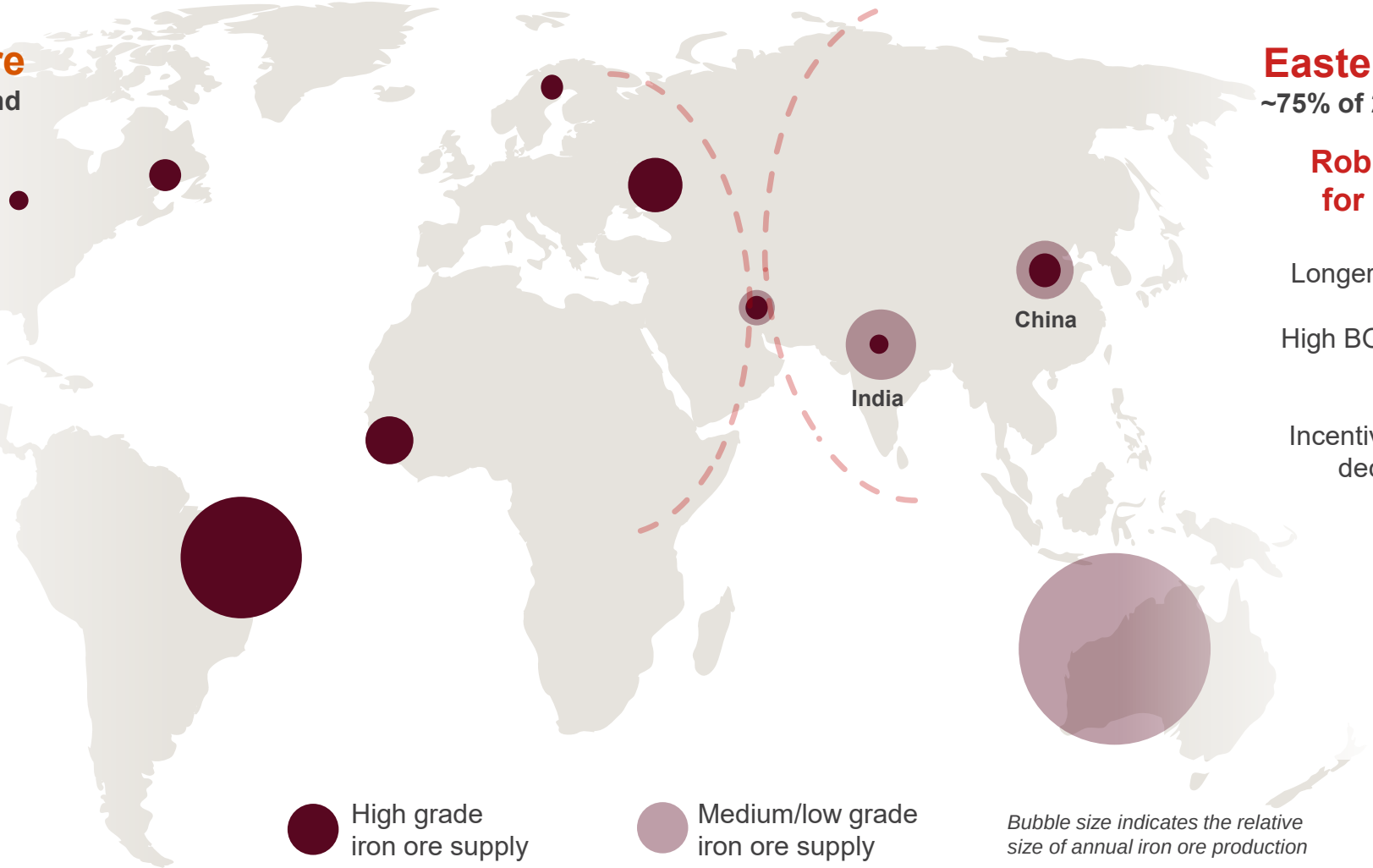
Eastern hemisphere
~75% of 2040 iron ore demand

Robust future demand for all iron ore grades

Longer-dated net zero targets

High BOF steel share in China and east Asia

Incentive for liquid ironmaking decarbonisation pathway[2]



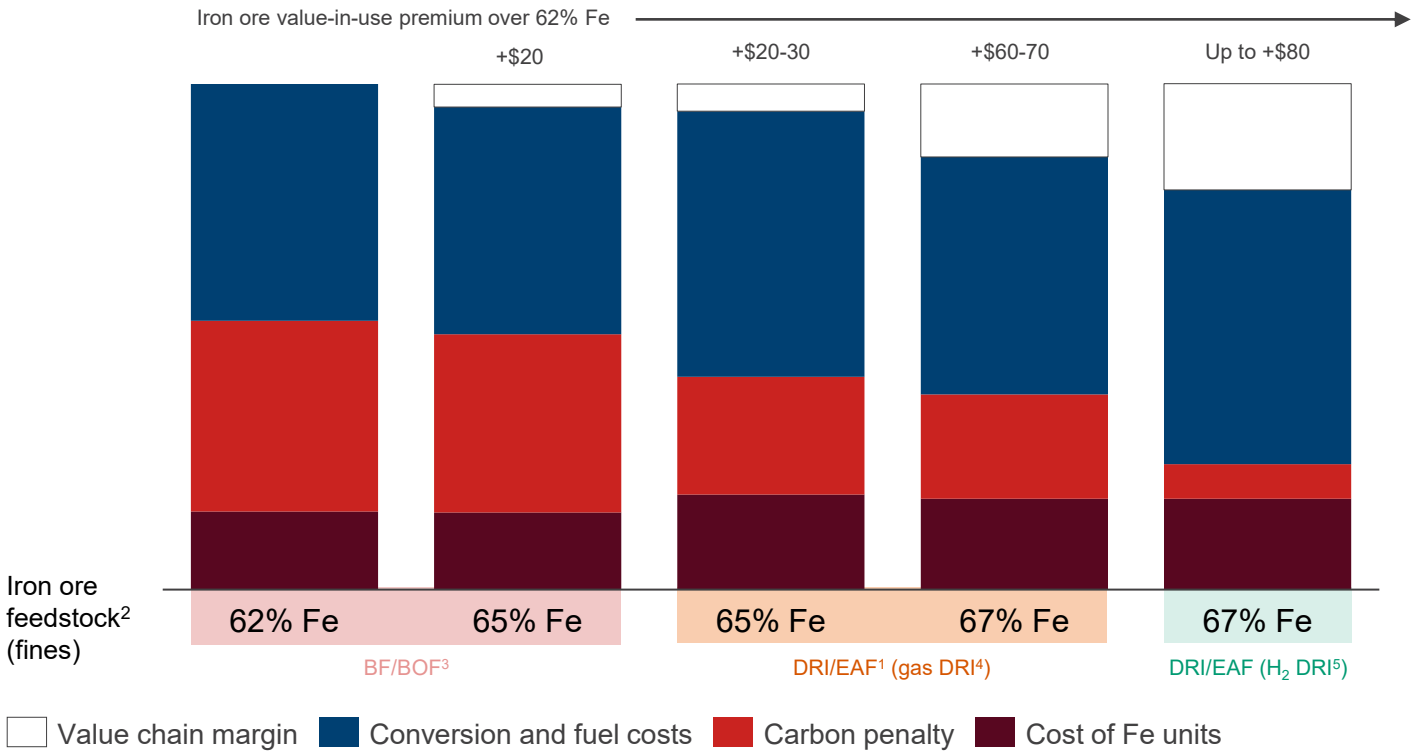
[1] EU policies include binding target of 55% GHG emission reduction by 2030, and 2050 net-zero target, supported by industry level targets, removal of free allowances, implementation of CBAM and green energy subsidies. US Inflation Reduction Act offers generous subsidies and rebates for clean energy including up to $3/kg tax credit for green hydrogen and up to $85/t CO_2 for CCUS

[2] Refers to any technology that abates CO_2 emissions from and upstream of the melting separation of slag from hot metal. This includes BF+CCUS, DRI-BF-BOF and DRI-electric melting furnace-BOF

Low-impurity ores could realise significant premiums at $100/t$CO_2$

Indicative operating cost structure per tonne of crude steel

at $100/t CO_2 penalty and consensus long-run iron ore price forecasts ($75/t on a 62% Fe equivalent basis, CFR China)



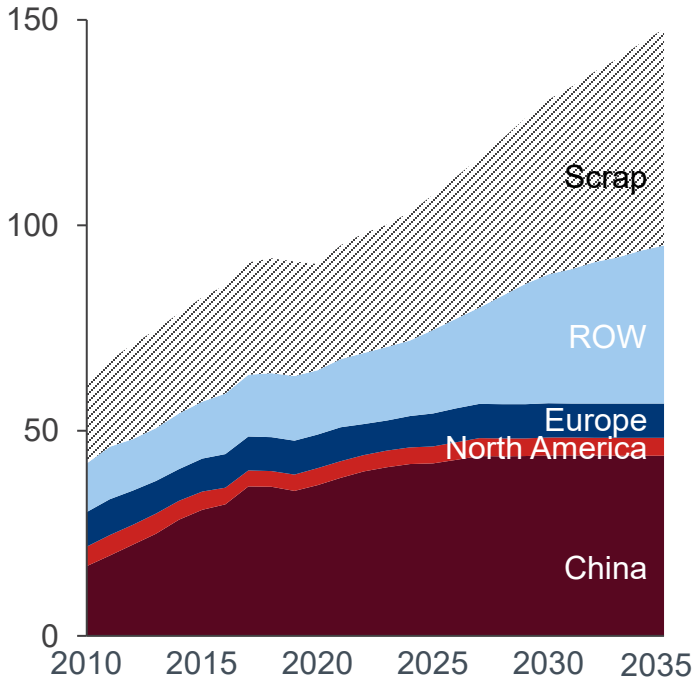
- Reduction in CO_2 penalties achieved when moving to DRI/EAF routes creates higher steel margins with high-grade iron ores
- Natural gas DRI can partially abate ironmaking CO_2 emissions
- Value chain margins can reach ~$120/t steel under H_2 reduction, equating to around $80/t for iron ore

1. 90% iron and 10% home scrap (valued at cost) used in steelmaking. Scrap costs are included in iron and steel conversion
2. Cost for coal products are assumed to be between $150-$250/t
3. Assumes Scope 2 emissions factor of 0.5t CO_2/MWh, electricity price of $60/MWh
4. $8/GJ as generic industry cost of natural gas is consistent with regional projections from International Energy Agency. Iron ore value-in-use premiums can go up to $30/t (65% Fe) or $70/t (67% Fe) respectively if natural gas is sourced from a low-cost gas hub
5. Based on green H_2 @ $2/kg, and assumes low-cost power and low Scope 2 emissions factor for steel conversion

Recycling creates broad benefits across aluminium supply chain

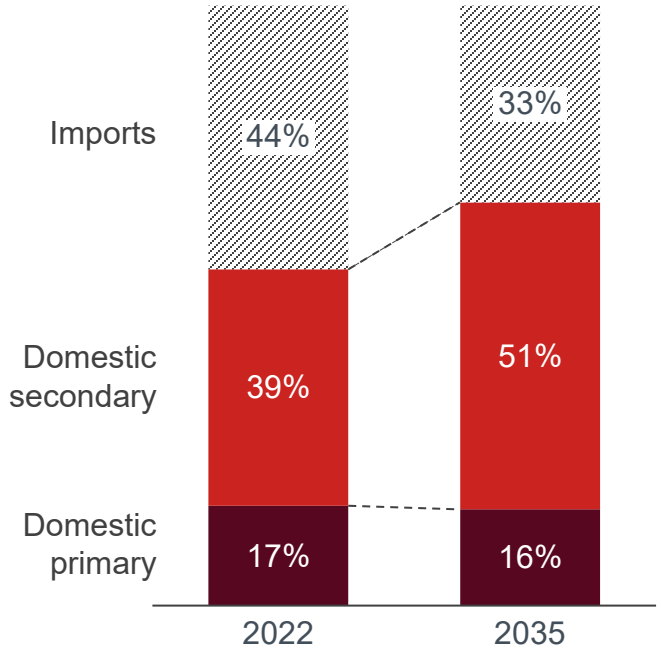
Recycling growth to outpace primary…

<2°C scenario; global aluminium production (Mt)



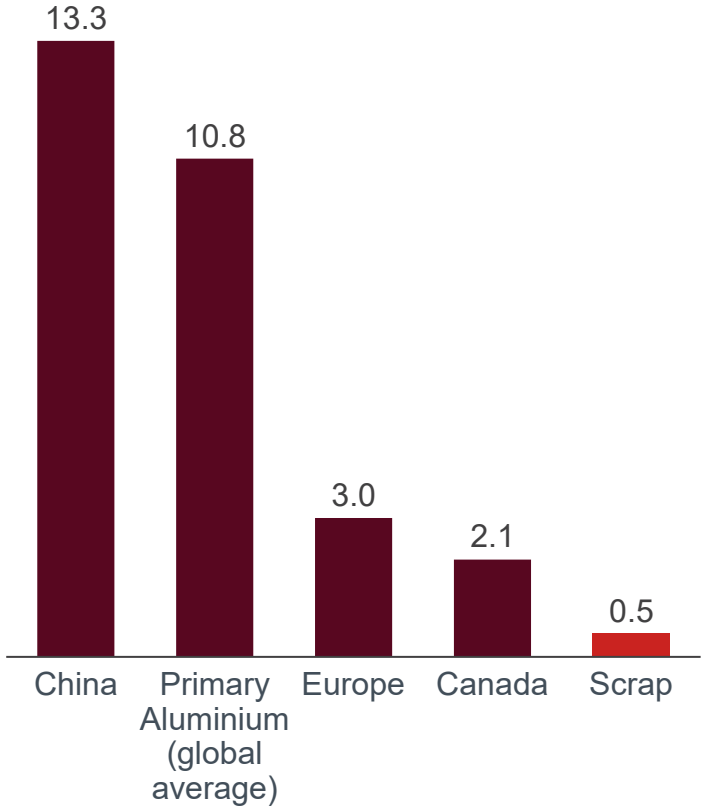
…to enhance supply chain resilience

Europe + US + Japan semis production



… and to reduce emissions

CO_2 intensity of primary aluminium and scrap (tCO_2/t Al)



Source: IAI; CRU

Finding better ways to serve our customers

What customers want

Decarbonisation

- Value chain decarbonisation
- Low carbon products
- New materials for the energy transition

Security of supply

- Access to scarce materials
- Traceability

Rio Tinto partner of choice

Fe Iron ore

- Diversified orebody portfolio (grade, geography)
- Steel decarbonisation solutions

Al Aluminium

- Low/ultra-low carbon and recycled aluminium
- Powered by renewable energy
- Geographically diverse production

Cu Copper

- Oyu Tolgoi concentrates for growing smelting capacity in China
- “Made in America” copper

Li Lithium

- Developing supply options

Matalco – a step change in our customer offering

2016

2018

2021

2021

2023

End customers are increasing the use of recycled aluminium with North American demand forecast to increase from 4.7 to 7.8 Mt from 2022 to 2032[1]

Matalco JV creates a leadership position, increasing our North American aluminium portfolio by 45% and almost doubling our portfolio of value-added products

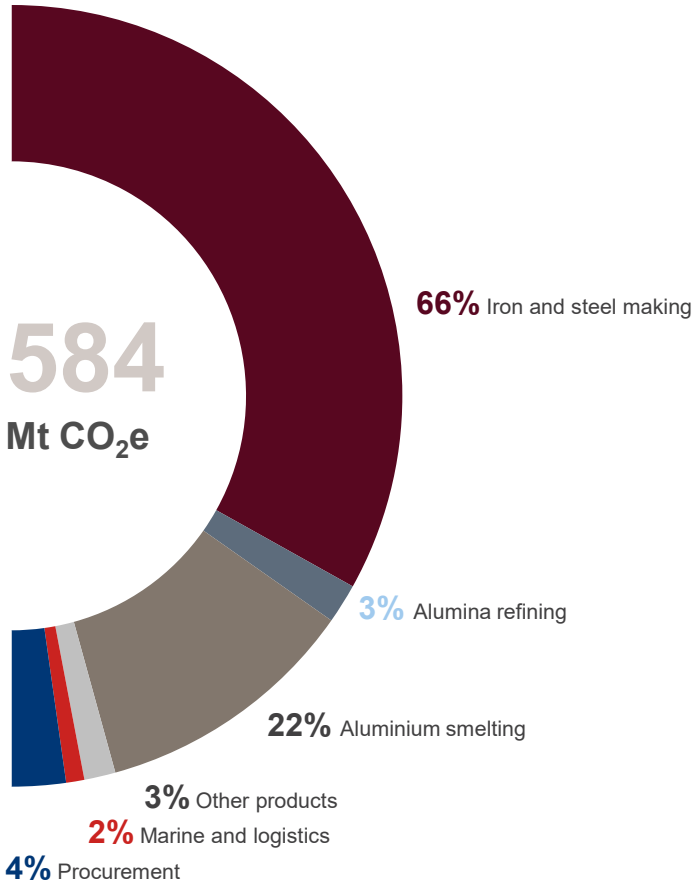
Recycling complements our offering – low carbon primary aluminium, ELYSIS™ and now recycling – with secure access to high-quality scrap

And sets us up for growth in the expanding North American market

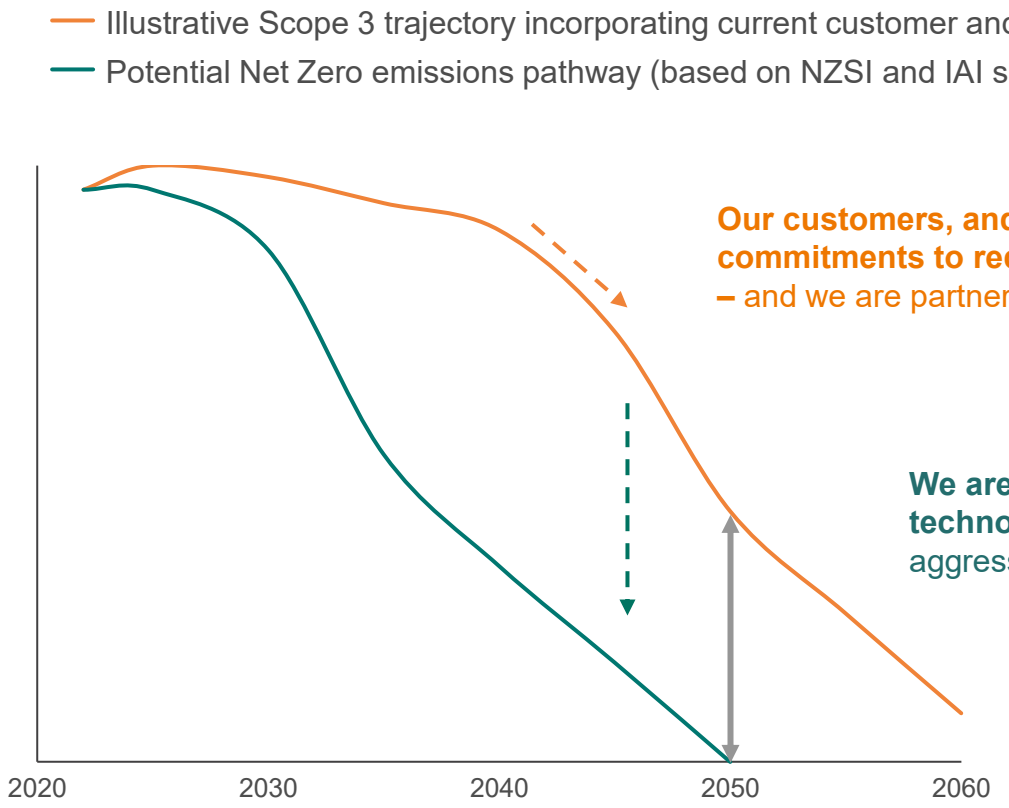
1. CRU Aluminium Long Term Market Outlook, December 2022.

Supporting customers and suppliers to decarbonise the value chain

Our Scope 3 emissions



We are helping our customers beat the current trajectory



Our customers, and their governments, have real commitments to reduce their emissions (our Scope 3) – and we are partnering to help them achieve these

We are also driving breakthroughs in the technologies that will be required to achieve aggressive Net Zero 2050 trajectories

1. Based on current product and customer mix
2. NZSI = Net Zero Steel Initiative. IAI = International Aluminium Institute

Partnering with customers to decarbonise the steel value chain

1 Existing Pathways
Ongoing

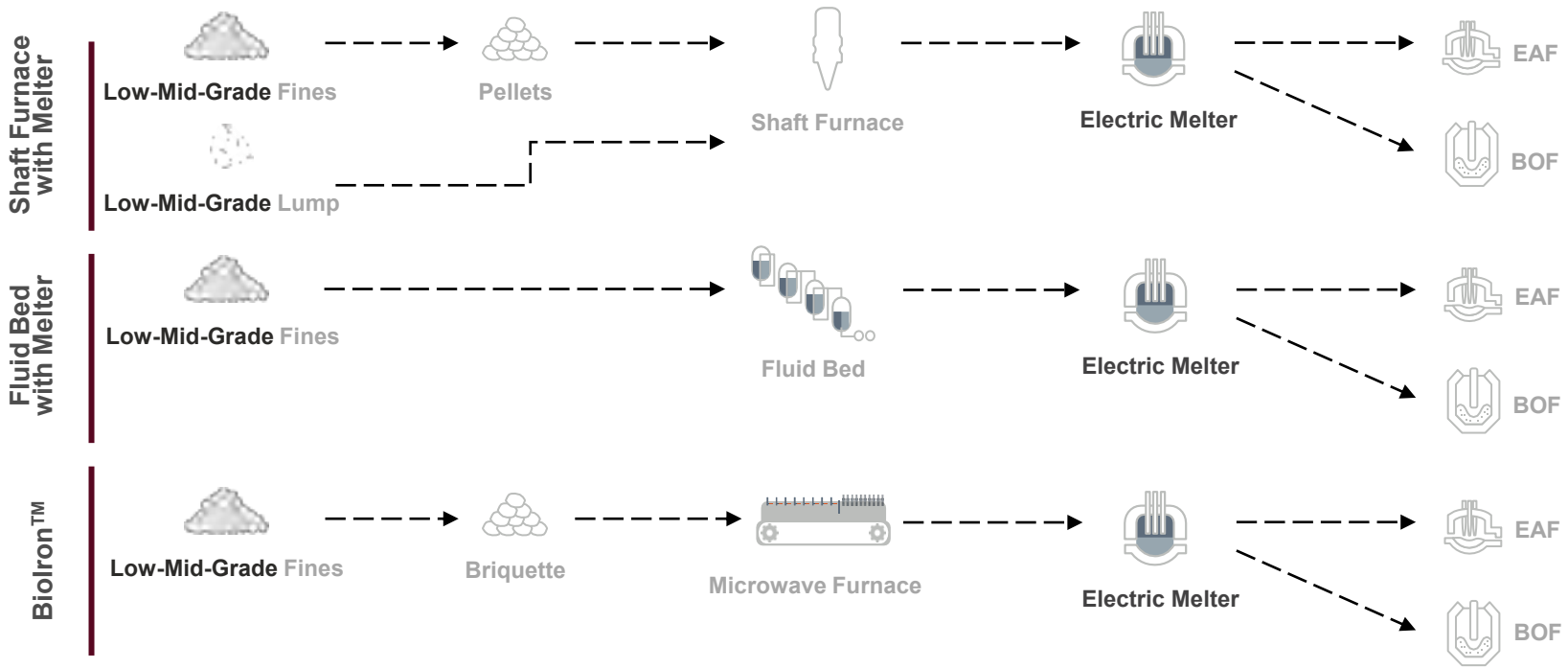
Working with our customers to lower the CO_2 intensity of the Blast Furnace

2 Emerging Pathways
~1–10 years to commercial scale

Using our high-grade iron ores to accelerate the early proliferation of low CO_2 technologies

3 Future Pathways
>10 years to commercial scale

Unlock new low-CO_2 technologies for low-mid grade Pilbara ores



RioTinto

Specific, action-oriented near-term Scope 3 targets

Steel

- Support customers to reduce emissions from BF by 20-30% by 2035
- Target a 50% reduction in Scope 3 (7 Mt) from IOC by 2035[1]
- Commission Biolron™ Continuous Pilot Plant by 2026[1]
- Deliver a DRI+melter pilot plant by 2026 in partnership with a steelmaker[1]
- Finalise study on a beneficiation pilot plant in the Pilbara by 2026

Marine

- Achieve 50% emissions intensity reduction by 2030
- FMC[2] pledge of 10% of time charters net zero fuel capability by 2030
- Improve reporting – use actual voyage data for 95%+ of shipments in 2024

Procurement

- Engage with top 50 emitting suppliers on emissions reduction
- Decarbonisation as evaluation criteria for all new sourcing in high emitting categories in 2024

Alumina

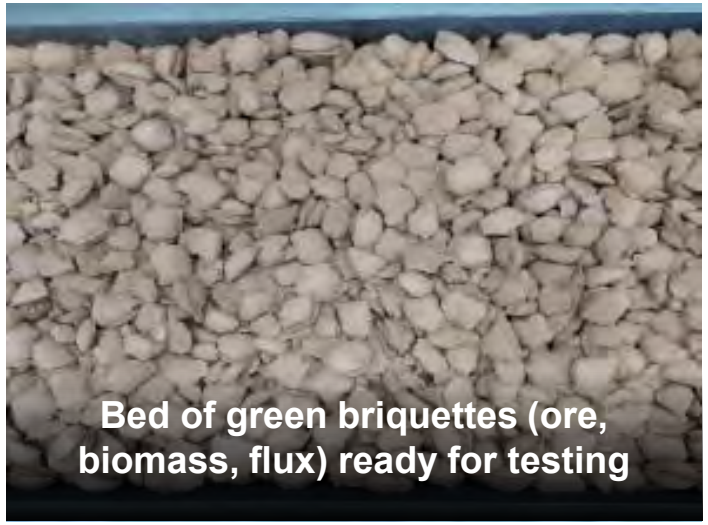
- Advance customer partnerships driving decarbonisation in 2024, advance and share improvements in the refining process (R&D)

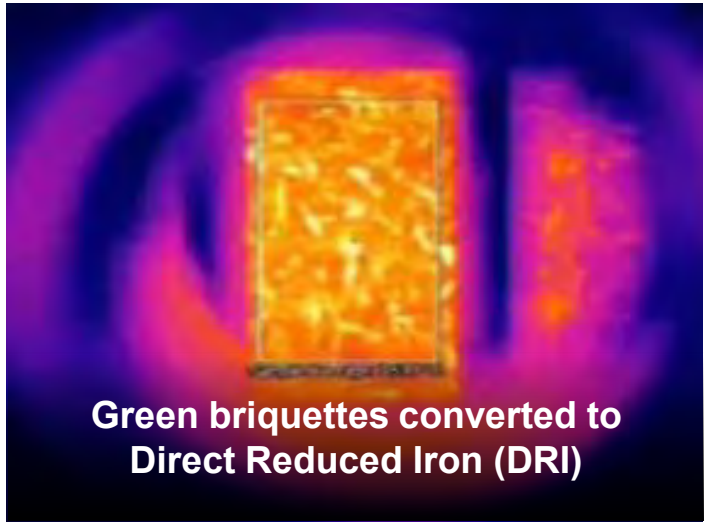
RioTinto

1. Subject to funding approval and technical feasibility
2. First Movers Coalition

BioIron™ – pioneering breakthrough technologies

BioIron™ uses raw biomass instead of metallurgical coal and microwave energy to convert Pilbara iron ore to metallic iron and has the potential to support low CO_2 steel making





01. Highly productive with ores from the Pilbara, the world's largest iron ore region

02. More than 95% reduction in CO_2 emissions compared to pig iron produced in the Blast Furnace

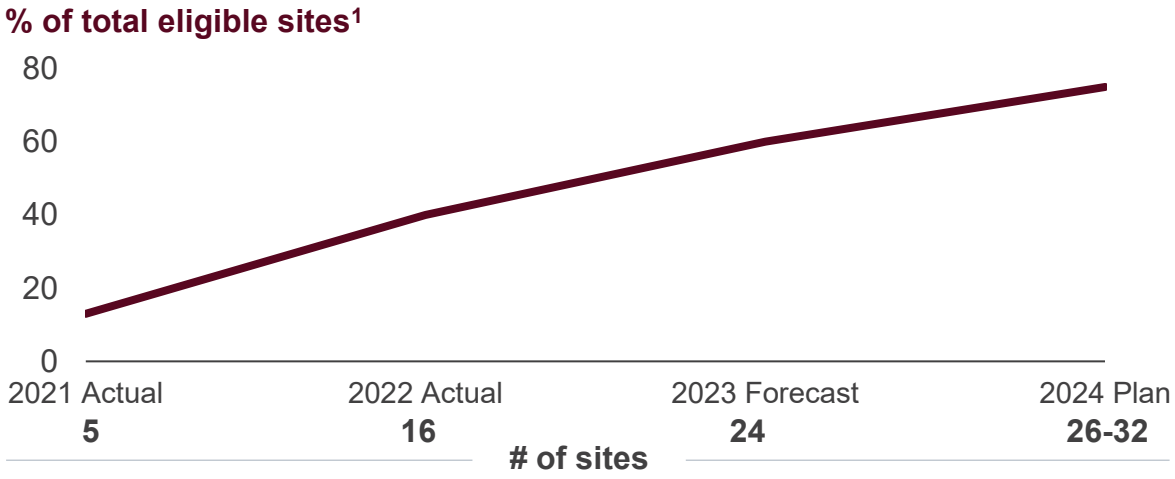
03. Utilises biomass produced from agricultural by-products

04. Electricity consumption is ~65% lower than other green Hydrogen technologies

Panel 2:
The mindset that's driving performance – Best Operator

James Martin
Kellie Parker
Arnaud Soirat
Simon Trott

Safe Production System progress and 2024 priorities



2024 priorities:

Significant maturity uplift at existing deployment sites, and specifically problem solving for accelerated impact

Partnership approach to rapidly improve asset health

Continued rollout of SPS at a further **2-8 sites**

Delivery of a further 5mt production uplift at Pilbara Iron Ore in 2024

RioTinto

1. 42 eligible sites across Rio Tinto

SPS is a global system improving safety, people and profit outcomes

Year-on-year change

Hope Downs
(Iron Ore)

42% ↓

Processing operating time variability

Grande Baie
(Aluminium)

19% ↑

Casting operating time (excluding shutdowns)

Kennecott
(Copper)

8% ↑

People Survey employee satisfaction

IOC
(Minerals)

20% ↓

All injury frequency rate (AIFR)

RioTinto

An update on Everyday Respect
and our progress on the 26 recommendations

Respect at every level

Exceeded our stretch target with 81%[1] of employees completing training on building **psychological safety and becoming an upstander**

Integrated Everyday Respect in leader and culture change programmes

Identified structural barriers in our recruitment process through a combination of research, and surveying more than 6,300 employees

Respect in every place

Addressed immediate safety and hygiene risks at our sites

Progressed works to further ensure **our facilities are safe and inclusive**

Expanded **'Stop for Respect'** conversations

Created safe and inclusive facilities guidance, as well as implementing new village councils, with 20 now in place

Respect for every voice

Launched Care Hub in 3 countries – Australia, New Zealand and Mongolia covering ~30,000 employees, to help people impacted by harmful behaviours

Established 3 global employee resource groups including gender equality, neurodiversity and LGBTQ+, with over 600 people joining so far

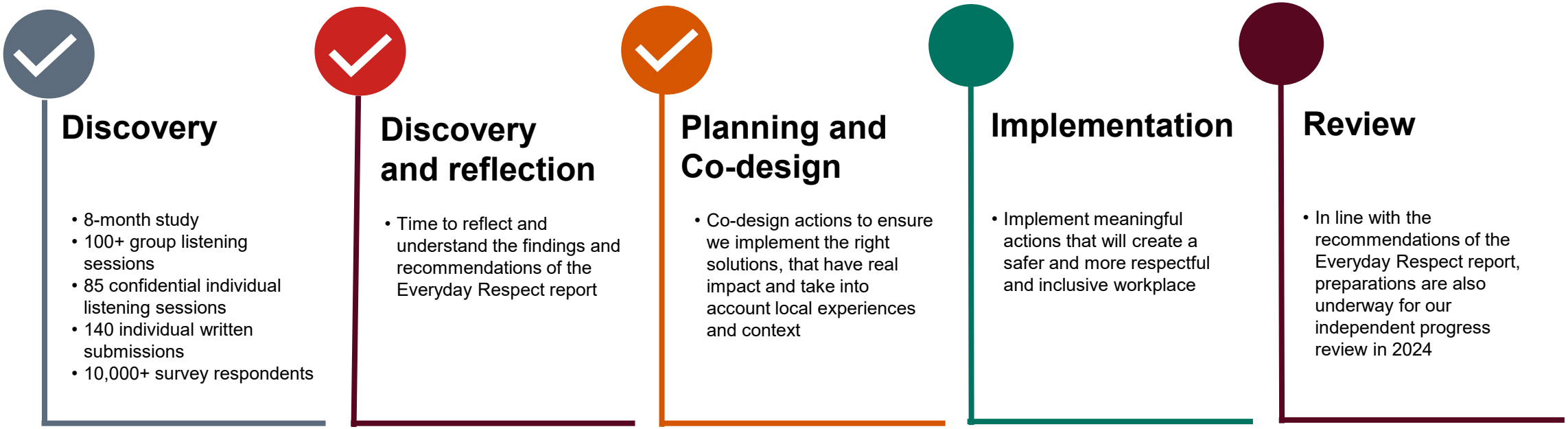
Commenced **contractor listening sessions**

Continue partnership with stakeholders to keep the momentum beyond Rio Tinto

- Partnering with BHP and Fortescue to launch an industry-first pilot programme aimed at educating new entrants to the sector
- Sharing learnings with other stakeholders including our engagement results, cases, training and third-party culture assessments

1. As at November 2023

Everyday Respect – looking ahead



2024 Review

- Committed to the progress review, with release of the outcomes likely in Q4
- We are again using independent expert Elizabeth Broderick
- We continue to commit to transparency and will share the progress report

Safety share - culture

Molly Singline

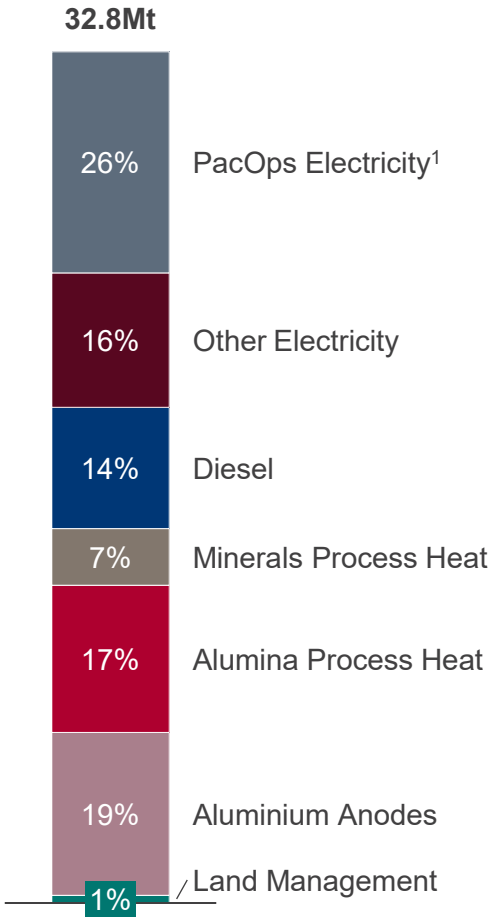
Break

Our decarbonisation in action

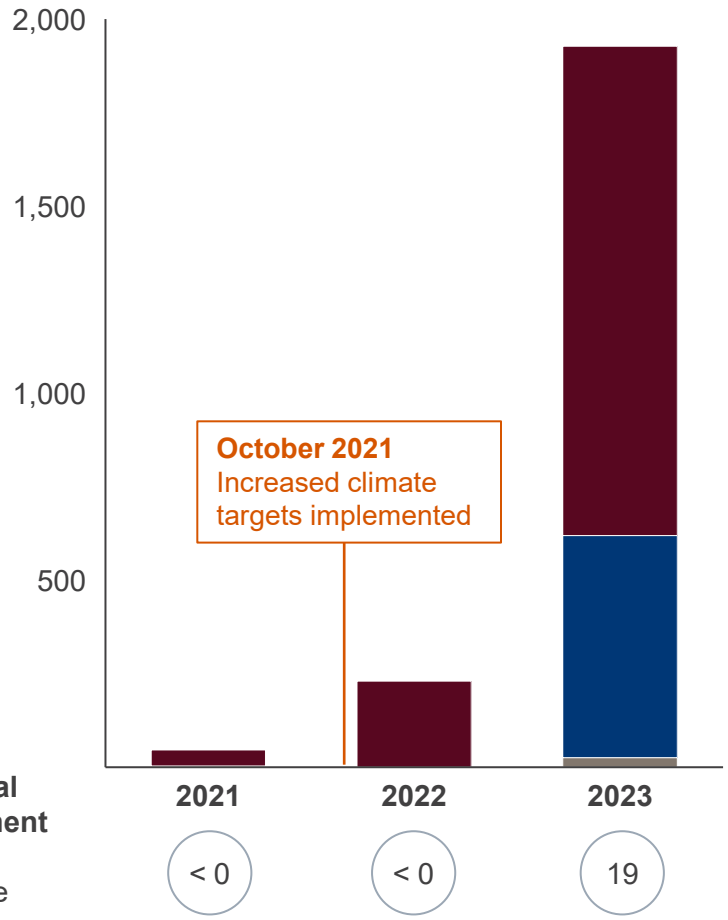
Mark Davies

Our project commitments are taking hold

2022 emissions
% by source



Commitments to abatement projects[2]
tCO_2e equity basis



2023 outcomes

We have momentum in the portfolio
- Converting our targets into actions, with an expected increase in activity in 2024

We have evolved our programme-based approach
- Appointed Chief Decarbonisation Officer
- Strengthened investment approach

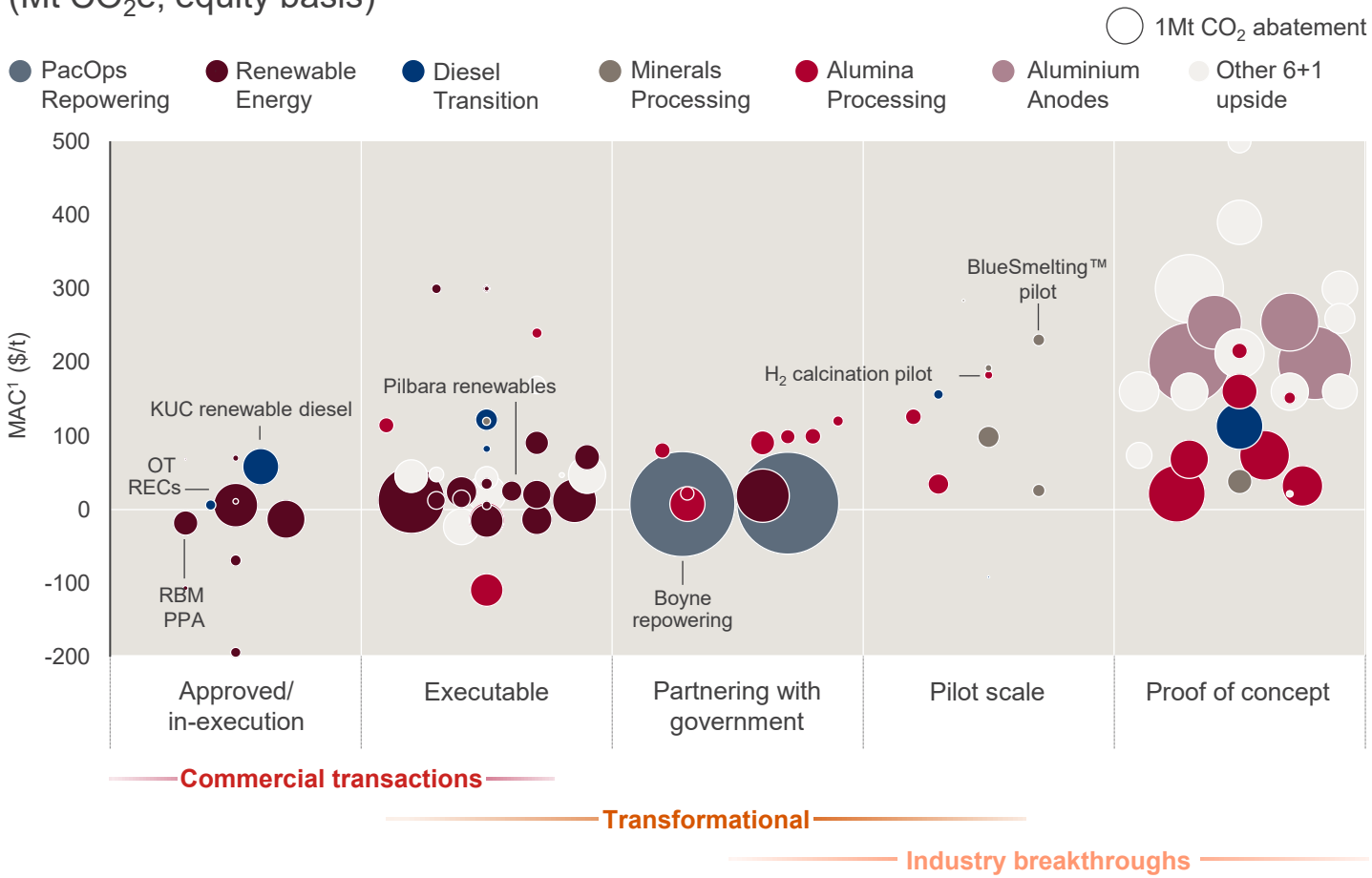
2023 commitments
- Renewable energy in Australia and Africa
- Biofuels including 100% use at Boron and Kennecott
- Piloting low-carbon heat and use of hydrogen in processing emissions

RioTinto

1. Total PacOps emissions represent 50% of group emissions, largely allocated to PacOps electricity (26%), alumina process heat (15%) and anodes (6%)
2. Represents the abatement from in-year project commitments. There may be a lag to realised abatement given execution schedules or the nature of contracts entered into
3. Calculated on weighted average basis

Responsible investment today and a technology focus for the future

Decarbonisation project pipeline
(Mt CO_2e, equity basis)



Robust evaluation approach

- Our path to 2030 is built on defined projects with value assessed in different future scenarios
- Projects progress through pipeline using abatement cost and schedule considerations

PacOps repowering

- Working with the evolving Australian energy market for an industry-competitive, low-carbon energy solution

R&D focus

- Half our emissions will require technology breakthroughs to develop viable solutions
- We continue to invest in our industry leadership position to address hard to abate processing emissions

1. MAC = Marginal Abatement Cost

2023 pipeline progress

Commercial transactions

Renewable energy

- Committed renewable energy and certificates in Australia, South Africa and Mongolia
- Yindjibarndi Energy Corporation partnership

Drop-in biofuels

- Boron and Kennecott replace its entire fossil diesel consumption with renewable diesel

Transformational

Repowering Pacific Operations

- Low-carbon energy solutions progressing with key stakeholders

Reducing baseload energy requirements

- Piloting double digestion at QAL refinery

Electric fleet development and trials

- Pilbara battery-electric haul truck pilots

Industry breakthroughs

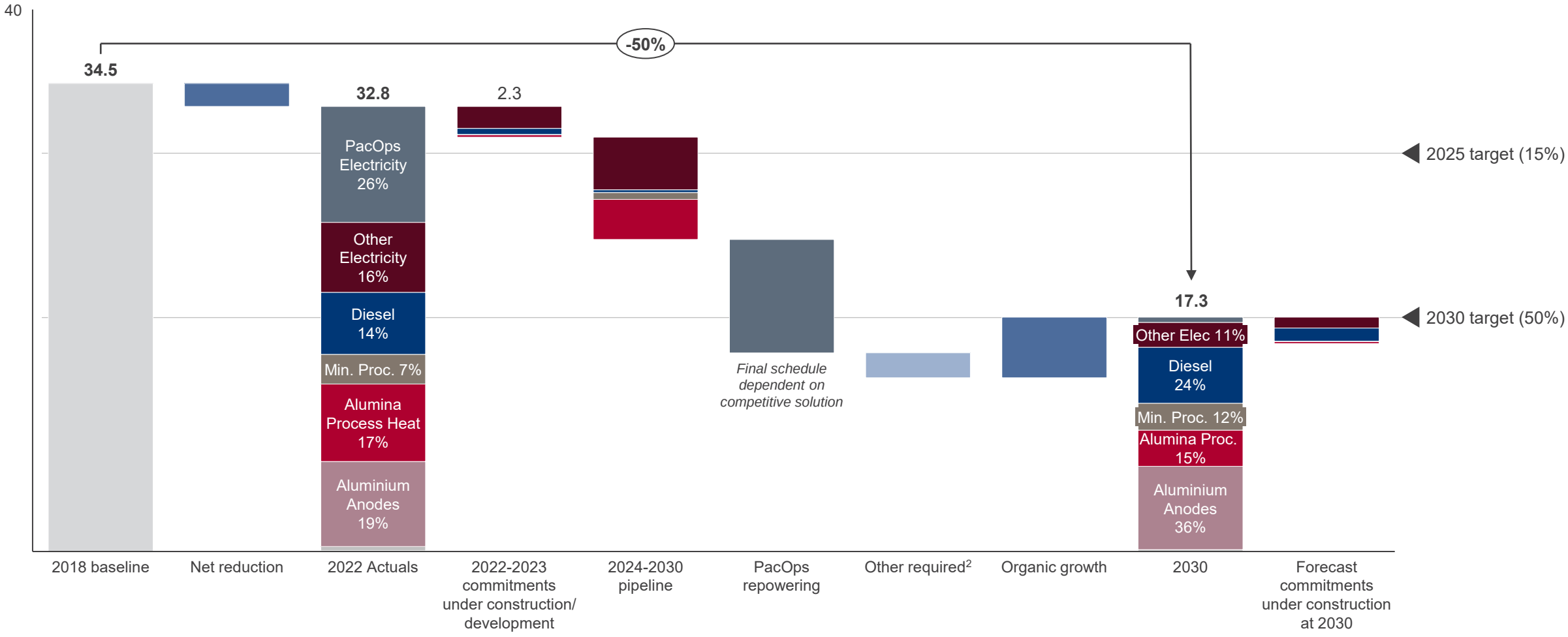
ELYSIS™ carbon-free aluminium anodes

Yarwun hydrogen calcination

RTIT BlueSmelting™ demonstration plant

Pathway to 2030 target under our decarbonisation programmes

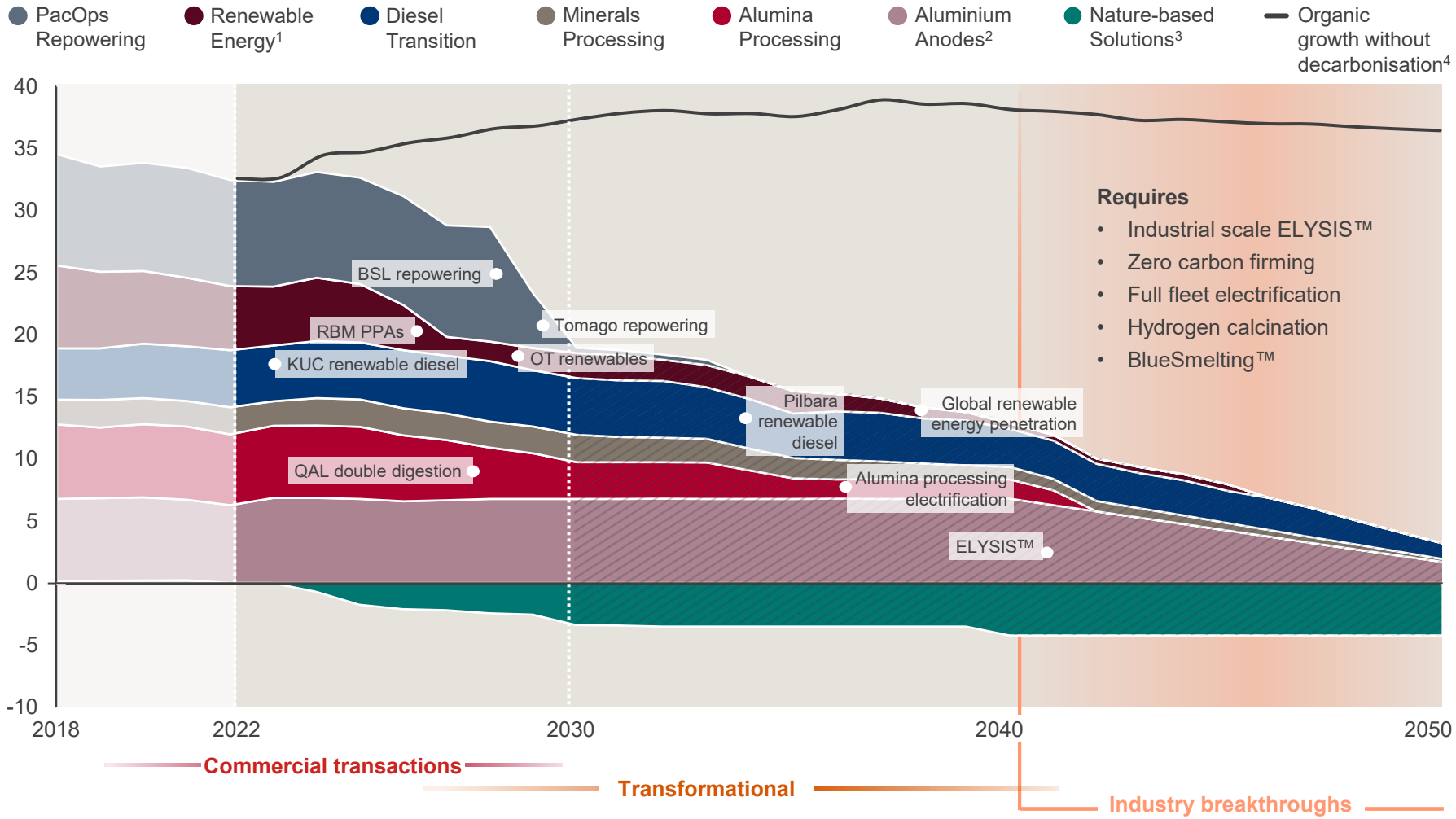
Mt CO_2e equity basis[1]



1. Rebased emissions due to scope 2 methodology changes. Data represents 'gross' Scope 1&2 emissions and direct abatement projects
2. 'Other required' will flex over time based on abatement project delivery, growth, closures and asset changes

Roadmap to net zero

Mt CO_2e equity basis



We remain committed to our 2030 targets, with the repowering of our Australian aluminium assets to play a significant role

Trajectory to net zero driven by ability to prove and scale-up technology breakthroughs for hard to abate processes

We believe nature-based solutions play a role in addressing climate change and nature loss

Rio Tinto

1. Electricity abatement assumes commercial solutions (Power Purchase Agreements, Renewable Energy Certificates) to be rolled over upon conclusion of contract terms or alternative abatement projects implemented
2. Aluminium anodes abatement shown illustratively as linear decline throughout 2040s, timing of ELYSIS™ deployment to be defined
3. High quality offsets include regulated compliance and voluntary offsets from our nature-based projects
4. Baseline emissions extended post-2040 using assumed asset life extensions

Aluminium – in focus

Jérôme Pécresse

We are the world's leading low-carbon aluminium producer, with options to grow

4
Bauxite Mines[1]

4
Alumina Refineries[1]

7
Hydropower Plants

14
Aluminium Smelters[1]

8
Recycling Centres[2]

3
R&D Centres and ELYSIS JV

Best positioned for an industry in transition

- Critical metal to enable the energy transition
- Western re-industrialisation and industrial policies
- Consumer demand for green products
- Increasing aluminium scrap supply
- Cost of firmed green energy (hydro advantage)
- China 45Mt capacity cap

RioTinto

1. Incorporates non-managed joint ventures | 2. Seven facilities are Matalco joint venture assets

Our strategy to deliver sustainable competitive advantage through the cycle

Best Operator | Excel in Development

Asset & people health | Capital intensity & project management expertise | SPS & productivity
Culture & leadership | Innovation

01
Grow North American low-carbon aluminium

02
Repower Pacific Operations smelters

Four Lenses

To focus our aluminium strategy

03
Optimise integrated alumina supply chain

04
Maintain options for third party bauxite sales

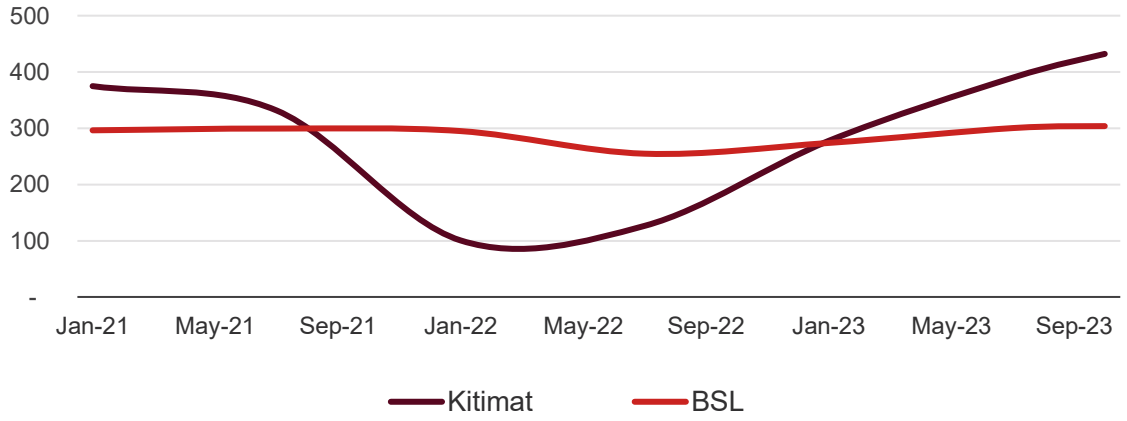
Impeccable ESG | Social Licence

Partnerships with customers | Governments | First Nations | Industrial partners

Best operator: restoring the base for a stronger business

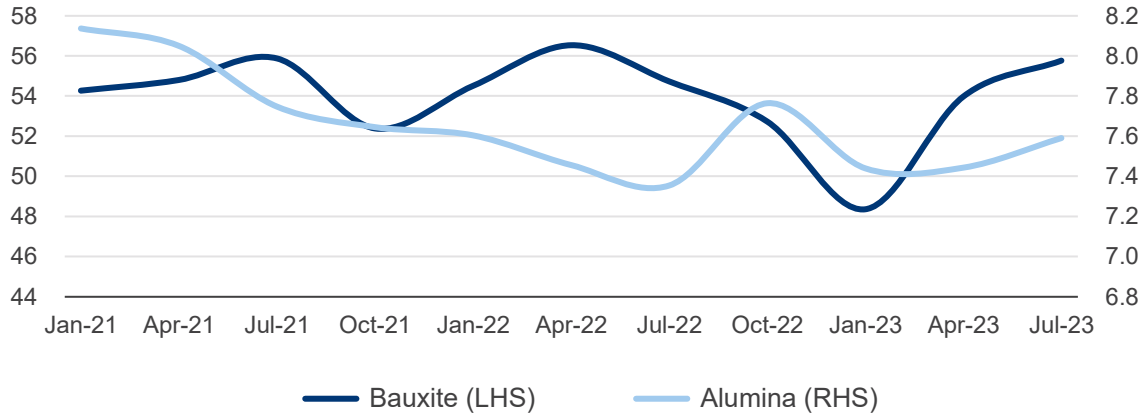
Kitimat at full capacity and Boyne cells recovered

Annualised production rate
kt, Rio Tinto share



Stability improving in Bauxite & Alumina

Annualised production rate
mt, Rio Tinto share



Boyne - 'Best Operator'

- ✓ Metal pad 'noise'[1] down 40%
- ✓ Anode 'noise'[1] down 30%
- ✓ Carbon dust down 50%
- ✓ Bath temperature deviation down 25%

Delivering stability on Line 3 into 2024

Weipa – Safe Production System in mining and refining

People
6%
Improvement in engagement

Variability
6%
Process variability reduction

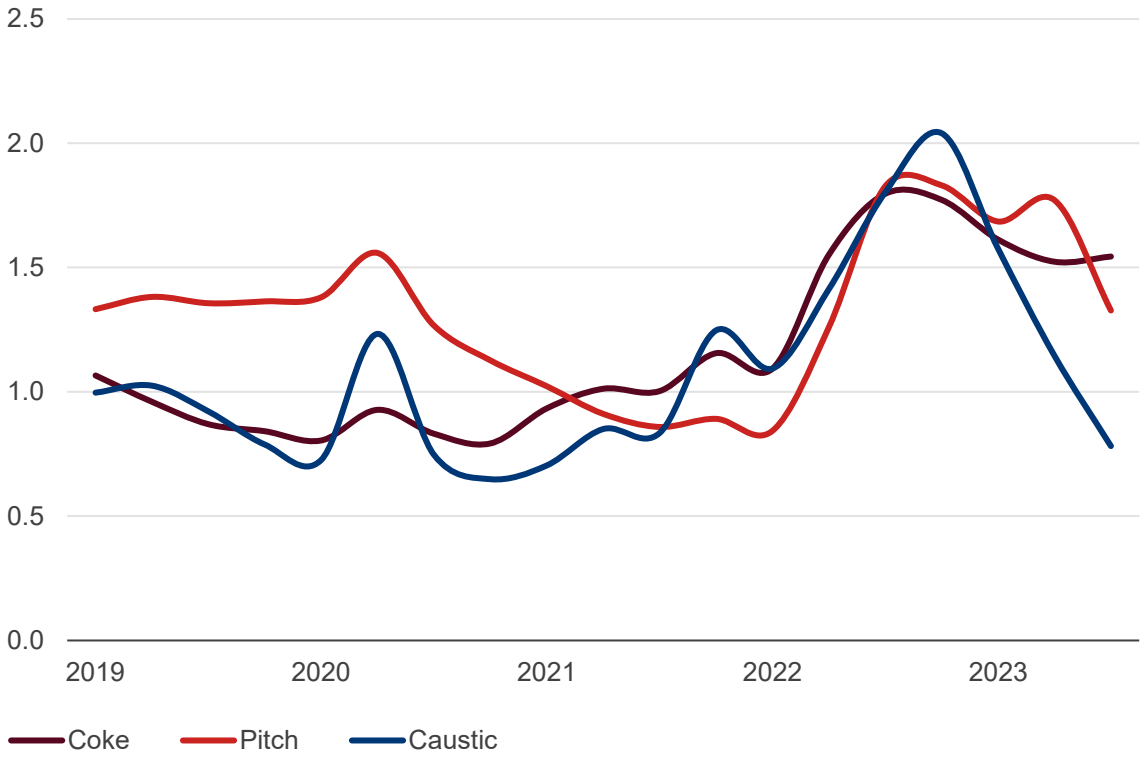
1. The term noise refers to unsteady voltage signal in the reduction cell or random and/or uncontrolled fluctuations in the cell voltage

Raw material prices trending downwards and inflation subsiding

Input prices down from cyclical high

Raw material prices

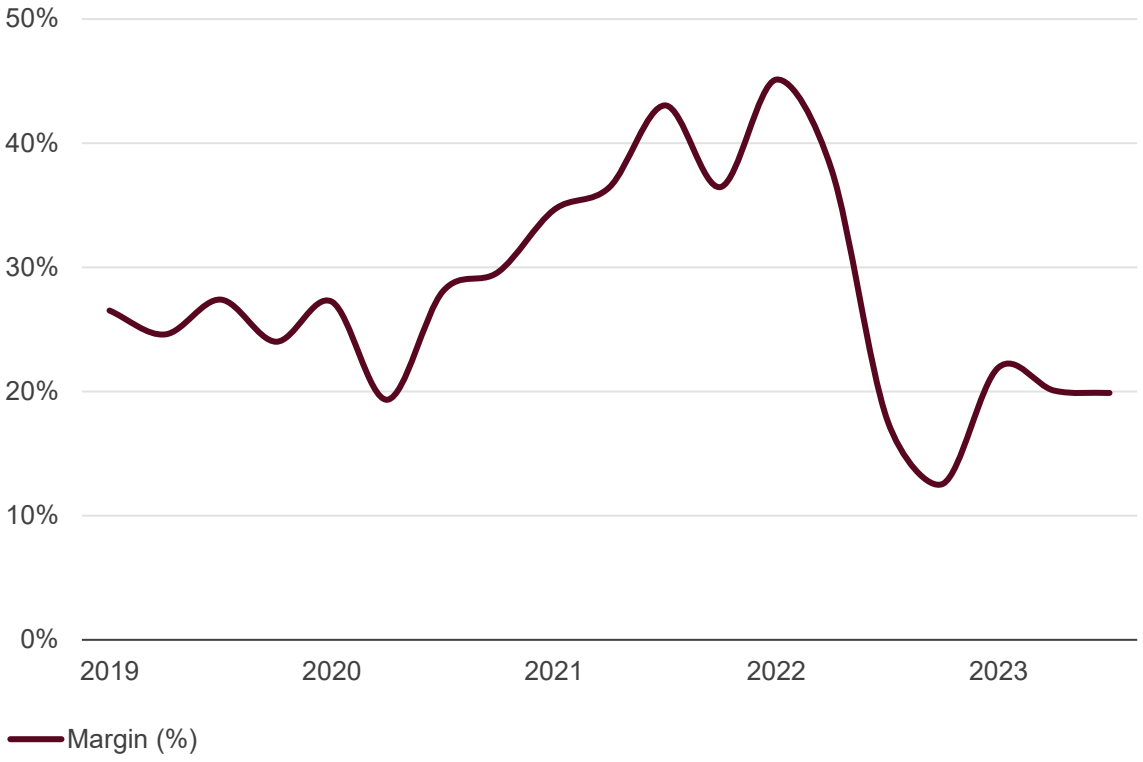
as a % of LME (indexed to historical 2014-2021 average)[1]



Cyclical margin pressure subsiding

Rio Tinto Aluminium EBITDA margin

Quarterly %



1. Index = 1.0 when the value is the same as the average % of LME for 2014-2021 for that raw material input. Data provided to the end of September 2023 (Source: Rio Tinto Market Analysis)

Delivering on our North America conviction

Recycling

Growing in North America with Matalco JV

$0.7bn Investment in high-quality aluminium recycling	**50%** JV with Giampaolo Group
~$65m (for 8 months) EBITDA on $700m revenue[1]	**400kt (for 8 months)** Shipments[1]
900ktpa Annual capacity	**100%** Rio Tinto responsible for sales & marketing

Potential for future growth beyond existing 7 facilities - underpinned by a complete product offering, improving the customer value proposition and scrap supply from Triple M Giampaolo group subsidiary

Low-carbon Primary Metal

Investing in Canada with AP60

$1.1bn AP60 state of the art smelter technology	**$113m** Quebec Government financial support
96 New AP60 pots (Total 134 AP60 pots)	**160kt** New capacity (220Kt total AP60 capacity)
1.6t CO_2e/t Al Approx. 50% less carbon emissions than Arvida	**2026** Fully ramped-up, matched with progressive Arvida closure

Continuing ELYSIS™ development to move towards zero carbon aluminium with major steps towards demonstration

Supplier of choice of low-carbon, fully traceable aluminium, with future access to zero-carbon ELYSIS™

RioTinto

1. Based on 8 months to September 2023 (based on 31 January year-end)

Partnering to capture the energy transition opportunity

Customers

- Prysmian – supply energy transition material
- OEMs – partnerships for low emission vehicles

Industrial partners

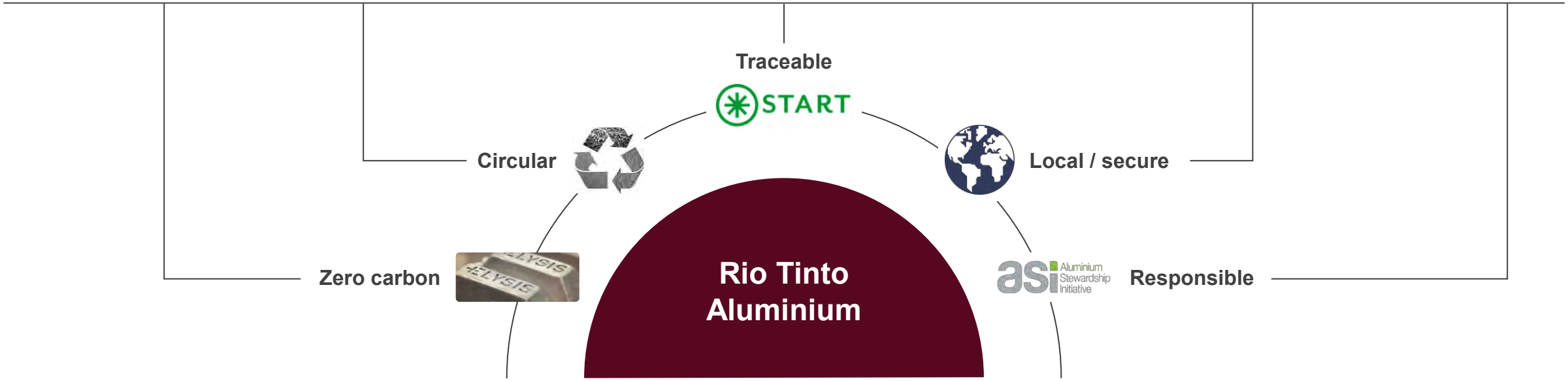
- Matalco – new recycling JV
- ARENA & Sumitomo – hydrogen calcination pilot at Yarwun

Government

- Governments of Australia and Canada – exploring opportunities for clean energy
- Governments of Canada & Quebec – collaboration on AP60 and ELYSIS™

First Nations

- Kuessilueu (“wind is turning”) agreement; Saguenay-Lac-Saint-Jean region
- Continuous engagements



Our Aluminium business

Improving our margins
with Kitimat and Boyne recovery

Setting **Matalco JV** up for success

Progress **AP60 expansion**
and **ELYSIS™ development**

Care | **Courage** | **Curiosity**

RioTinto

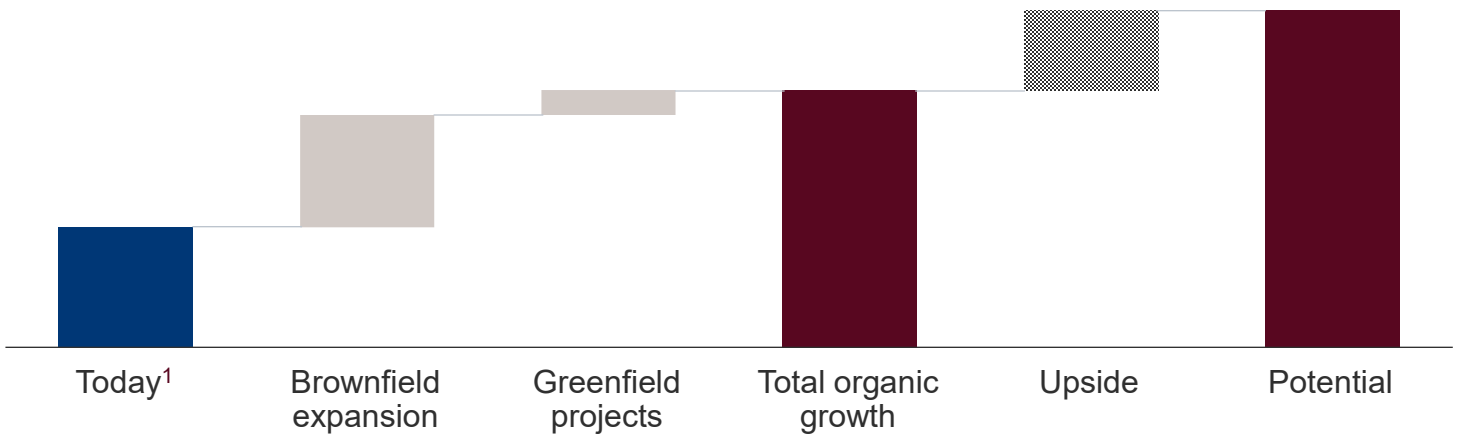
Copper - in focus

Bold Baatar

On track for 1Mt of mined copper production within 5 years

88% of the growth capital already spent

Our portfolio of assets



Ownership interest in 4 large world class ore bodies:

Asset	Ownership	Mine life[3]	Ore Reserves[2]	Mineral Resources[2]
Escondida	30%	2070+	6.7Bt @ 0.59% Cu	19.3Bt @ 0.50% Cu
Oyu Tolgoi	66%	2070+	1.1Bt @ 0.87% Cu	4.4Bt @ 0.69% Cu
Resolution	55%	2070+	-	1.9Bt @ 1.52% Cu
La Granja	45%	2070+	-	4.32Bt @ 0.51% Cu

- **Rio Tinto is expected to account for 25%** of the growth in global copper supply in the next 5 years[4]
- **Oyu Tolgoi underground ramp-up on track** to deliver over 500ktpa[2] as a world class Tier 1 asset with **multiple expansion options**
- **Well positioned to support US energy transition**
  - **Kennecott expansion pathways include** underground and open pit
  - Revival of US copper position, **Resolution** in established Arizona copper triangle
- **Nuton™ bioleaching** could unlock substantial volumes with up to 85% recoveries
- **La Granja** joint venture with First Quantum
- **Winu is a promising project** in the Paterson region of Western Australia
- **Nuevo Cobre JV** with Codelco, to explore and potentially develop in Chile's Atacama region

RioTinto

[1] Represents 2022 production as disclosed in our Q4 Operations Review, 17 January 2023, with Oyu Tolgoi adjusted to 100% volumes. Escondida at RT share 30%
[2] See supporting references for the 500kpta copper target and Escondida, Oyu Tolgoi, Resolution and La Granja Mineral Resources and Ore Reserves categorisation and reporting on slide 3
[3] Anticipated mine life is based on currently reported Ore Reserves and Mineral Resources tonnes projected at predicted annual capacity
[4] Source: Rio Tinto, CRU, Wood Mackenzie

Continued investment at our high-quality operations

$1bn of investment committed

Smelter rebuild completed, expect to be fully ramped up by **Q1 2024**

Improved stability and returns following investment in the smelter rebuild

83 drawbells blasted[1], ahead of plan

Underground project **92% completed** with **95%** of the capital committed[2]

Expected to average **500ktpa**[3] of copper production from 2028 to 2036

Significant investment over the next 10 years to maintain production

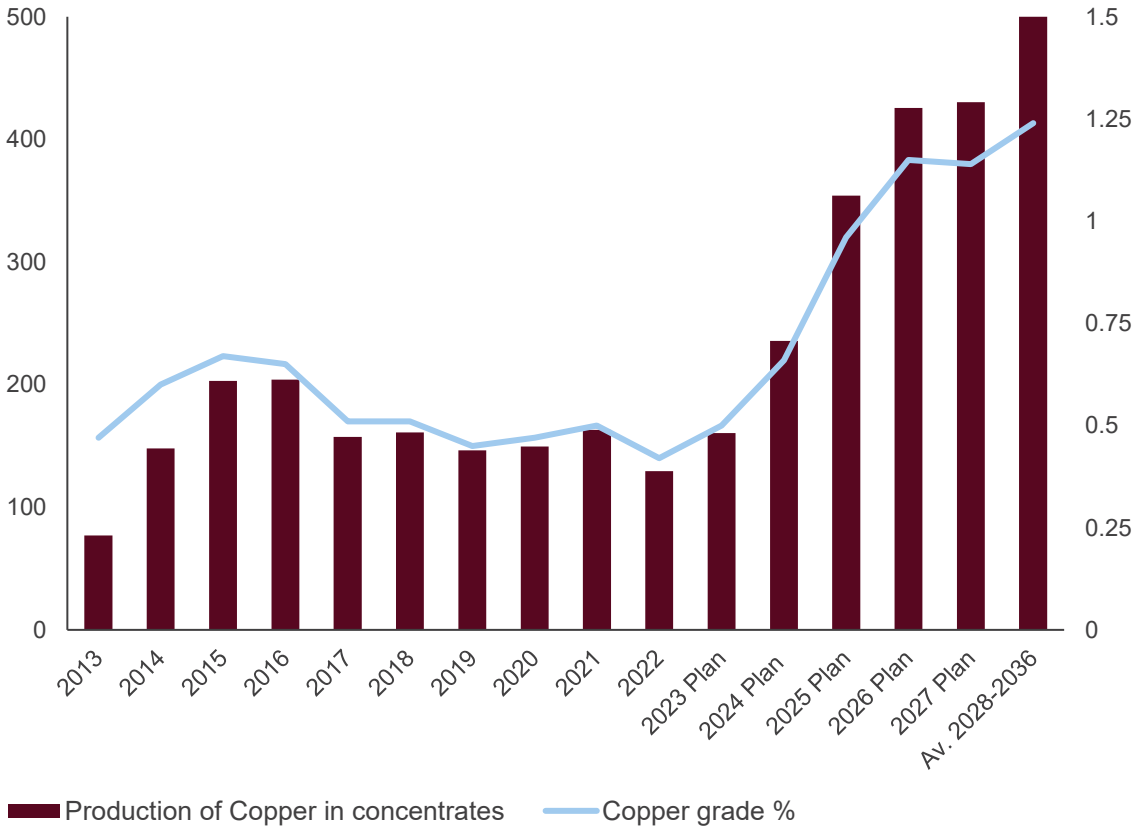
Growth options - **concentrator vs leaching** currently under evaluation

RioTinto

[1] As at 28 November 2023. [2] As at 31 October 2023
[3] See supporting references for the 500kpta copper target and Oyu Tolgoi Resources and Ore Reserves categorisation and reporting on slide 3

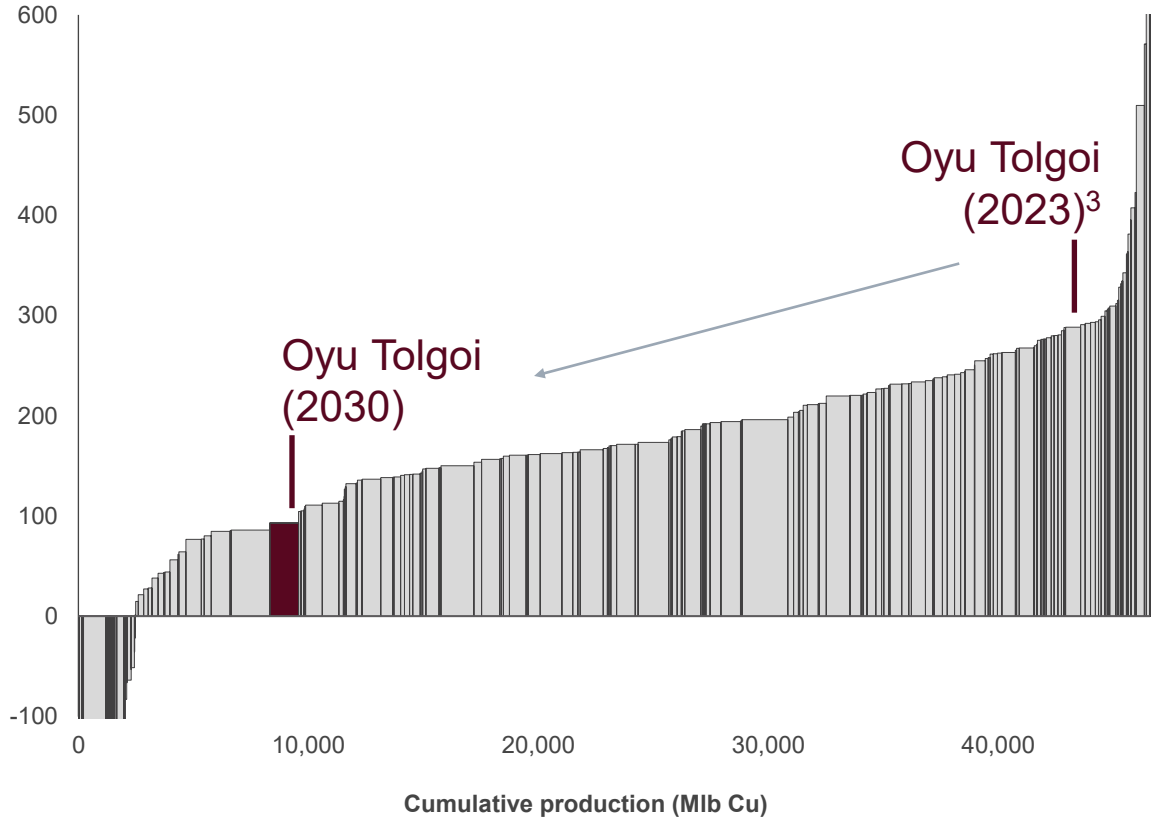
Oyu Tolgoi expected to move to first quartile of the 2030 cost curve

Copper in concentrates (LHS)/ head grade (RHS)[1]



2030 Copper equivalent cost curve[2]

Copper equivalent unit cost including sustaining capex (c/lb)



[1] See supporting references for the 2023-2027 and 2028-2036 production profiles on slide 3
[2] Source: Wood Mackenzie Ltd. Dataset 2023 Q1, Rio Tinto
[3] Oyu Tolgoi cost quartile position on 2023 Copper Equivalent Cost Curve

Well positioned to support the US energy transition

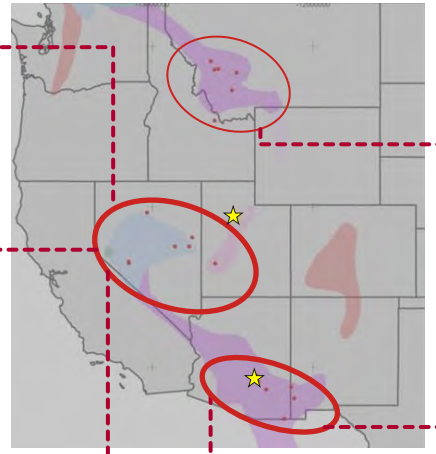
Our US footprint

Kennecott

Utah and Nevada exploration

nuton

RESOLUTION COPPER



Montana exploration

Arizona and New Mexico exploration

☆ RT Cu Operation

● Exploration Project

- US demand expected to double over next decade from 2Mt to 4Mt, with growing import dependence[1]
- Kennecott is 1 of 2 operating smelters and potential for life of mine beyond 2040[2]
- Investment in Kennecott underground expansion and smelter rebuild, with further growth optionality
- Supplier of critical minerals, such as tellurium
- Rebuilding the copper triangle with potential to supply ~25% of US domestic supply through Resolution[1]
- Reducing our environmental footprint through our bioleaching technology Nuton
- Advancing our regional exploration portfolio

RioTinto

[1] Source: S&P Global
[2] Anticipated mine life is based on currently reported Ore Reserves and Mineral Resources tonnes projected at predicted annual capacity

Nuton™ - a high-recovery and low-footprint technology

nuton | A Rio Tinto venture

Key differentiators

01

High-performing technology:

Outstanding copper recovery rates:

up to 85% on primary copper sulphide ore bodies

Multiple applications

02

Partnership approach:

Partnering with resource holders to access copper volumes

Portfolio today

6
Partnerships

4
Countries

Leading sustainability credentials

Aim to produce world's lowest footprint copper across our five pillars, and stretch to have a positive impact in at least one:

Nuton's performance[1]
vs. conventional concentrating/smelting

CO2e emissions	up to 60% lower
Water consumption	>80% more efficient
Tailings requirement	None
Capital intensity	>40% lower

[1] Will vary depending from site to site, ore characteristics and operating environment. Rio Tinto analysis.

Our copper business

Oyu Tolgoi ramping up

Improving stability and returns at **Kennecott**

Scaling up **Nuton**™

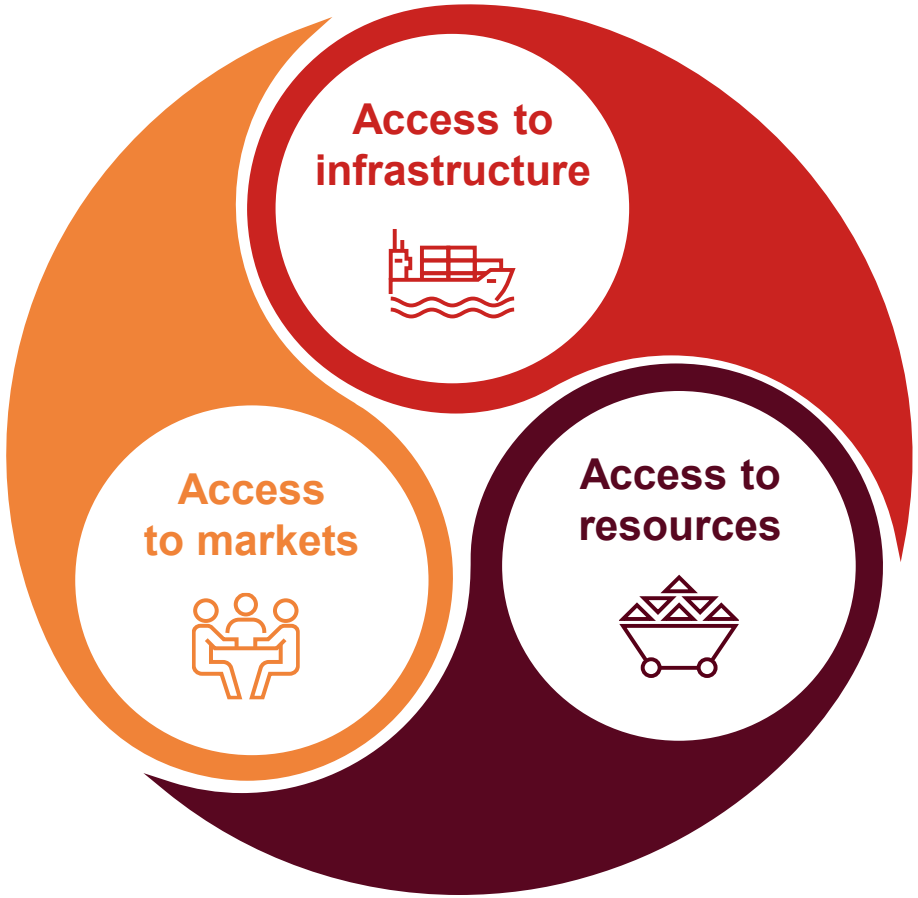
Care | **Courage** | **Curiosity**

RioTinto

Iron Ore - in focus

Simon Trott

A portfolio compatible with the environmental and heritage values of the region



Port and rail - our competitive advantage

- >360 Mtpa of port capacity
- 350 – 360Mtpa of rail capacity

Co-design and co-management of mines

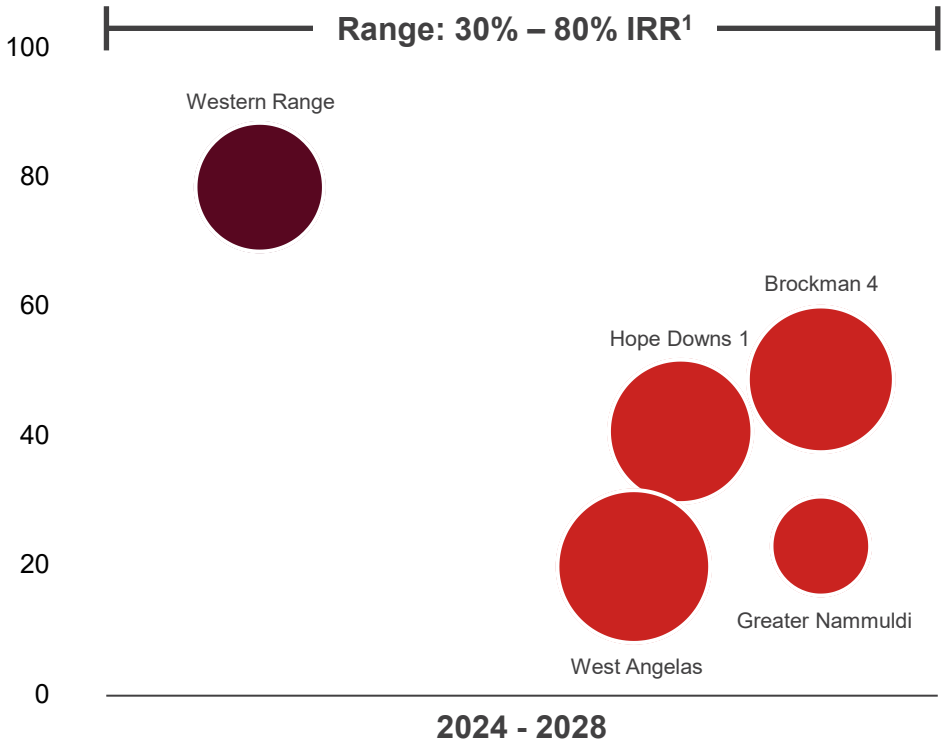
- Investing in genuine engagement and partnership with Traditional Owners
- Protecting culturally significant areas

Strong strategic relationships

- Joint Ventures provide access to markets
- Cracking the code for Pilbara ores in a green steel world

Robust returns through disciplined investment

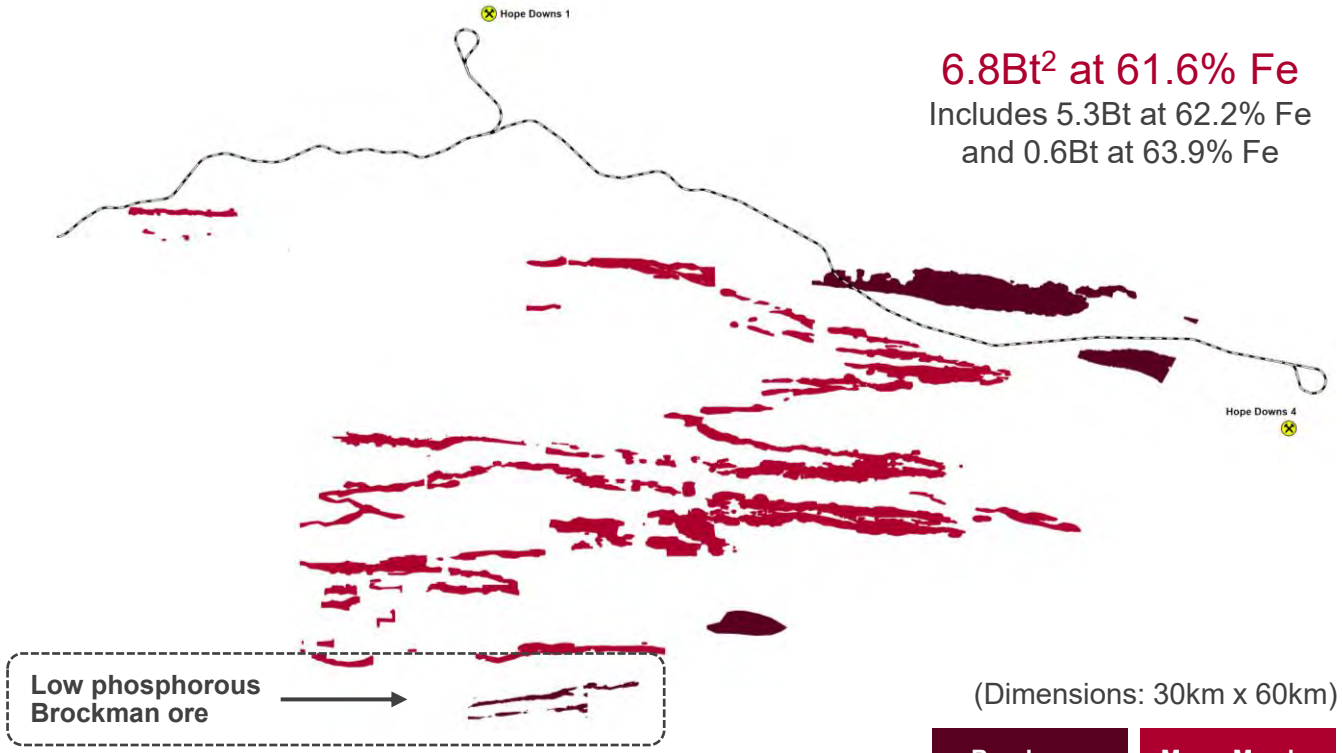
Mine capital intensity outlook
($/t installed capacity)



● In development ● Study phase

Rhodes Ridge: the best undeveloped project in the Pilbara

Large	Grade-advantaged	Infrastructure
>100 Mtpa capacity	>62% for Pilbara Blend	Close to established rail



6.8Bt[2] at 61.6% Fe
Includes 5.3Bt at 62.2% Fe and 0.6Bt at 63.9% Fe

(Dimensions: 30km x 60km)

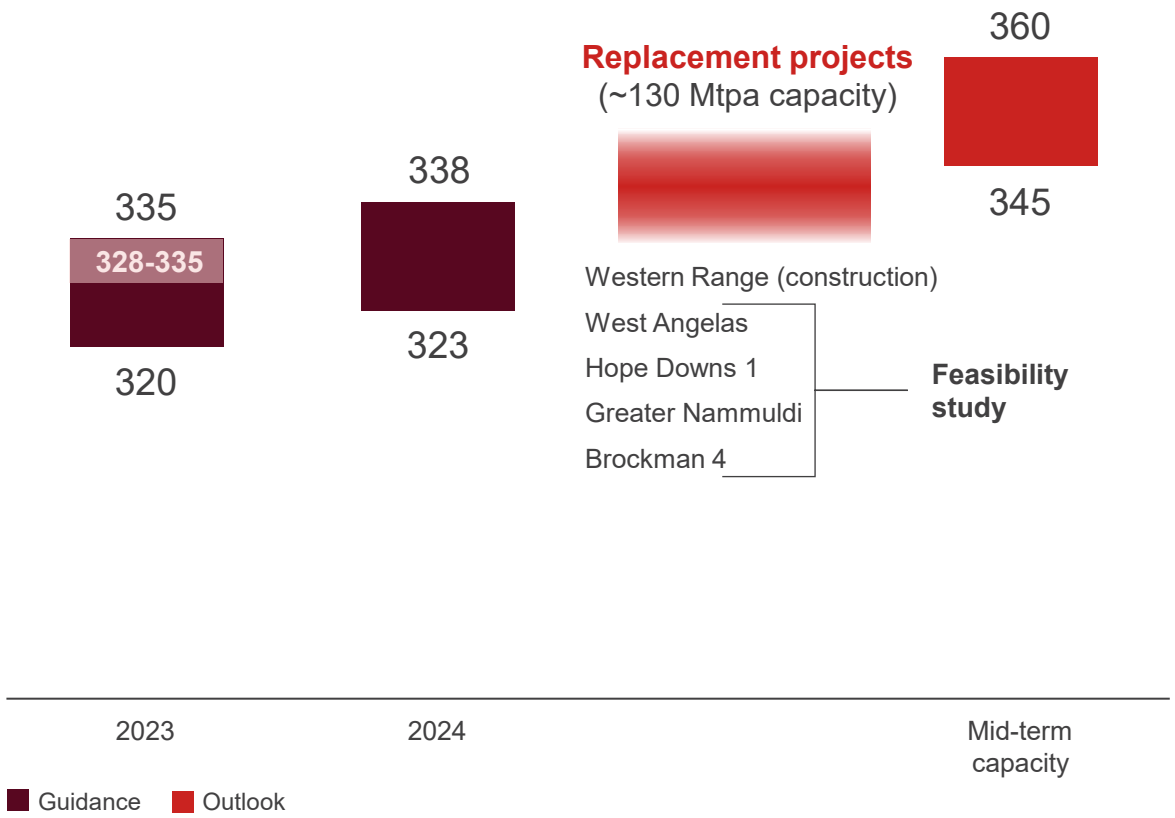
Brockman **Marra Mamba**

RioTinto

1. IRR range across next tranche of replacement mines
2. Mineral Resources. See slide 3 for supporting references and breakdown of Mineral Resources

Clear pathway to mid-term system capacity of 345 – 360 Mt

Shipping guidance
(Mt, 100% basis)



5 mines in the pipeline (~130 Mtpa capacity in total)

- Western Range (25 Mtpa[1]), first ore 2025
- West Angelas, first ore 2027
- Hope Downs 1, first ore 2027
- Greater Nammuldi, first ore 2028
- Brockman 4, first ore 2028

Productivity and mine capacity depletion

- Safe Production System: 5 Mt in 2023 and 5Mt in 2024
- Depletion: ~18 Mt in 2023 and ~12 Mt in 2024 (~90 Mt 2023 to mid-term)

Rhodes Ridge

- >100 Mt of capacity, staged development with first ore this decade
- Re-orients Pilbara Blend to >85% of shipments

Equity share and product mix

- SP10 45 – 50 Mt in 2023 and elevated until replacement projects delivered
- Effective equity share of free cashflow stable at >85%[2]

RioTinto

1. Capacity
2. Post development of Rhodes Ridge

Safe Production System to deliver 5Mt production uplift in both 2023 and 2024

Development	Drill & blast	Load & haul	Processing	Rail	Ports
E ↑ 14% Spatial conformance[1]	C ↑ 27% Metres drilled per hour[1]	E ↑ 11% Truck work rate[1]	D ↑ 10% Fixed plant availability[1]	F ↓ 5% Cape Lambert rail cycle time[1]	G ↑ 11% Cape Lambert A plant effective utilisation[1]
D ↑ 10% Ex-pit movement[1]	B ↑ 21% D&B confirmed tonnes[1]	D ↑ 14% Haul Truck utilisation[2]	B ↓ 82% Reduction in shut overrun[1]	F ↑ 14% Resurfacing productivity[1]	G ↓ 3.6% Cape Lambert A plant downtime[1]
C ↑ 25% Surface mining health[2]	A ↑ 6% Drill availability[1]	C ↑ 18% Dig unit utilisation[1]	A ↓ 48% Rock breaking delays[1]		

Deployment

- **A** West Angelas
- **B** Yandicoogina
- **C** Brockman 4
- **D** Tom Price
- **E** Marandoo
- **F** Cape Lambert Rail
- **G** Cape Lambert Port

Focus on front line engagement is delivering results

4,332 Increase in ideas from front line[2]

2,196 Increase in ideas actioned[2]

4% reduction in all injury frequency rate[1]

25% increase in People Survey participation[2]

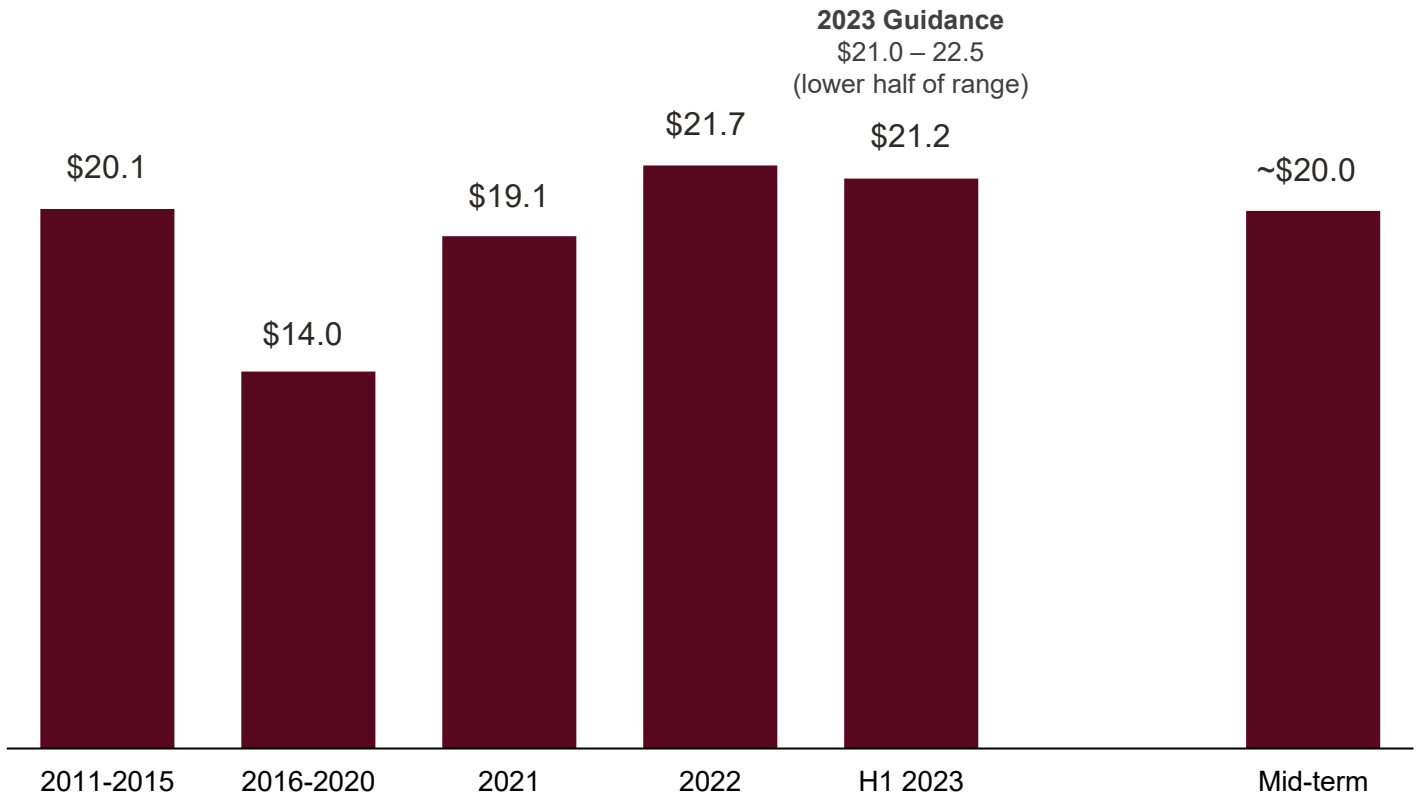
Highest employee satisfaction since survey began in 2018

4% increase in employee[2] productivity per tonne of saleable ore[1]

[1] Year-on-year improvement (2022 compared to H1 2023); [2] Improvement since deployment commenced

Increased volume and productivity to drive down mid-term costs

Unit costs
$/tonne shipped



~$20/t mid-term unit cost target[1]

Volumes increasing ↓

Productivity improvements ↓

Work index rising ↑

↓ Reduces unit costs from current ↑ Increases unit costs from current

1. Mid-term unit cost - AUD:USD FX 0.67, real basis, subject to inflationary pressures

Our Iron Ore business

Prioritising **safety** and **culture**

Embedding **‘Most Valued’** mindset

Capital efficient **growth**

“Cracking the code” on green steel

Care | **Courage** | **Curiosity**

RioTinto

Simandou

Bold Baatar
Mark Davies

RioTinto

Unlocking[1] the world's largest known high-grade iron ore resource

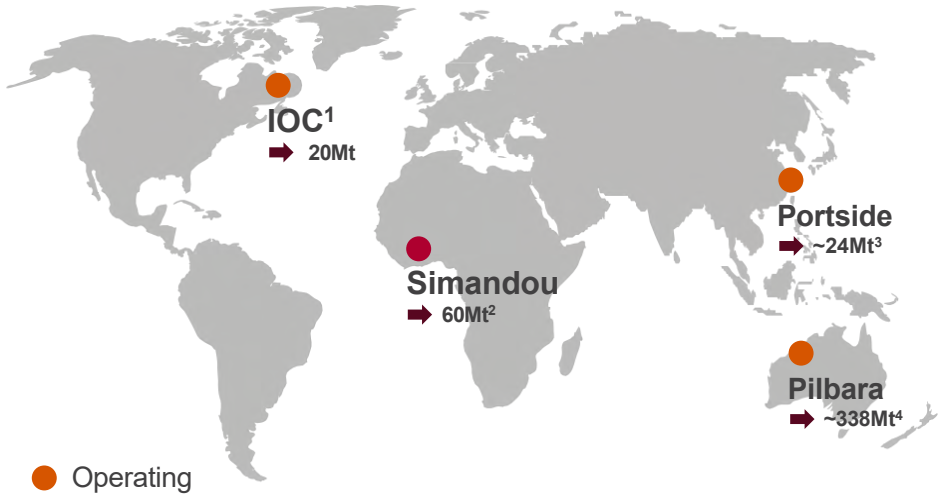
- A financially attractive, Tier 1 resource: IRR[2] in low double digits anticipated for Simfer mine and combined infrastructure through ownership of Compagnie du TransGuinéen (CTG)
- Diversification of iron ore portfolio – complements our Pilbara and Iron Ore Company of Canada products
- Positioning for decarbonisation of the steel industry
- Co-development model a prototype for the future
- Strategic partnership with Guinea and China

Rio Tinto

1. Final Rio Tinto Board approval is subject to the remaining conditions being met, including joint venture partner and regulatory approvals from China and Guinea
2. IRR of 11 to 13% reported on a post-tax, real basis, based on Wood Mackenzie and CRU average pricing for iron ore (65% grade), with a premium applied for DR product. Refer to supporting references for the production targets underpinning the financial information on slide 4. For detailed project assumptions refer to slide 98

Simandou complements our Pilbara and IOC[1] portfolio

Unrivalled global portfolio

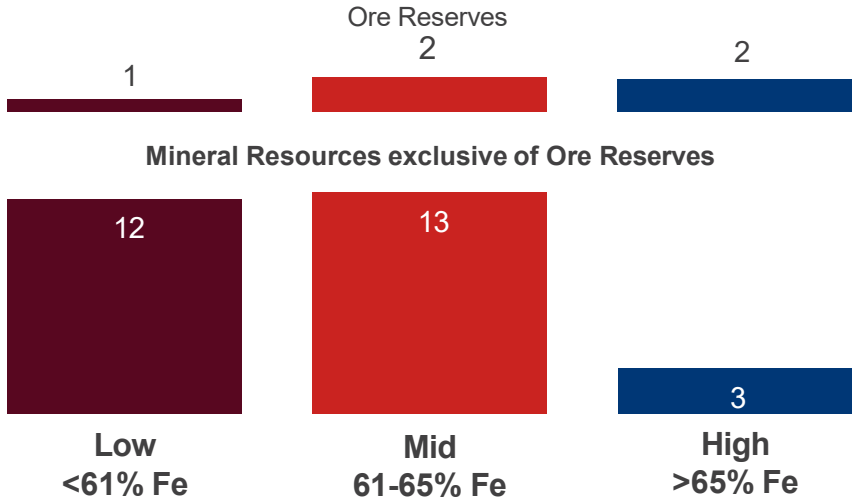


Strategic differentiators

- World class infrastructure
- Joint Venture partnerships
- Scale and resilience
- Product grade spread

High quality Ore Reserves

Global Mineral Resources & Ore Reserves[5]
Billions of dry tonnes, published grades



Pilbara
Pilbara Blend
Green steel application pathways

Simandou
Blast furnace feed or Direct Reduction Iron products (~65% Fe)

Iron Ore Company of Canada
High-grade, low-impurity products with Direct Reduction Iron market presence

China Portside
Global blending capability providing greater customer access

1. Iron Ore Company of Canada (100% basis)
2. Simandou blocks 3 and 4 expected annualised capacity (Rio Tinto's share is 27Mt)
3. Portside sales in 2022 – blended and screened ores from Pilbara, IOC and third parties
4. Pilbara demonstrated capacity - sales volumes in 2018 (100% basis)
5. See supporting references for categorisation and reporting of Rio Tinto's Mineral Resources and Ore Reserves on slide 4

Three dimensions to the Simandou project

01
Compagnie du TransGuinéen (CTG) Infrastructure[1]

Funded:

50% by Simfer InfraCo (53% Rio Tinto, 47% CIOH Consortium[2])

50% by WCS InfraCo

Ownership:

15% Government of Guinea

42.5% Simfer InfraCo (53% Rio Tinto, 47% CIOH Consortium[2])

42.5% WCS InfraCo (51% Winning Consortium[3], 49% Baowu)

02
Simfer Mine – blocks 3 & 4

Funded:

53% by Rio Tinto

47% by CIOH Consortium[2]

Ownership:

15% Government of Guinea

85% Simfer Jersey (53% Rio Tinto, 47% CIOH Consortium[2])

03
WCS Mine – blocks 1 & 2

Funded:

51% Winning Consortium[3]

49% Baowu

Ownership:

15% Government of Guinea

42.5% Winning Consortium[3]

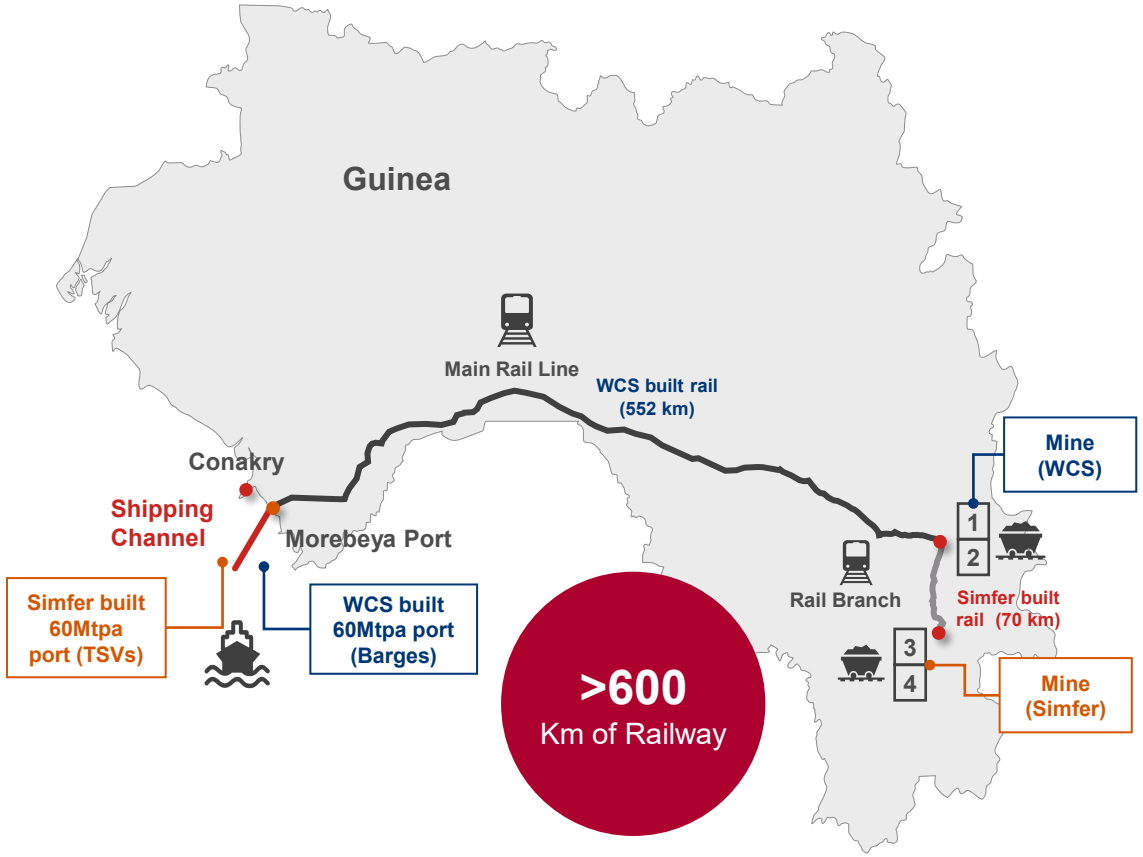
42.5% Baowu

RioTinto

1. The ownership of the rail and port infrastructure will transfer from CTG to the Guinean State after a 35-year Operations Period, with Simfer retaining access rights on a non-discriminatory basis and at least equivalent to all Third Party Users
2. Chalco Iron Ore Holdings (CIOH) Consortium: 75% Chinalco, 20% Baowu, 2.5% China Rail Construction Corporation and 2.5% China Harbour Engineering Company
3. Winning Consortium is currently a consortium of Singaporean company, Winning International Group (50%), Weiqiao Aluminium (part of the China Hongqiao Group) (50%) and United Mining Supply Group (nominal shareholding)

Simfer's project scope

Simfer will construct a 60Mtpa mine[1], rail spur and transhipment vessel (TSV) port, and will own an equal share of CTG with WCS on completion



Mine

60Mtpa with expansion options – average grade of **65.3% Fe - 26-year** mine life[2]

Port – TSVs[3]

Self-propelled and dual navigation system - **40k dwt** - **5 TSVs** to deliver **60Mtpa**

Rail Spur

70km – **25t** axle load – **5** bridges – **1** tunnel – connecting to **552km**[4] main rail line (WCS)

1. Mine constructed on blocks 3 and 4
2. See supporting references for the production target on slide 4
3. Simfer sole funds the TSVs (capital is not shared with WCS unlike the rest of the infrastructure). Simfer will retain ownership (less a possible 15% State interest) and operation of the TSVs throughout the operations period. The TSV wharf and channel will be owned and operated by CTG
4. Comprised of a 536km mainline and a 16km spur

Construction progress: enabling works underway

Scopes of work to support contractor mobilisation and construction are progressing

Accommodation availability and site facilities have been the focus across Q3 and Q4 2023

Camp strategy involves several temporary construction camps adjacent to the central office facility to accommodate 2,620 people initially

4 remote camps to support rail spur construction are mechanically complete

Stockyard dam to provide water for construction

Tin Dijou camp building modules being assembled

Installation of temporary construction camp for 1,020 people

Material movement for heavy mobile equipment road

Simfer capital expenditure summary

Final Rio Tinto Board approval is subject to the remaining conditions being met, including joint venture partner and regulatory approvals from China and Guinea[1]

	Simfer capex	Rio Tinto share
Mine and TSVs, owned and operated by Simfer:		
Development of an initial 60Mtpa mine[2] at Simandou South (blocks 3 & 4) to be constructed by Simfer	$5.1 billion	$2.7 billion
Co-developed infrastructure, owned and operated by CTG once complete[3]:		
Simfer scope **Rail:** a 70 km rail-spur from Simfer mine to the mainline, including rolling stock **Port:** construction of a 60Mtpa TSV port	$3.5 billion	$1.9 billion
WCS scope Port and rail infrastructure including a 552 km trans-Guinean heavy haul rail system[4]	$3.0 billion	$1.6 billion
Total capital expenditure (nominal terms)	**$11.6 billion**	**$6.2 billion[5]**

1. Investments into the WCS infrastructure project companies, that will serve as the joint venture vehicles for construction of the co-developed infrastructure, remain subject to a number of conditions including governmental approvals from Guinea and China
2. See supporting references for the production target on slide 4
3. A true-up mechanism will apply between Simfer and WCS to equalise their out of pocket costs of constructing the co-developed rail and port infrastructure
4. Comprised of a 536km mainline and a 16km spur
5. By the end of 2023, Rio Tinto expects to have invested $0.5 billion (Rio Tinto share) to progress critical path works. Rio Tinto's share of capital investment remaining to be spent from 1 January 2024 is expected to be $5.7 billion

Commitment to globally recognised ESG standards and best practices

Key Risks

- Health and safety
- Biodiversity
- Project-induced migration
- Resettlement and land access
- Human Rights

Key Opportunities

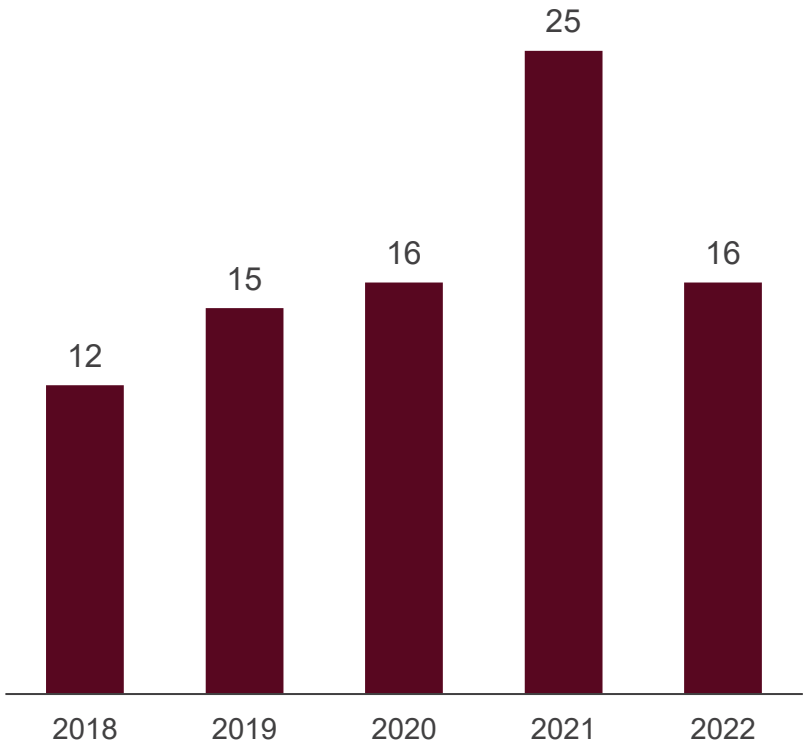
- Regional economic development
- Economic contribution
- Job creation
- Co-development model
- Climate change resilience

Capital allocation and financials

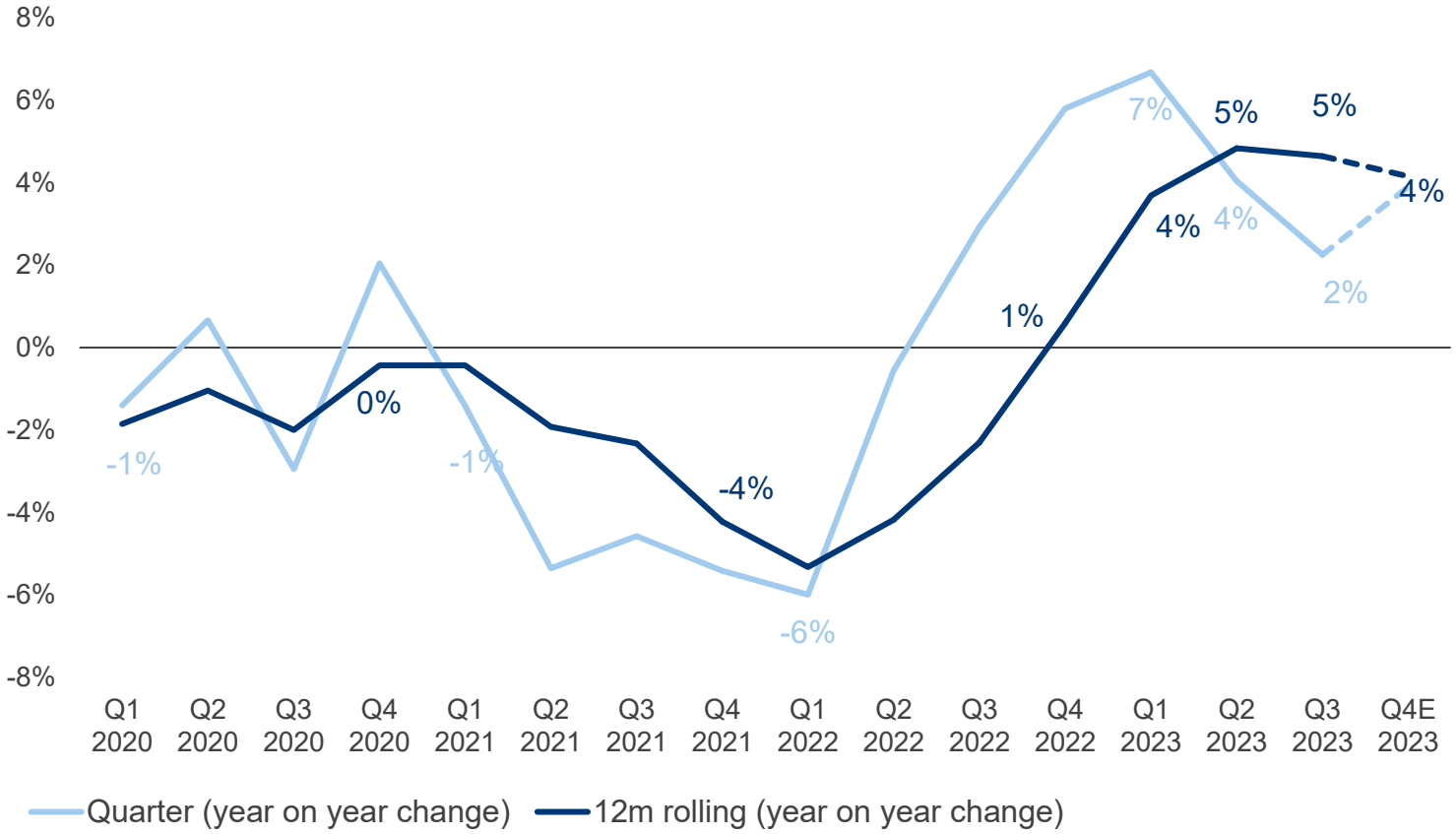
Peter Cunningham

Focus on operational performance uplift and consistently strong cash flows

Operating cash flow[1] ($bn)



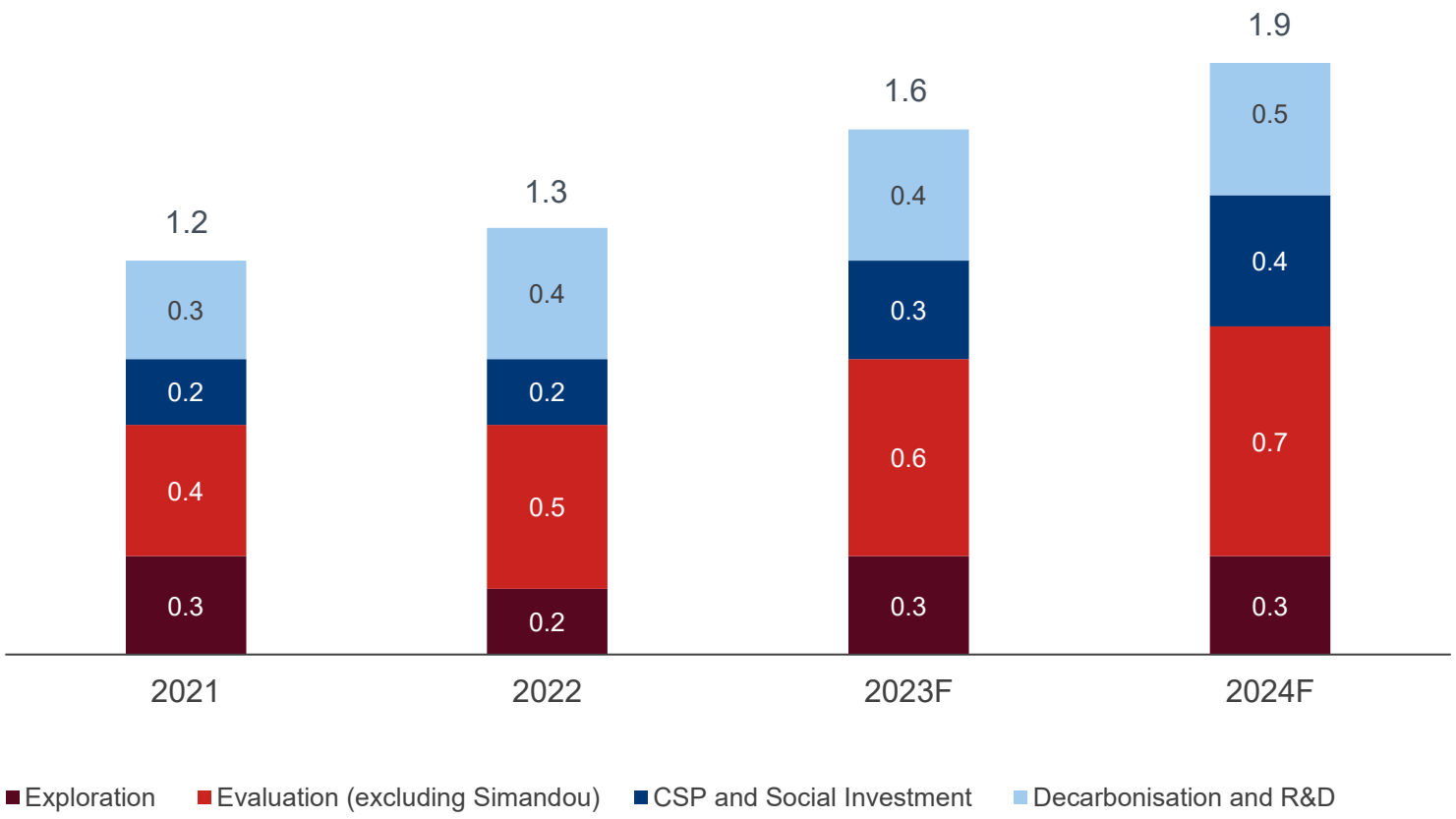
Production growth CuEq[2] (Rio Tinto share)



[1] Operating cash flow includes capital gains tax paid on disposals of $0.9bn in 2019, primarily related to coal disposals
[2] Based on long-term consensus pricing

Operating cash flow includes investment for creating growth options and strengthening social licence

$bn

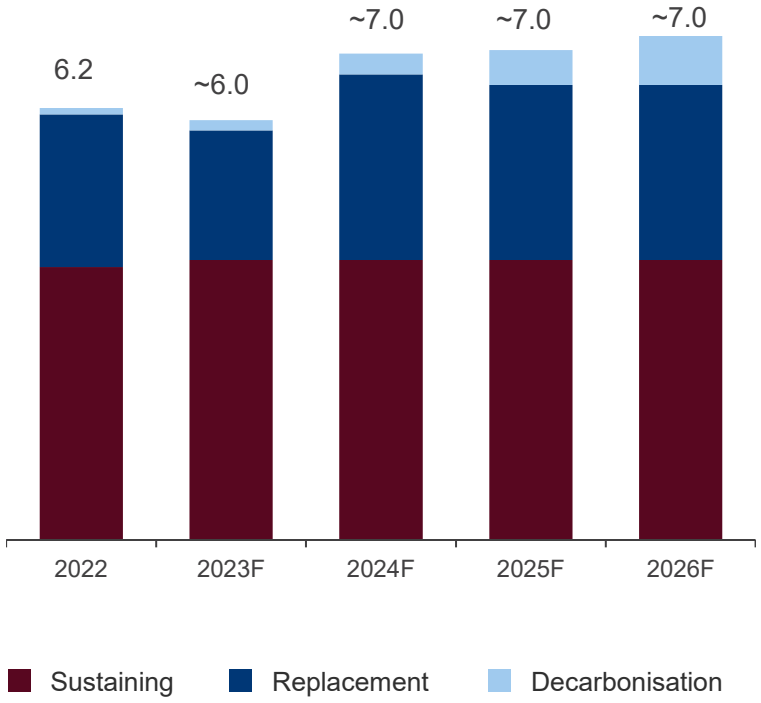


- Expenditure rising in line with development of project portfolio
- Fully expensed via the P&L
- Includes $250m per year of central greenfield exploration
- R&D includes Nuton™, ELYSIS, decarbonisation and other projects
- Progressing studies on Rincon, Resolution, Pilbara replacement and Rhodes Ridge in 2023/24

Consistent capital allocation, balancing essential capex with shareholder returns and growth

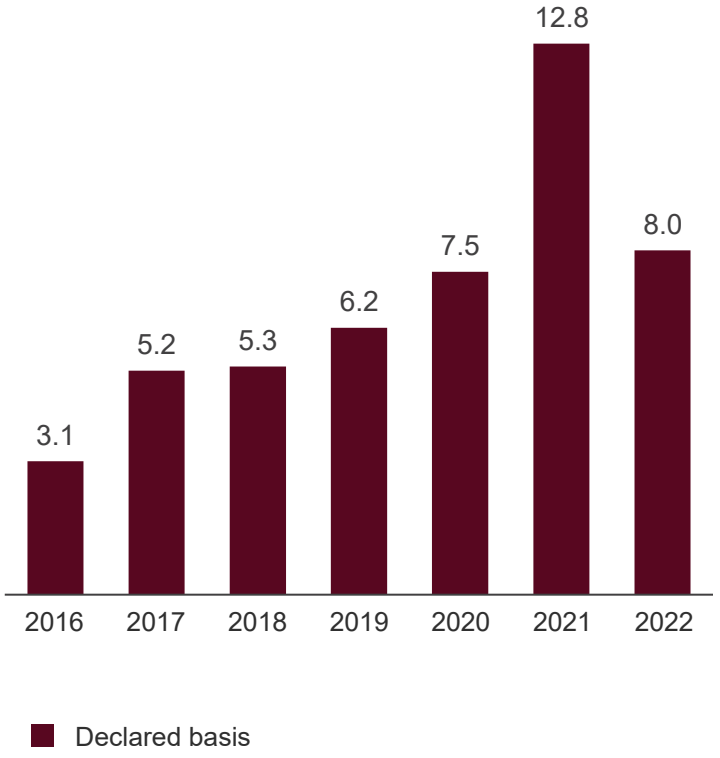
01 Essential capex ($bn)

Integrity, Replacement, Decarbonisation

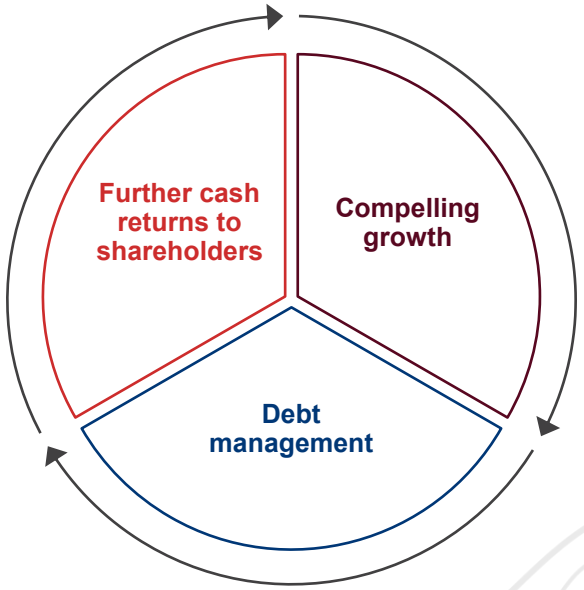


02 Ordinary dividends ($bn)

60% of underlying earnings paid out in each of past 7 years[1]



03 Iterative cycle of…



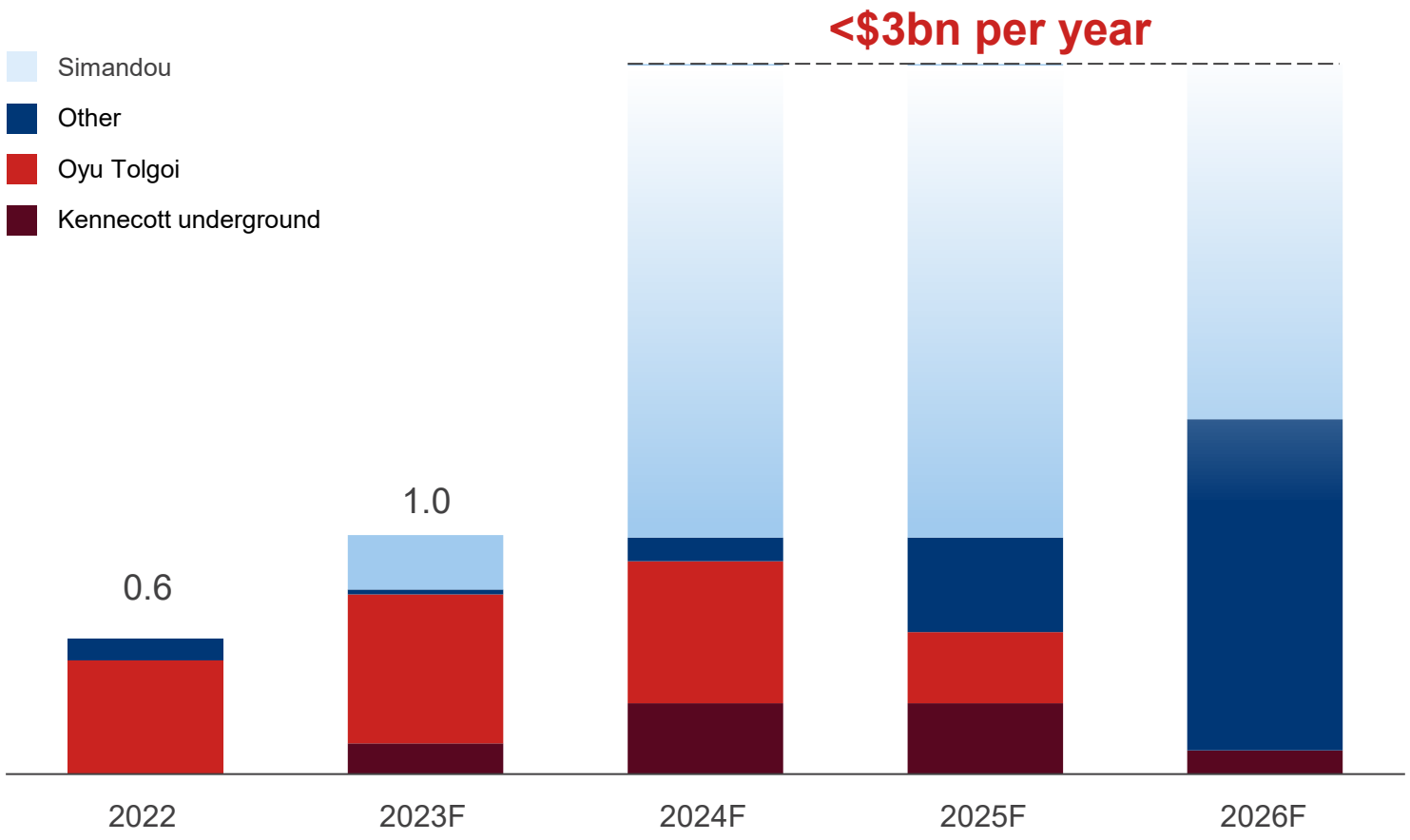
RioTinto

[1] Shareholder returns on a declared basis, excluding divestment proceeds returned to shareholders

Shaping our portfolio for the future

Growth capex[1]

$bn



Simandou the key driver of growth capex

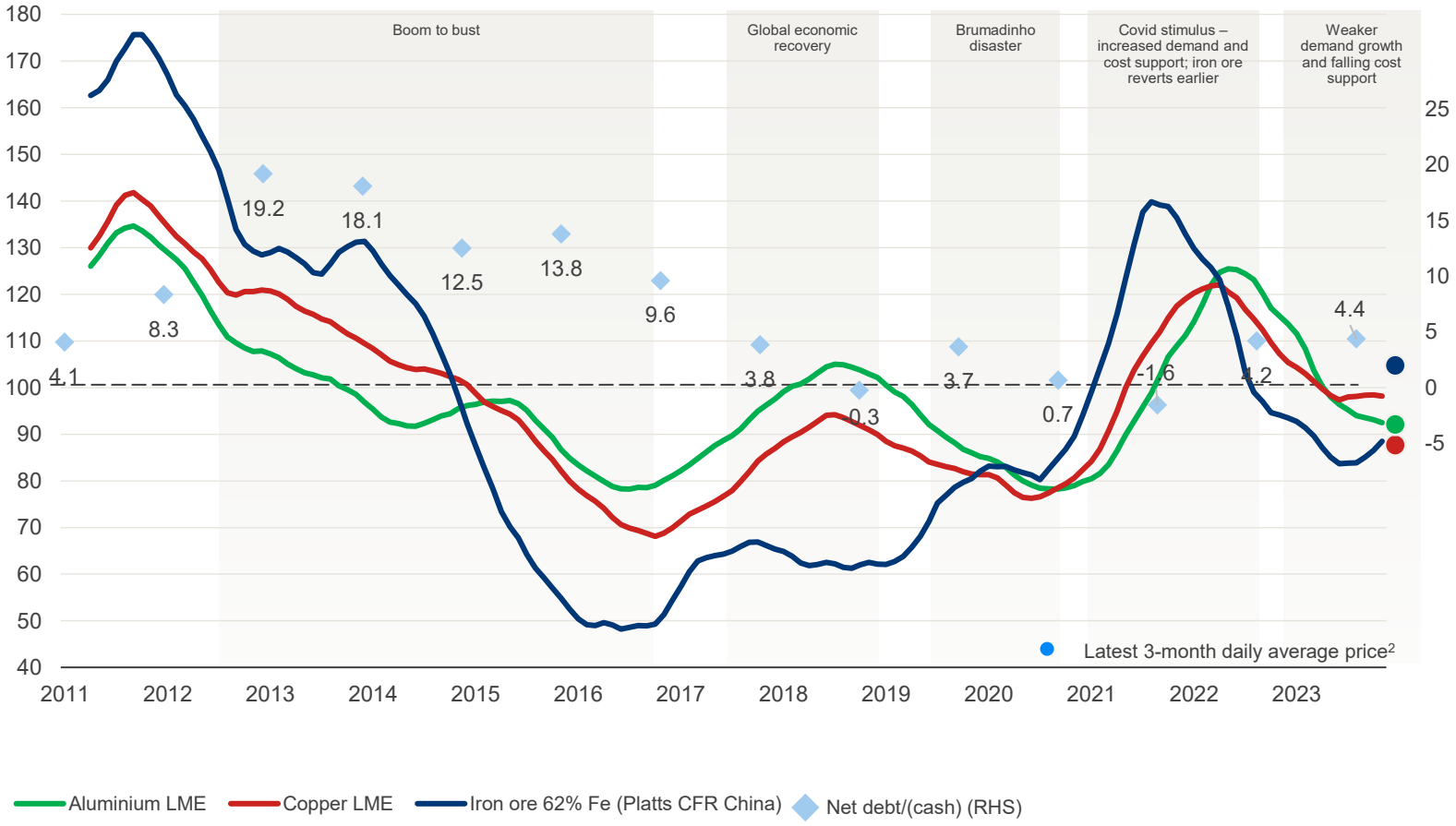
Oyu Tolgoi underground spend to wind down from 2024 as infrastructure is completed

Other includes yet to be approved copper and lithium projects

[1] Rio Tinto share basis

Financial strength remains a key asset in volatile markets

Major commodity prices (real $2023, 12-month moving average[1])

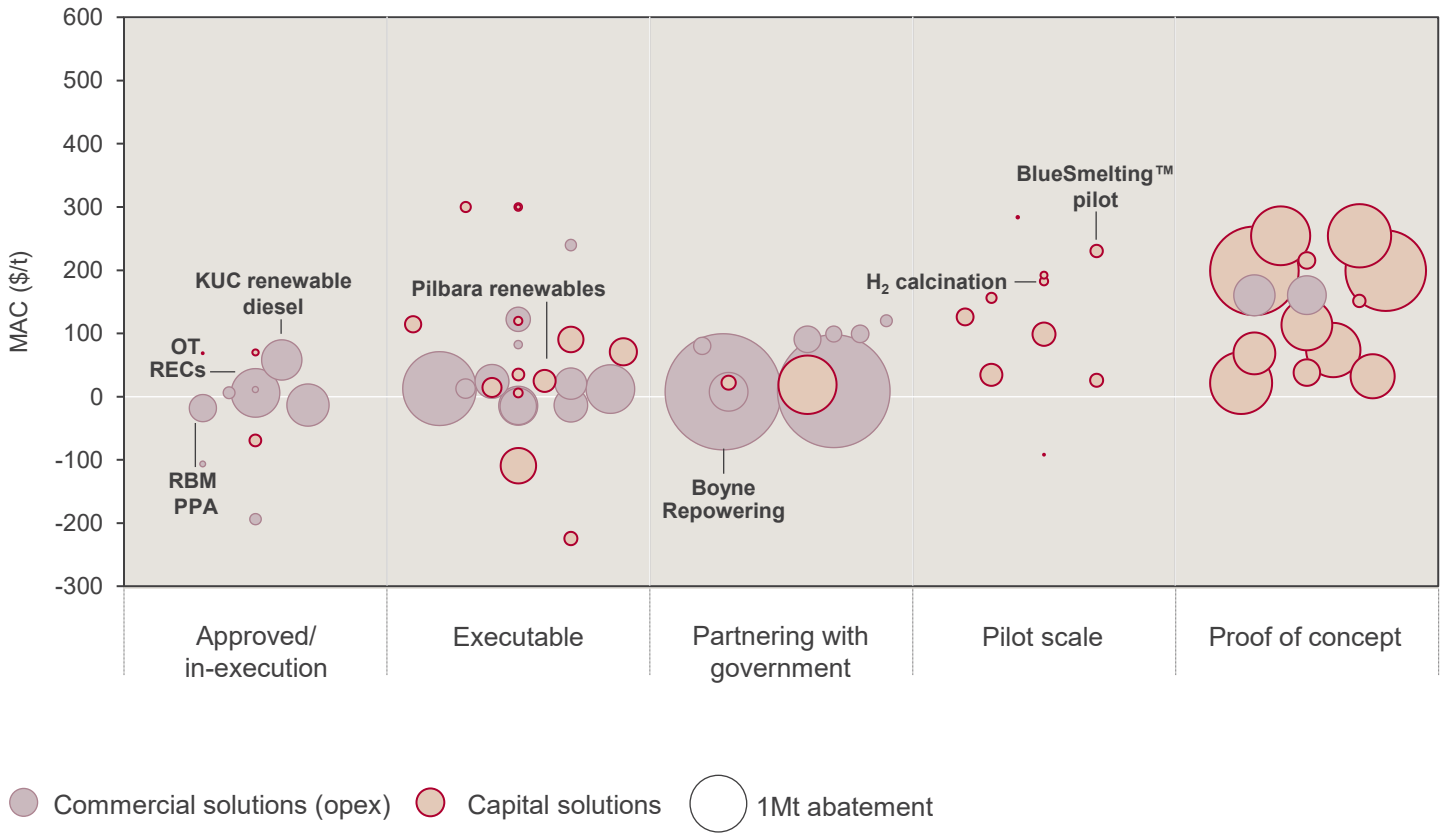


- Near-term demand more subdued with services driving GDP growth post-Covid and supply bottlenecks fading
- Commodity prices stabilised in H2 2023 at close to or just below historical averages since 2010
- Balance sheet strength is an asset. Offers resilience and creates optionality

[1] Based on monthly average nominal price, converted to real 2023 levels using US GDP deflator from January 2010 and provided as a 12-month moving average
[2] Based on average monthly price to 17 November 2023

Decarbonisation investment pathways continue to evolve

Decarbonisation pipeline
(Mt CO_2e, equity basis)



Total capex guidance to 2030 revised to $5-6bn[1,2]

	2030 CO_2e abatement %	2023-2030 capex %
Commercial solutions • PPAs, VPPAs, RECs • Biofuels	**~65-70%**	**~10%**
Capital solutions • Onsite renewables • Alumina process heat • Renewable diesel	**~25-30%**	**~90%**
Nature-based solutions • Development connected to our operating regions	**~5%**	**-%[1]**

Capital allocation driven by NPV/MAC, execution readiness, asset strength

Greater use of commercial solutions and partnerships are easing capex requirements this decade

Major fleet electrification expected post-2030

[1] Excludes capitalised voluntary offset costs and compliance based offset costs (e.g. Australian Safeguard mechanism ACCUs), estimated at ~$1bn to 2030. Rio Tinto nature-based solutions are opex as project funding does not meet accounting capitalisation criteria
[2] Excludes costs expensed to the income statement associated with early-stage R&D and studies

Investment to de-risk from carbon legislation and reduce opex

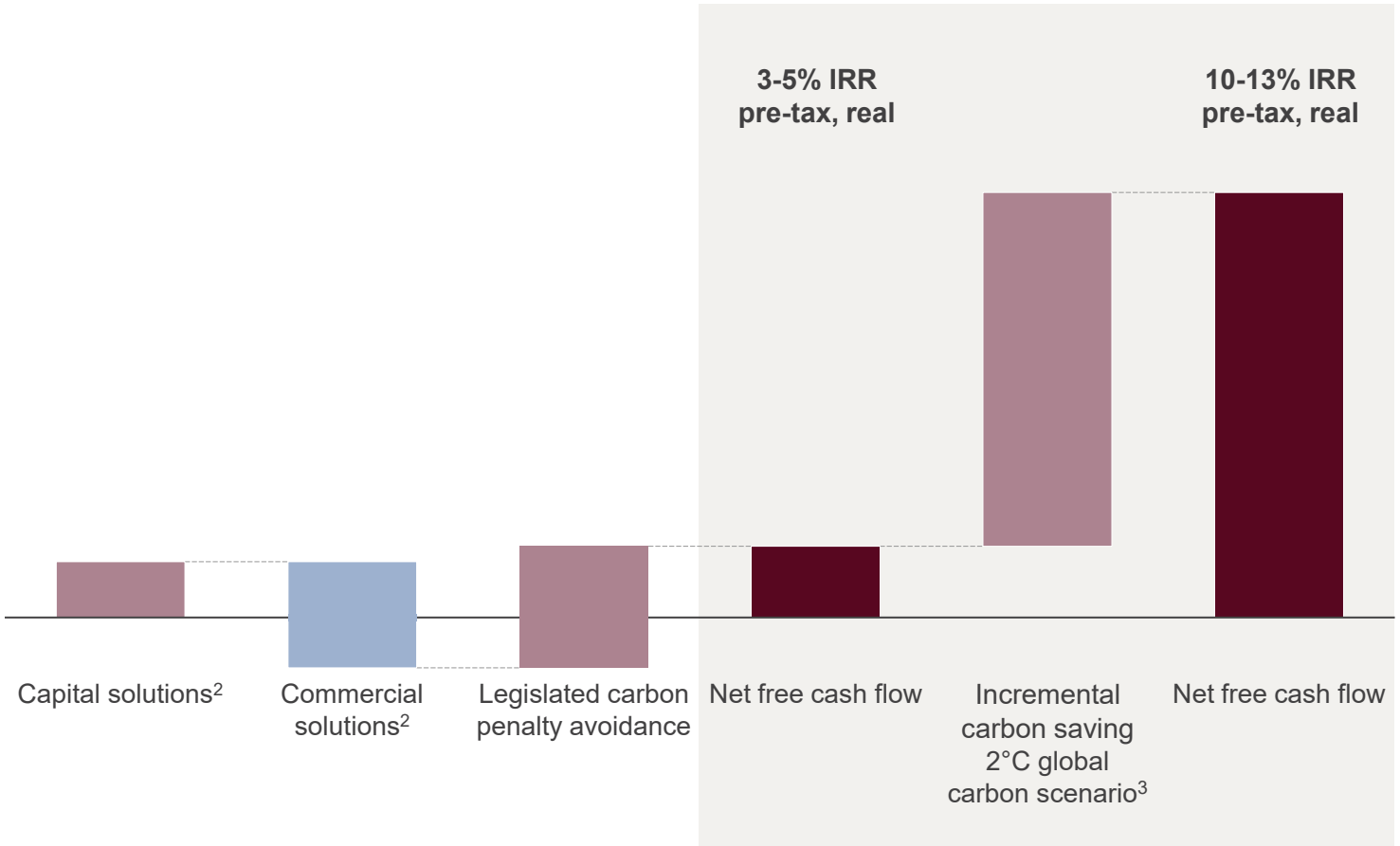
Increasing influence of carbon taxes

- ~50% of our emissions are now in scope for legislated carbon penalties
- Costs not material in 2023, but will have greater impact as transitionary arrangements unwind
- Uncertain future carbon pricing provides enhanced returns for decarbonised assets

Reducing cost volatility

- Fossil fuels account for ~16% of operating costs
- Decarbonisation provides an opportunity to replace this volatility with long term stability

Annual average net operating costs ($m) from decarbonisation programme[1]

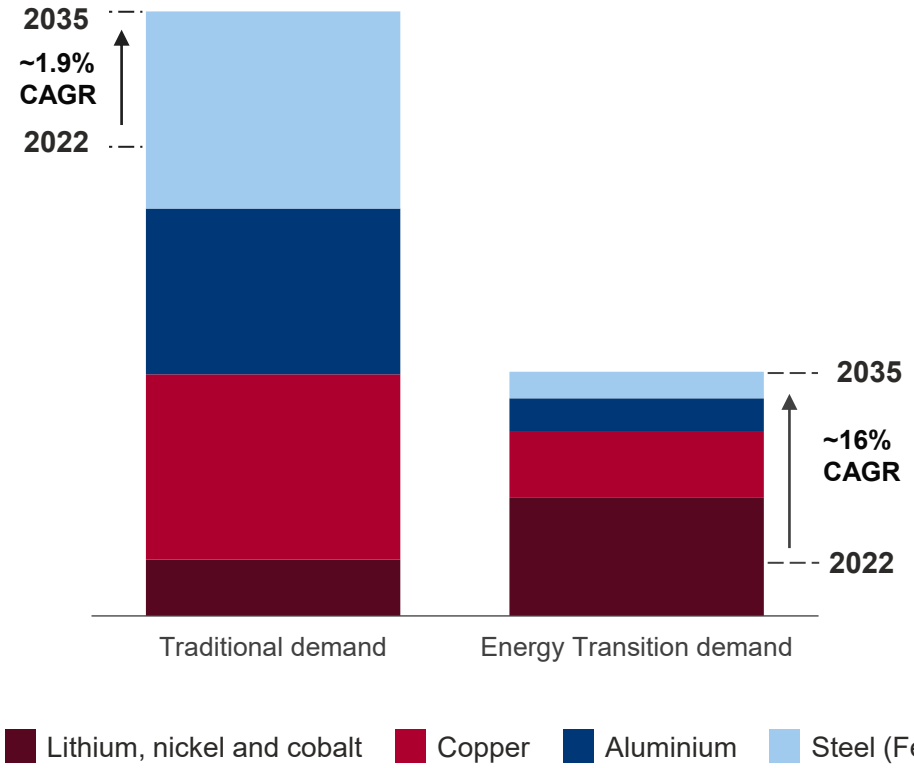


[1] Annual average net operating costs reflect average cost savings / incremental costs over the period 2024-2039, recognising timing differences in delivery of projects and variability in underlying cash flows
[2] Capital solutions relate to portfolio projects with large-scale upfront capital investment. Commercial solutions relate to projects delivered through contractual mechanisms
[3] Modelled using Rio Tinto's Competitive Leadership scenario

Outlook underpins a strong Rio Tinto for the long term

Total commodity demand by 2035 (<2°C scenario, CuEq)[1]

Total demand growth of ~4% CAGR between 2022 and 2035 with net demand uplift from Traditional and Energy Transition broadly equal



Attractive long-term demand fundamentals

Primary demand[2], Mtpa	2003-2022	2023-2035	Uplift
Copper	20.5	29.8	+45%
Aluminium	49.0	77.0	+57%
Lithium	0.22	2.34	+945%
Iron Ore	1,862	2,200	+18%

[1] Copper equivalent demand uses average annual prices from 2018-22 with finished steel demand in iron ore equivalent units. Energy Transition demand calculated on a gross basis. Based on Rio Tinto's Competitive Leadership scenario. The contribution to growth is based on a net basis, for example, electric vehicles generate incremental demand for copper but actually contain less steel than internal combustion engines

[2] Wood Mackenzie, CRU; average primary market demand over the period. Iron ore refers to global iron ore demand

Rio Tinto

Appendices

Guidance

Production guidance

	2023 Guidance	2024 Guidance
Pilbara iron ore shipments[1] (100% basis)	320 – 335Mt[2]	323 – 338Mt
Copper		
Mined Copper (consolidated basis)[3]	590 – 640kt	660 – 720kt
Refined Copper	160 – 190kt	230 – 260kt
Aluminium		
Bauxite	54 – 57Mt[4]	53 – 56Mt
Alumina	7.4 – 7.7Mt	7.6 – 7.9Mt
Aluminium	3.1 – 3.3Mt	3.2 – 3.4Mt
Minerals		
TiO_2	1.1 – 1.4Mt[4]	0.9 – 1.1Mt
IOC pellets and concentrate[5]	9.3 – 9.8Mt	9.8 – 11.5Mt
B_2O_3	~0.5Mt	~0.5Mt

RioTinto

[1] Pilbara shipments guidance remains subject to weather, market conditions and management of cultural heritage | [2] In the upper half of the range | [3] Includes Oyu Tolgoi on a 100% consolidated basis and continues to reflect our 30% share of Escondida | [4] In the lower end of the range | [5] Iron Ore Company of Canada

Group level financial guidance

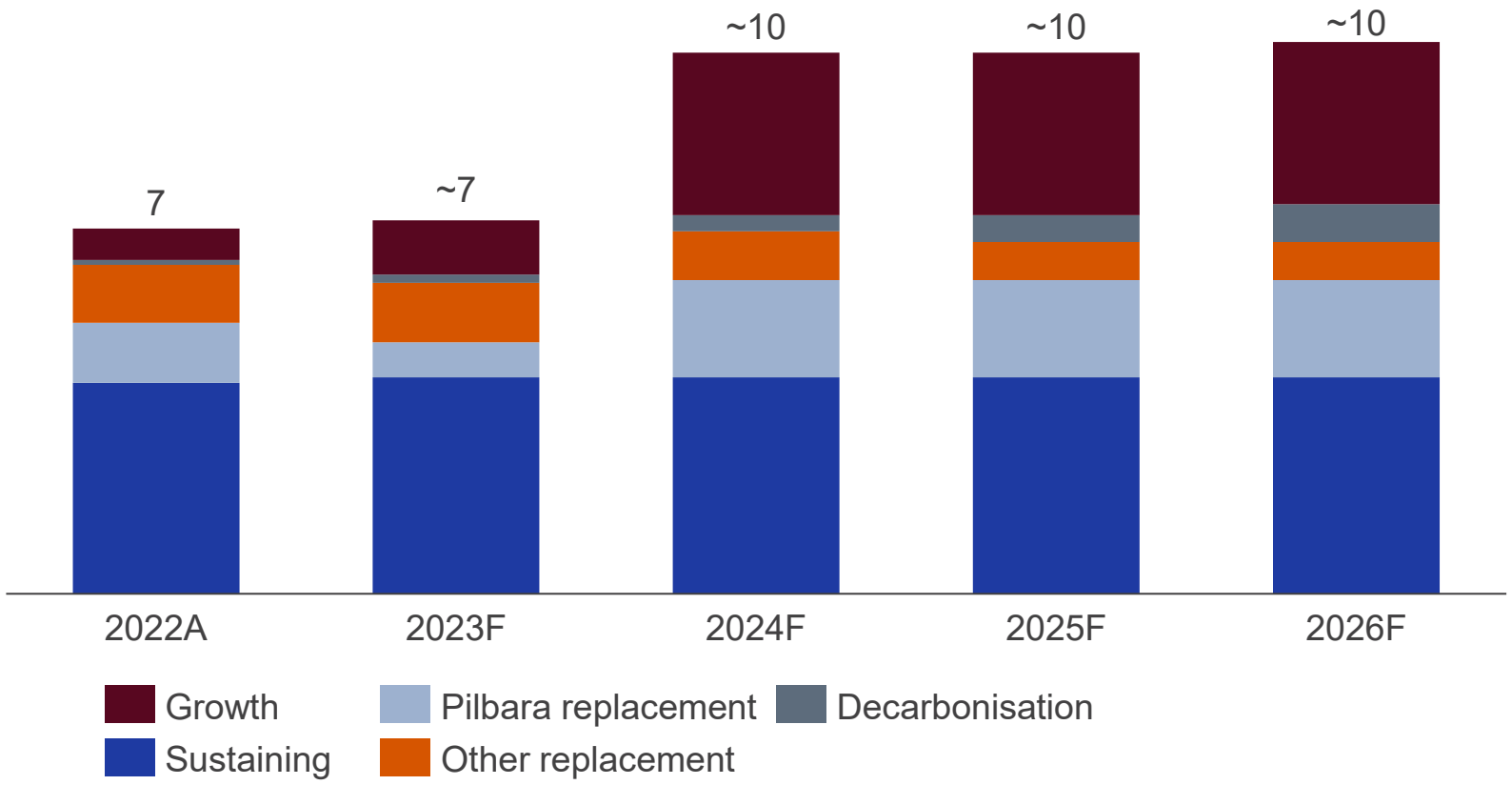
	2023	2024-2026 (per year)
Capex		
Total Group[1]	~$7.0bn	~$10.0bn
Growth capital	~$1.0bn[2]	Up to $3bn
Sustaining capital	~$4.0bn	~$4.0bn
Including Pilbara sustaining[3]	*~$2.0bn*	*~$1.8bn*
Replacement capital	~$1.7bn	~$2 to $3bn
Decarbonisation capital	~$0.15bn	~$1.5bn cumulative
Effective tax rate	~30%	
Shareholder returns	Total returns of 40 – 60% of underlying earnings through the cycle	

[1] Including Simandou | [2] We expect our share of investment in Simandou to be ~$0.2 billion in H2 2023 | [3] Subject to ongoing inflationary pressure

Disciplined investing for growth and decarbonisation

Capital expenditure profile (Rio Tinto share)

$bn

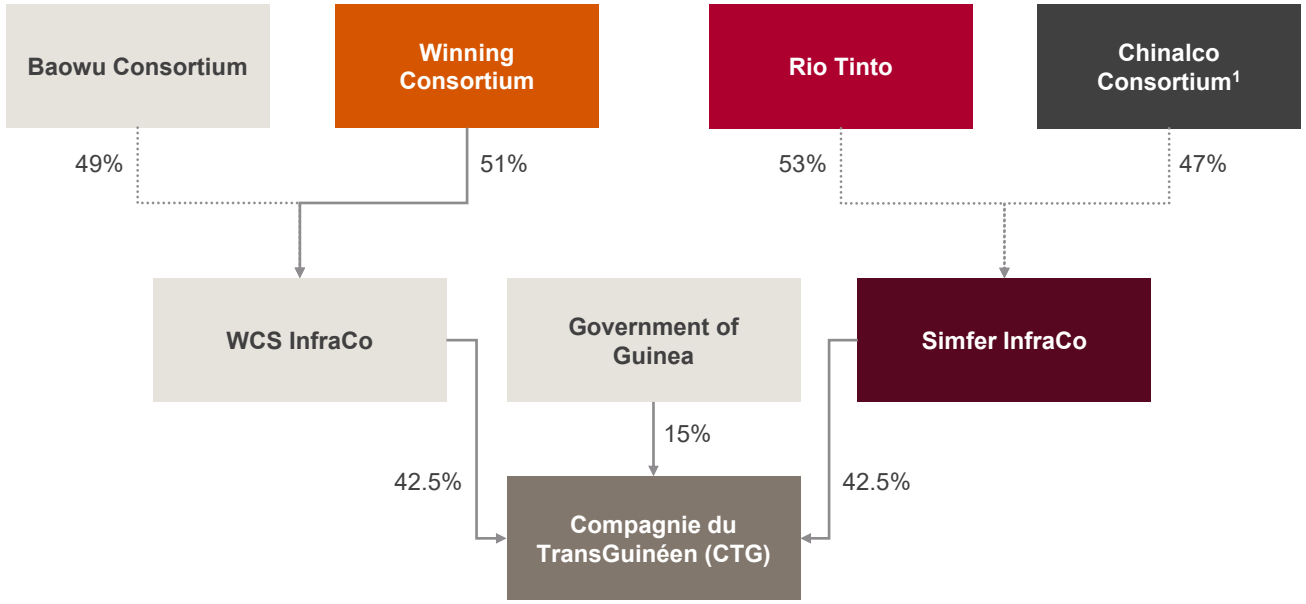


- We expect our share of capital investment to be around $7.0bn (previously $7.5bn) in 2023
- Sustaining capex of around $4.0bn per annum from 2024 to 2026, includes Pilbara of $1.8bn per annum on average
- Replacement capex of around $1.7bn in 2023 increasing to $2 to $3bn per year from 2024 to 2026
- Growth capex of around $1.0bn in 2023 rising to up to $3.0bn from 2024 to 2026

Simandou

WCS and Simfer have separate scopes to leverage expertise, and reduce risk and costs

Structure during operations



Infrastructure assets will be funded 50/50 overall by WCS and Simfer in a co-development arrangement of focused scopes[2]. During construction, Simfer will hold **34%** of WCS entities responsible for construction

Simfer InfraCo will construct on behalf of CTG:

- **70 km** Simfer spur line
- **60 Mtpa** transhipment vessel (TSV) port

WCS InfraCo will construct on behalf of CTG:

- **552 km**[3] main rail line and WCS spur line
- **60 Mtpa** barge wharf

Once infrastructure is complete, CTG will own and, with independent management team, operate all port and rail assets, excluding the WCS barges and Simfer TSVs

CTG shareholders: 42.5% Simfer InfraCo, **42.5%** WCS InfraCo and **15%** Government of Guinea (during construction and operation)

1. 75% Chinalco, 20% Baowu, 2.5% China Rail Construction Corporation and 2.5% China Harbour Engineering Company
2. A true-up mechanism at the end of construction will top up/down to ensure 50/50 equal spend
3. Comprised of a 536km mainline and a 16km spur

Compagnie du TransGuinéen co-development model

Robust governance structure

7-member CTG Board of Directors

Guinean Chairman appointed by the State

Transitional arrangements during construction to comply with existing conventions

Simfer and WCS have equal rights including capacity share split

Sustainability committee to oversee ESG / HSSEC performance

Leverages expertise of Winning Consortium Simandou (WCS) know-how in Guinea and Rio Tinto ESG capability

The Co-Development Agreement (CDA) with the State sets the project scope for WCS and Simfer and links the existing conventions and investment frameworks

The Compagnie du TransGuinéen (CTG) Shareholders Agreement provides for a robust governance model (including rights to appoint directors and senior managers), an HSSEC, business integrity and quality assurance regime, regular independent audits, HSSEC secondees and regular KPI reporting.

Other transaction documents that are currently being negotiated will provide for a true-up mechanism between Simfer and WCS, to equalise the costs of constructing the rail and port infrastructure; and shareholders agreements to implement that governance model, including HSSEC, to the WCS and Simfer project companies that are undertaking construction.

Simandou project life of mine key statistics[1]

IRR[2] in low double digits anticipated for Simfer mine and combined infrastructure through ownership of CTG

Simfer Mine

Overview	**Mine**	Open pit, 1.5Bt Ore Reserves, Block 3 only
	Ownership	Rio Tinto (45%), Chinalco Iron Ore Holdings (40%) Government of Guinea (15%)
Construction	**Construction time**	~3 years
	First Production	By the end of 2025
	Ramp-up	~30 months
	Capex (Mine and TSVs)	$5.1bn nominal (100% basis); $2.7bn RT share[3]
Operation	**Throughput rate**	60 Mtpa
	Product specification	Testing underway for dual fines product – for blast furnace and direct feed: ~65.3% Fe and low impurities
	Mine life	26 years
	Operating cost (LOM[4])	$10/wmt (mine gate)
	Sustaining capex (LOM[4])	$1/wmt
	Accounting treatment[5]	Simfer Jersey (53% owned by Rio Tinto) owns 85% of mine (fully consolidated)

Simfer / CTG Infrastructure

Overview	**Scope**	Dual track, multi-user railway and transhipment port
	Ownership	Simfer (42.5%), WCS (42.5%) Government of Guinea (15%)
Construction	**Construction time**	~30 months
	Commissioning	Rail and port: ~30-42 months post signing
	Capex	Investment in WCS rail & port: $3.0bn nominal (Simfer, 100% basis); $1.6bn RT share[3] Simfer InfraCo port and rail spur: $3.5bn nominal (Simfer,100% basis); $1.9bn RT share[3]
Operation	**Capacity**	120 Mtpa (of which 50% is for Simfer's use)
	Concession life	35-year operating period to cover investment repayment
	Operating cost (LOM[4])	Rail: $8/wmt; Port: $7/wmt
	Sustaining capex (LOM[4])	$2/wmt
	Accounting treatment[5]	Simfer Jersey (53% owned by Rio Tinto) owns 42.5% of infrastructure (expected to be proportionally consolidated)

1. See supporting references for categorisation and reporting of Simandou's Mineral Resources and Ore Reserves as well as the production targets underpinning the financial information on slide 4
2. IRR of 11-13% reported on a post-tax, real basis. Based on Wood Mackenzie and CRU average pricing for iron ore (65% grade), with a premium applied for DR product
3. By the end of 2023, Rio Tinto expects to have invested $0.5 billion (Rio Tinto share) to progress critical path works. Rio Tinto's share of capital investment remaining to be spent from 1 January 2024 is expected to be $5.7 billion
4. Life of mine, provided in real terms
5. Accounting treatment remains subject to full review of the final transaction agreements, assessment represents our current expectation during operation

Tax settings will provide a sustainable sharing of benefits between partners

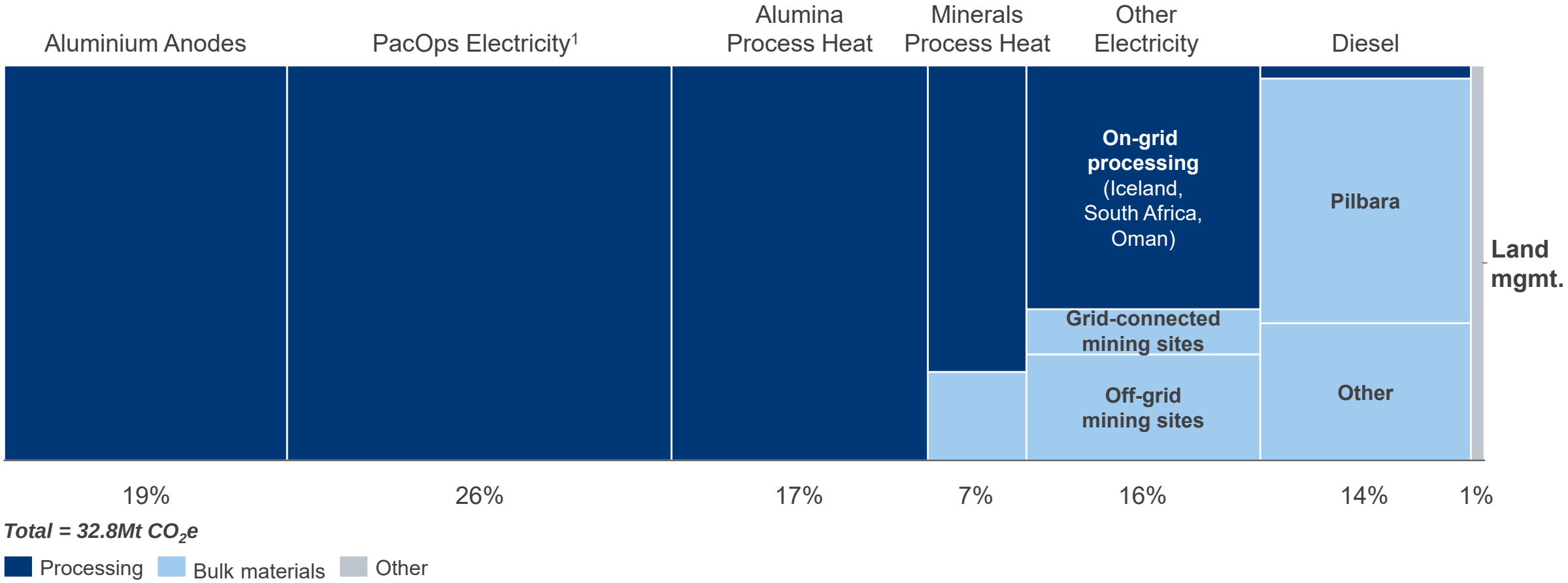
Key Tax Settings	Simfer Mine	Simandou Infrastructure
Governing framework	Simfer Convention Modified by the Bipartite Agreement	WCS Port and Rail Conventions Modified by the Co Development Agreement
Corporate tax	Year 1-8: 15% Year 9+: 30%	Year 1-17: 15% Year 18+: 25%
Mining tax	3.5%[1] on exports	N/A
Transhipping royalty	N/A	$0.50/t royalty on tonnes shipped Royalty can be partially offset by other taxes paid[4] (reducing over time[5])
Local development contribution	0.25% of turnover[2]	n/a
Dividend withholding tax	n/a	Year 1-17: 0% Year 18+: 5%
Interest withholding tax	n/a	10% on related party loans 4% on third party loans
Customs	5.6% customs duty on imports used in mining process during operation[3]	1% registration/administrative levy & 5.6% customs duty on imports required for the project during operation[6]

1. FOB value. 0% on products used for local steel production
2. Annual turnover of Simfer SA after deducting fees for services in relation to the port and rail infrastructure
3. Examples of affected imports include inter alia plant, equipment, vehicles, fuels etc. Registration duty capped at US$100k is also payable. Exemption for imports directly involved in operating the mining infrastructure and port and rail
4. Interest withholding tax and corporate tax
5. Total possible offset: Year 1-10 $0.40/t; Year 11-15 $0.35/t; Year 16-30 $0.34/t-$0.20/t; Year 31+ $0.20/t
6. Examples of affected imports include inter alia materials, machinery, certain fuels etc. Excludes essence/gasoline (instead subject to 20% customs duty)

Decarbonisation

Our emissions differ from our peers: ~80% arise from processing metals and minerals which are in hard to abate sectors

Scope 1 & 2 emissions, 2022 actuals
(Mt CO_2e, equity basis)

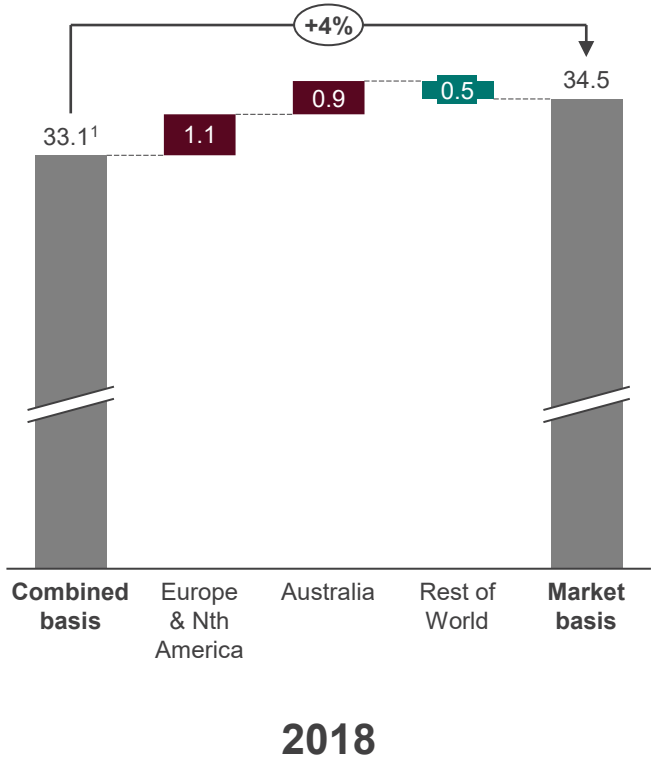


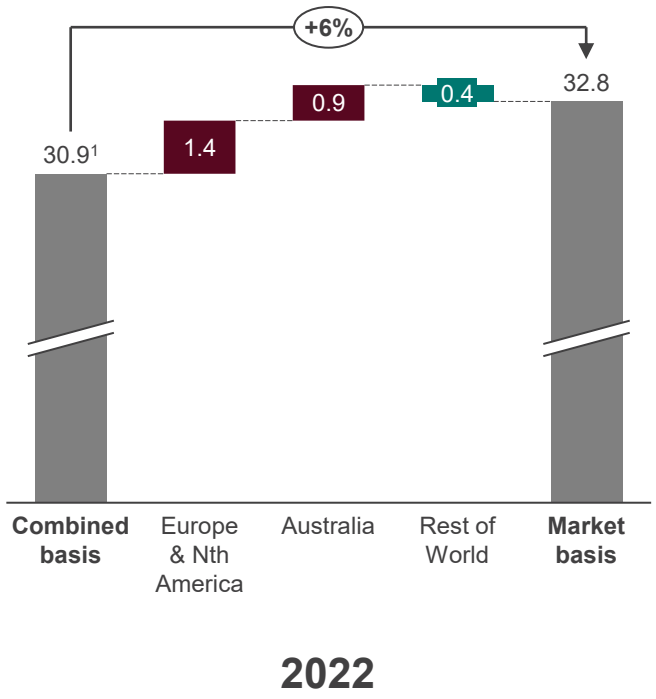
1. Total PacOps emissions represent 50% of group emissions, largely allocated to PacOps electricity (26%), alumina process heat (15%) and anodes (6%)

Updated emissions reporting methodology

Scope 1 & 2 underlying emissions[1]

(Mt CO_2e, equity basis)





Market basis is now our primary measure

- Emissions previously reported on a single measure combining location and market basis
- New dual reporting aligned to GHG Protocol Corporate Standard and emerging best practice

Market basis incentivises addition of renewables

- Recognises new Rio Tinto contracted energy attributes
- No ‘free carry’ from third party decarbonising of grids

ISAL now recognised in emissions base

- ~1.9Mt of reported emissions as Icelandic renewable credentials sold into European market
- Smelter electricity still sourced from islanded renewable hydro-electric supply

1. Combined basis emissions for 2018 and 2022 are both higher than previously reported in the 2022 Climate Change Report, reflecting portfolio equity changes

500,000+ hectares of land committed to high integrity nature-based solutions globally by 2025

Developing nature-based solutions in our operating regions

Addressing nature loss, climate change and community challenges

Financing urgent nature protection and restoration

Generating high quality carbon credits to complement our decarbonisation efforts

Developing high integrity projects in Guinea, Madagascar and South Africa

Aiming for 1 Mtpa development portfolio by 2030 – pilots advanced in Madagascar, opportunities to replicate in Guinea and South Africa in 2024

Building nature-based solutions partnerships

Sourcing and investing in high-quality nature-based solutions projects to meet compliance requirements (e.g. Safeguard Mechanism) or complement our development portfolio

Developing long-term partnerships that provide additional support to projects and guarantee credits offtake

In May 2023, our Boron operation became the world's first open pit mine to go 100% biofuel – reducing up to 45kt of CO_2e per annum

Biofuels approach

- **Electrification will be the most efficient and cost-effective pathway** to our zero-emission end state for diesel we believe, with meaningful effect post 2030. In the interim, we need to develop and deploy **alternative abatement solutions available today, such as biofuels.**
- Biofuels critical to our transition and **pivotal in supporting our near-term emission reduction commitments** (2030). It is technically feasible with successful trials at Boron and Kennecott Copper operations.
- Key **challenge is access to sustainable non-edible feedstock** at acceptable product premiums – we must consider the **GHG impact across full life cycle** of the biofuel (both scope 1 and scope 3).
- In current markets, this is challenging and **results in product costs higher than diesel fuels** and we expect sustainable biofuels will likely continue to be relatively expensive outside subsidised regions.
- The pragmatic pursuit of biofuels as an interim decarbonisation solution serves multiple benefits:
  - Protects us against **carbon tax** scenarios;
  - Enables a response to **carbon penalties or subsidy opportunities**; and
  - Affords **time for suppliers, markets, supply chains and regulators to mature future zero-emission electrification technologies** and ensure **safe deployment** in our operations.
- We are exploring **opportunities to support the development of the biofuel value chain**, influence the type of biofuel feedstock and build scale.

Boron case study

- In May, we fully transitioned to renewable biofuel at Boron in the U.S, **reducing up to 45kt of CO2-e per year**.
- Boron is the **first open pit mine globally to fully transition to renewable biofuel**.
- Trial conducted in 2022 in partnership with Neste and Rolls-Royce to use Neste MY Renewable Diesel™ - 100% renewable raw materials such as used cooking oil and animal fat waste.
- Trial showed trucks with **renewable diesel delivered similar performance and reliability to conventional diesel**.
- Important first step and will lead to further opportunities to decarbonise our operations with biofuels and an excellent example of what can be achieved when **partners (State of California, Neste and Rolls-Royce) collaborate toward a carbon reduction goal**.

Above: Neste MY Renewable Diesel is a Hydrotreated Vegetable Oil (HVO) made from 100% sustainably sourced renewable raw materials – used at Boron

Below: Biofuel powered truck at our Boron operations in California

The transition to renewable power generation in our Pilbara iron ore business will deliver additional value

Gas displacement

Approximately 600 – 700MW of renewable power generation is estimated to be required to displace up to 80% of gas consumption for our Pilbara iron ore operations.

The proposed renewable portfolio to displace the majority of gas usage is value accretive.

Partnerships

We are exploring a number of innovative solutions to accelerate decarbonisation, such as use of existing land access and post-mine closure land for future renewable developments.

This includes collaboration with Traditional Owner groups in the region.

Progressing studies

We are continuing to study and negotiate the development of the proposed coastal solar farm.

We are also pursuing additional opportunities to decarbonise our operations by advancing studies on other sites adjacent to our network (including additional solar/wind and battery solutions).

Potential coastal solar site being studied

Simon Trott with Yindjibarndi Aboriginal Corporation chief executive Michael Woodley

Case Study

Rio Tinto and Yindjibarndi Energy Corporation (YEC) have signed a memorandum of understanding (MOU) to explore opportunities to collaborate on renewable energy projects on Yindjibarndi country in the Pilbara

- Accelerated schedule with first operations starting from 2027 - 2030
- Initial development of 75 – 150MW_{AC} solar PV
- Close proximity to operations, reducing transmission infrastructure spend
- Gas displacement of 2.5 – 5.0PJ from existing gas-fired power stations per annum
- Carbon savings of 130 – 260kt CO_2e per annum

"This will strengthen our existing partnership and provide long term benefits for our community, while also ensuring that we can protect and preserve the areas of cultural, spiritual and environment significance within our Ngurra."

Michael Woodley, YEC chief executive

Iron & Titanium has advanced breakthrough decarbonisation options – creating optionality to adjust to a changing environment

Biocarbon

A drop-in/short-term opportunity to implement a proven technology in Canada – to produce sustainable biocarbon a strategic raw material essential to achieve Rio Tinto's decarbonisation commitments within several of our business units.

BlueSmelting™

A technological change combining mature pre-reduction technology from an existing smelter gas-based process, with advanced hydrogen-based technologies under development.

Minerals processing decarbonisation – Rio Tinto Technology and Critical Minerals Centre

The concept was to develop a portfolio of fast pace and agile options in order to accelerate and de-risk future projects and meet decarbonisation targets.

Several of them have been delivered safely in record time, drawing on the skills and experience of the teams based in Canada and globally.

Technology and Critical Minerals Centre in Sorel-Tracy

Biocarbon Case Study – Aymium partnership

Rio Tinto and Aymium have worked together over the past two years to develop a biocarbon product that has demonstrated exceptional efficacy in ilmenite smelting during internal trials at the Iron and Titanium Quebec Operations facilities in Sorel-Tracy, Quebec.

Our recently strengthened partnership marks a significant milestone in our joint efforts to accelerate the transition away from fossil-based energy sources, with the objective of producing renewable biocarbon at scale to help Rio Tinto achieve its 2030 emission reduction targets.

- Accelerated development schedule 2022-2024
- Successful full-scale trials in May 2023 at RTIT Quebec Operations
- Learnings from BlueSmelting™ development and construction project
- Significant emissions reduction potential across all business units of Rio Tinto in Canada

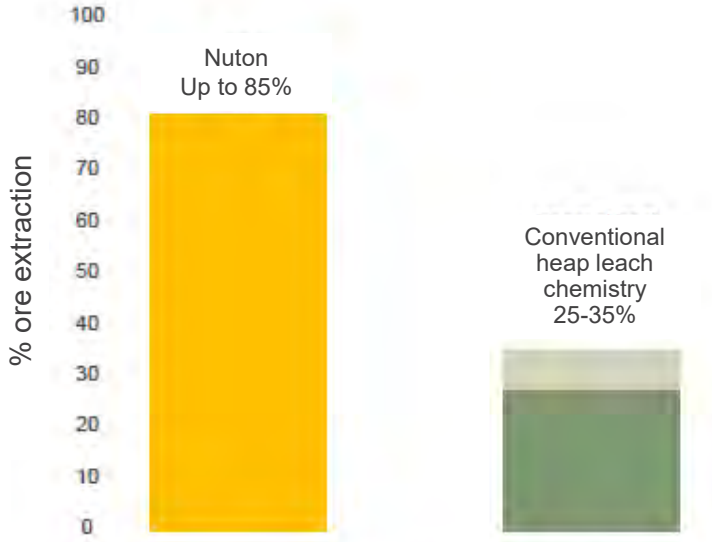
"We are delighted to work with Aymium to develop and trial this renewable biocarbon product that has real potential as an alternative, low carbon source for our processes. We are investing to deepen our partnership, as part of our commitment to finding better ways to decarbonise our operations and the supply chains we are part of."

Sinead Kaufman, Chief Executive Minerals

Nuton™

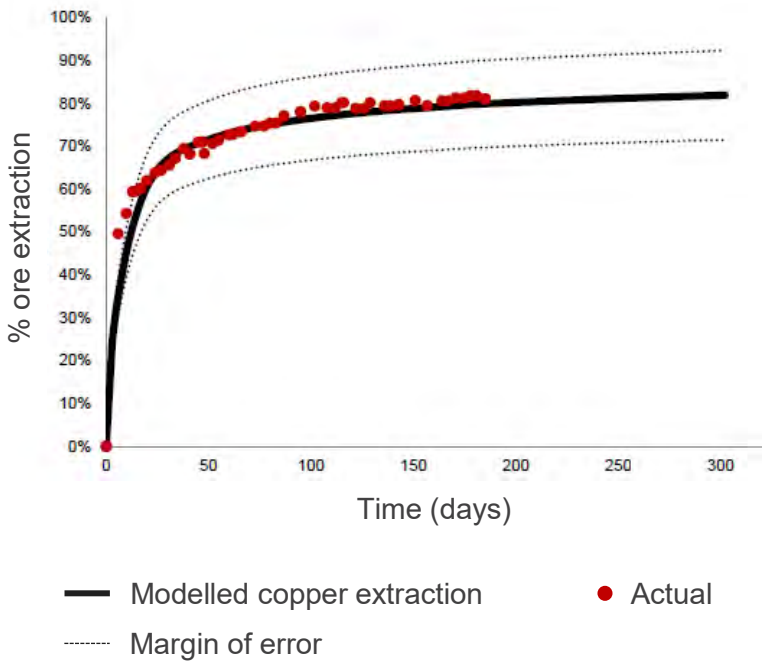
Nuton™ expected to deliver exceptional recovery

Up to 85% recovery from primary copper sulphides, compared to 25-35% from traditional heap leach



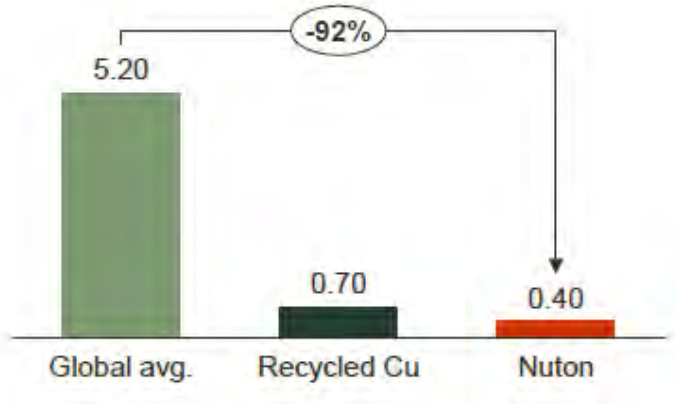
% extractions from primary copper mineralogy

Actual test results have supported our modelling work



Nuton delivers leading ESG performance[1]

Carbon intensity (CO_2/t)



- Lower CO_2 emissions, TMM[2] and friendly ore to 99% cathode process
- Efficient water consumption and no tailings
- A broad range of applications (brownfield, greenfield and reclamation)

[1] Carbon emissions intensity data compares the mine to cathode process of a concentrator (including smelting and refining), recycled cathode and Nuton cathode. The carbon intensity of Nuton cathode refers to a specific deployment case and depends on the parameters of the operation where it is deployed. Actuals at other deployment sites might diverge from the data shown in the chart. At each site, a Life Cycle Assessment will be conducted to measure specific carbon emissions intensity.

[2] TMM = total material moved

The Nuton™ portfolio today

nuton | A Rio Tinto venture

Asset/ company	Current investment/agreement	Key terms/ Nuton rights
Johnson Camp Mine, AZ **Excelsior Mining Inc. (TSX)**	Nuton Collaboration Agreement and option to JV Agreement Agreement with full pathway on demonstration and deployment	• Testing programme underway • Option to earn-in up to 49% at the asset level with 100% marketing rights
Yerington, NV **Lion Copper & Gold (TSX)**	Option to Earn-in Agreement Stage 2 in progress	• Option to earn up to 75%, with operating and marketing rights
Cactus Mine, AZ **Arizona Sonoran (ASCU) (TSX-V)**	Own 7.2% ASCU Investor Rights Agreement Testing Agreement	• Testing programme underway • Nuton exclusivity • Tech Committee rep
Los Azules, Argentina **McEwen Copper (MEC) (Private)**	Own 14.5% McEwen Copper (Private), Nuton Collaboration Agreement	• Testing programme underway • MEC Board seat • Nuton collaboration committee representative • Exclusivity over heap-leach technologies until Feb 2025
AntaKori, Peru **Regulus Resources (REG) (TSX-V)**	Own 16% Regulus Investor Rights Agreement	• Testing programme underway • REG Board seat, Tech Committee representative

Common acronyms

$	United States dollar	**CuEq**	Copper equivalent	**km**	kilometre	**PNG**	Papua New Guinea
AIFR	All Injury Frequency Rate	**CDA**	Co development agreement	**Kt**	Kilo tonnes	**PPA**	Power Purchasing Agreement
Al	Aluminium	**dmtu**	Dry Metric Tonne Unit	**Ktpa**	Kilo tonnes per annum	**QAL**	Queensland Alumina Limited
AUD	Australian dollar	**DR**	Direct Reduction	**KUC**	Kennecott Utah Copper	**R&D**	Research and Development
B_2O_3	Boric oxide	**DRI**	Direct Reduction Iron	**LHS**	Left hand side	**RBM**	Richards Bay Minerals
BF	Blast furnace	**DWT**	Deadweight tonnage	**Li**	Lithium	**REC**	Renewable Energy Certificate
bn	Billion	**E&E**	Exploration and Evaluation	**LME**	London Metal Exchange	**RHS**	Right hand side
BOF	Blast Oxygen Furnace	**EAF**	Electric Arc Furnace	**M&A**	Mergers and Acquisitions	**RMB**	Renminbi
BSL	Boyne Smelter Limited	**EBITDA**	Earnings Before Interest, Taxes, Depreciation and Amortisation	**MAC**	Marginal Abatement Cost	**RT**	Rio Tinto
Bt	Billion tonnnes	**ESG**	Environmental, Social, and Governance	**MENA**	Middle East and North Africa	**RT Share**	Rio Tinto Share
C	Celcius	**EU**	European Union	**Mlb**	Million pounds	**RTIT**	Rio Tinto Iron and Titanium
c/lb	US cents per pound	**F**	Forecast	**Mt**	Million tonnes	**RTM**	Rio Tinto Marines
CAGR	Compound annual growth rate	**Fe**	Iron	**Mtpa**	Million tonnes per annum	**SPS**	Safe Production System
Capex	Capital expenditure	**FOB**	Free on board	**MW**	Megawatt	**tCO_2**	Tonne of carbon dioxide
CBAM	Carbon Border Adjustment Mechanism	**GDP**	Gross Domestic Product	**MWh**	Megawatt hour	**tCO_2e**	Tonne of carbon dioxide equivalent
CCS	Carbon Capture and Storage	**GHG**	Greenhouse gas	**Ni**	Nickel	**TSV**	Transhipment vessel
CCUS	Carbon capture, utilisation and storage	**GJ**	Gigajoules	**NPV**	Net present value	**UG**	Underground
CFR	Cost and freight	**H_2**	Hydrogen	**OEM**	Original Equipment Manufacturer	**US**	United States
CIOH	Chinalco Iron Ore Holdings Consortium	**HBI**	Hot briquetted iron	**OT**	Oyu Tolgoi	**USD**	United States dollar
CO_2	Carbon dioxide	**HSSEC**	Health Safety Security Environment and Community	**OTFS20**	Oyu Tolgoi Feasibility Study 2020	**VPPA**	Virtual power purchase agreement
CO_2e	Carbon dioxide equivalent	**HMS**	Heavy mineral sands	**P&L**	Profit and loss	**WCS**	Winning Consortium
CSP	Communities and Social Performance	**IOC**	Iron Ore Company of Canada	**PacOps**	Rio Tinto Pacific Operations	**YoY**	Year on Year
CTG	Compagnie du TransGuinéen	**IRR**	Internal rate of return	**PDR**	People's democratic republic	**YTD**	Year to date
Cu	Copper	**JV**	Joint Venture	**PGE**	Platinum group elements		

Definitions

Calculated abatement carbon price

The levelised marginal cost of abatement at a zero carbon price

Calculation:
Discounted sum of all abatement costs over time at a zero carbon price /
Discounted sum of all abated emissions over time

Discounted at the hurdle rate RT uses for all investment decisions

Rio Tinto