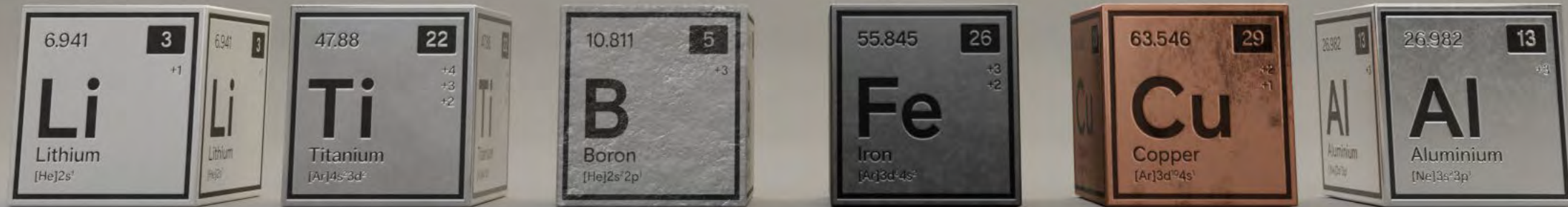


RioTinto

# Investor Seminar 2024



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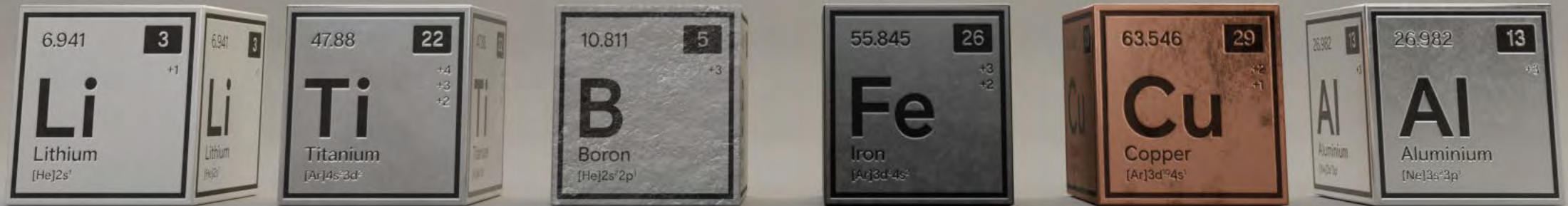
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# Agenda

Topic	Presenter
Safety share (Rincon)	Guillermo Caló
Overview	Jakob Stausholm (presenter) Peter Cunningham and Nigel Steward (contributing)
Best Operator	Mark Davies
Excel in Development	Mark Davies
Lithium / Minerals update	Sinead Kaufman
Iron Ore update	Simon Trott
Q&A 1	All above
Break	
Culture panel	Isabelle Deschamps / James Martin / Kellie Parker / Simon Trott
Copper update	Katie Jackson
Aluminium update	Jérôme Péresse
Markets and Decarbonisation panel	Bold Baatar / Jérôme Péresse / Mark Davies
Financials	Peter Cunningham
Wrap up	Jakob Stausholm
Q&A 2	All
Close followed by lunch	All

# Executing our strategy for long-term value

Jakob Stausholm





The background of the slide is a wide-angle photograph of a desert landscape at sunset. In the foreground, there is a field of dry, yellowish-brown grass. In the middle ground, a small industrial or mining site with several buildings and structures is visible. In the background, a range of dark, rugged mountains stretches across the horizon. The sky is filled with soft, orange and pink clouds, and the sun is low on the horizon, creating a warm, golden light. On the right side of the image, there are several thin, wavy, reddish-brown lines that appear to be part of a stylized graphic or map overlay.

# RioTinto

## Safety Share

Guillermo Caló

Managing Director, Rincon Lithium project



# Safety remains our highest priority

On 23 January 2024, four colleagues from our Diavik Diamond mine and two airline crew members died in a plane crash near Fort Smith, Northwest Territories Canada.

We are awaiting findings from an investigation into the plane crash.

On 26 October 2024, Morlaye Camara, an employee of one of our contractors at the SimFer Port Project in Morebaya, part of our Simandou operation, was injured, and subsequently passed away from his injuries.

Morlaye Camara was a grinder operator and had worked on the SimFer Port Project for five months.

We are committed to learn from these tragic incidents.



# Investor Seminar presenters

The full Executive Committee and our Chief Scientist



**Bold Baatar**  
Chief Commercial Officer



**Peter Cunningham**  
Chief Financial Officer



**Mark Davies**  
Chief Technical Officer



**Isabelle Deschamps**  
Chief Legal, Governance and Corporate Affairs Officer



**Katie Jackson**  
Chief Executive Copper



**Sinead Kaufman**  
Chief Executive Minerals



**James Martin**  
Chief People Officer



**Kellie Parker**  
Chief Executive Australia



**Jérôme Péresse**  
Chief Executive Aluminium



**Jakob Stausholm**  
Chief Executive



**Nigel Steward**  
Chief Scientist



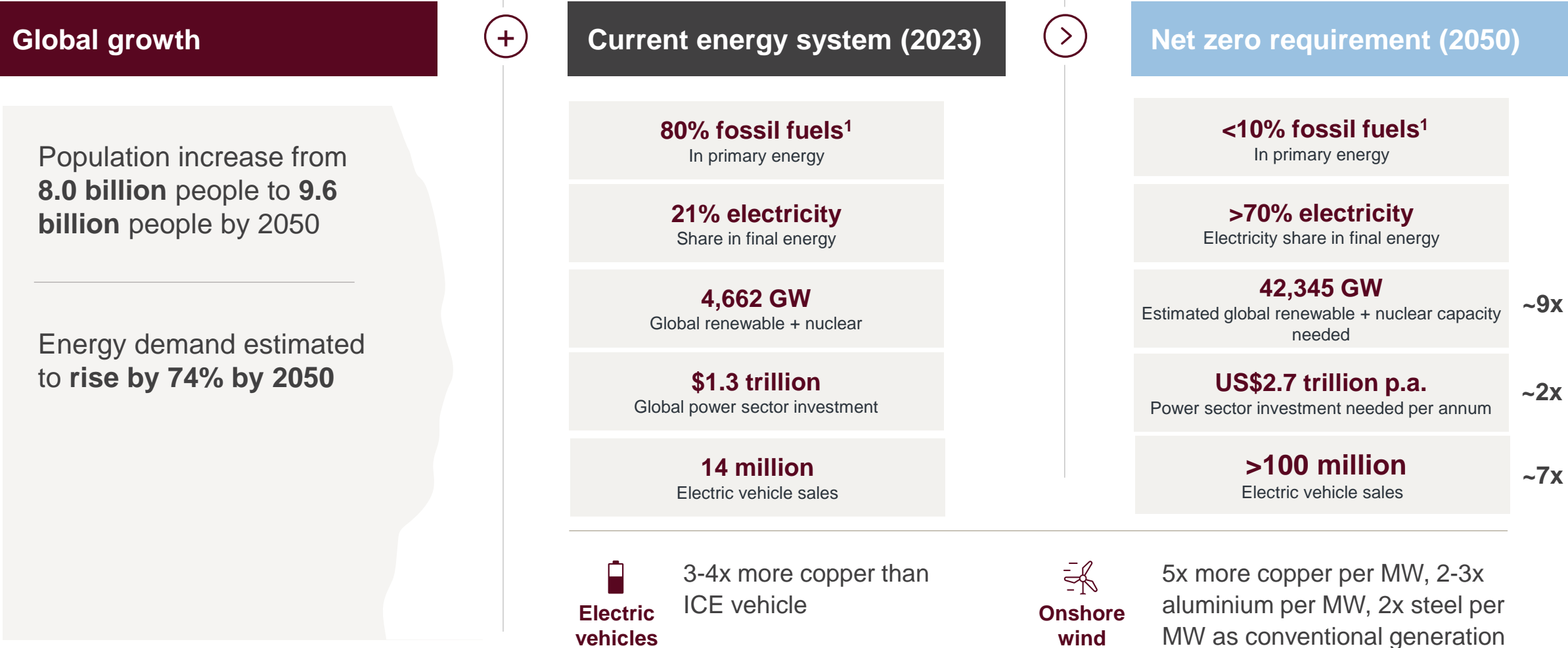
**Simon Trott**  
Chief Executive Iron Ore



# RioTinto

01 H Hydrogen																	02 He Helium J E				
03 Li Lithium	04 Be Beryllium															05 B Boron	06 C Graphite	07 N Nitrogen	08 O Oxygen	09 F Fluorine	10 Ne Neon
11 Na Sodium / salt	12 Mg Magnesium															13 Al Aluminium	14 Si Silicon	15 P Phosphorus	16 S Sulphur / Sulphuric Acid	17 Cl Chlorine	18 Ar Argon
19 K (Potash)	20 Ca Calcium	21 Sc Scandium	22 Ti Titanium	23 V Vanadium	24 Cr Chromium	25 Mn Manganese	26 Fe Iron	27 Co Cobalt	28 Ni Nickel	29 Cu Copper	30 Zn Zinc	31 Ga Gallium	32 Ge Germanium	33 As Arsenic	34 Se Selenium	35 Br Bromine	36 Kr Krypton				
37 Rb Rubidium	38 Sr Strontium	39 Y Yttrium	40 Zr Zirconium	41 Nb Niobium	42 Mo Molybdenum	43 Tc Technetium	44 Ru Ruthenium	45 Rh Rhodium	46 Pd Palladium	47 Ag Silver	48 Cd Cadmium	49 In Indium	50 Sn Tin	51 Sb Antimony	52 Te Tellurium	53 I Iodine	54 Xe Xenon				
55 Cs Caesium	56 Ba Barium	57 REE Lanthanides / Rare Earths	72 Hf Hafnium	73 Ta Tantalum	74 W Tungsten	75 Re Rhenium	76 Os Osmium	77 Ir Iridium	78 Pt Platinum	79 Au Gold	80 Hg Mercury	81 Tl Thallium	82 Pb Lead	83 Bi Bismuth	84 Po Polonium	85 At Astatine	86 Rn Radon				
87 Fr Francium	88 Ra Radium	89 Actinoid elements	104 Rf Rutherfordium	105 Db Dubnium	106 Sg Seaborgium	107 Bh Bohrium	108 Hs Hassium	109 Mt Meitnerium	110 Ds Darmstad-tium	111 Rg Roentgenium	112 Cn Copernicium	113 Nh Nihonium	114 Fl Flerovium	115 Mc Moscovium	116 Lv Livermorium	117 Ts Tennessine	118 Og Oganesson				
			57 La Lanthanum	58 Ce Cerium	59 Pr Praseodym'	60 Nd Neodymium	61 Pm Promethium	62 Sm Samarium	63 Eu Europium	64 Gd Gadolinium	65 Tb Terbium	66 Dy Dysprosium	67 Ho Holmium	68 Er Erbium	69 Tm Thulium	70 Yb Ytterbium	71 Lu Lutetium	Rare Earths are extracted from QMM monazite (Madagascar) with upside supply potential from RBM (S Africa)			
			89 Ac Actinium	90 Th Thorium	91 Pa Protactinium	92 U Uranium	93 Np Neptunium	94 Pu Plutonium	95 Am Americium	96 Cm Curium	97 Bk Berkelium	98 Cf Californium	99 Es Einsteinium	100 Fm Fermium	101 Md Mendelevium	102 No Nobelium	103 Lr Lawrencium				

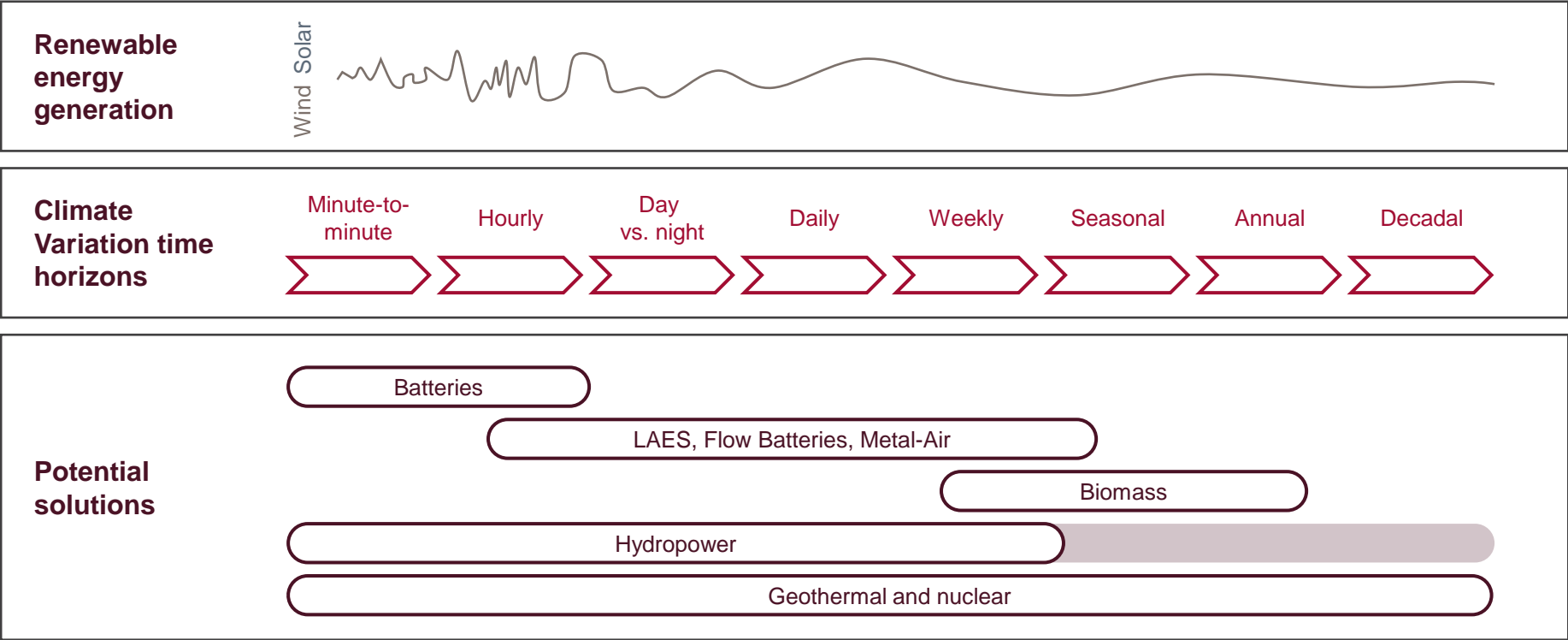
# Net zero requires unprecedented changes to energy systems





# Cracking the code on energy system transformation remains work in progress but the science is evolving fast

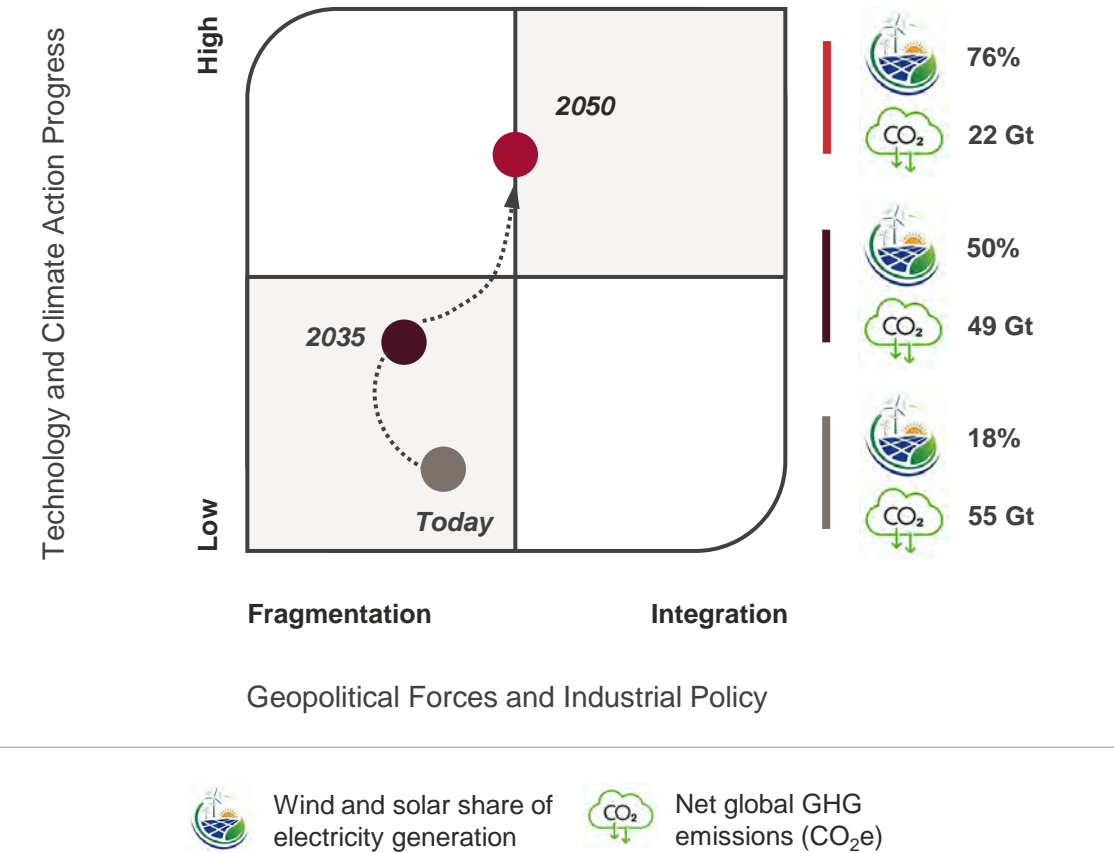
*Variations in renewables generation due to climate variations drive the need for energy storage over different time horizons, and zero carbon baseload firming for longer time horizons*



*A portfolio of technologies will be required to support the renewables build out*

# Our scientific and economic insights guide our strategy

## Pace of the Energy Transition

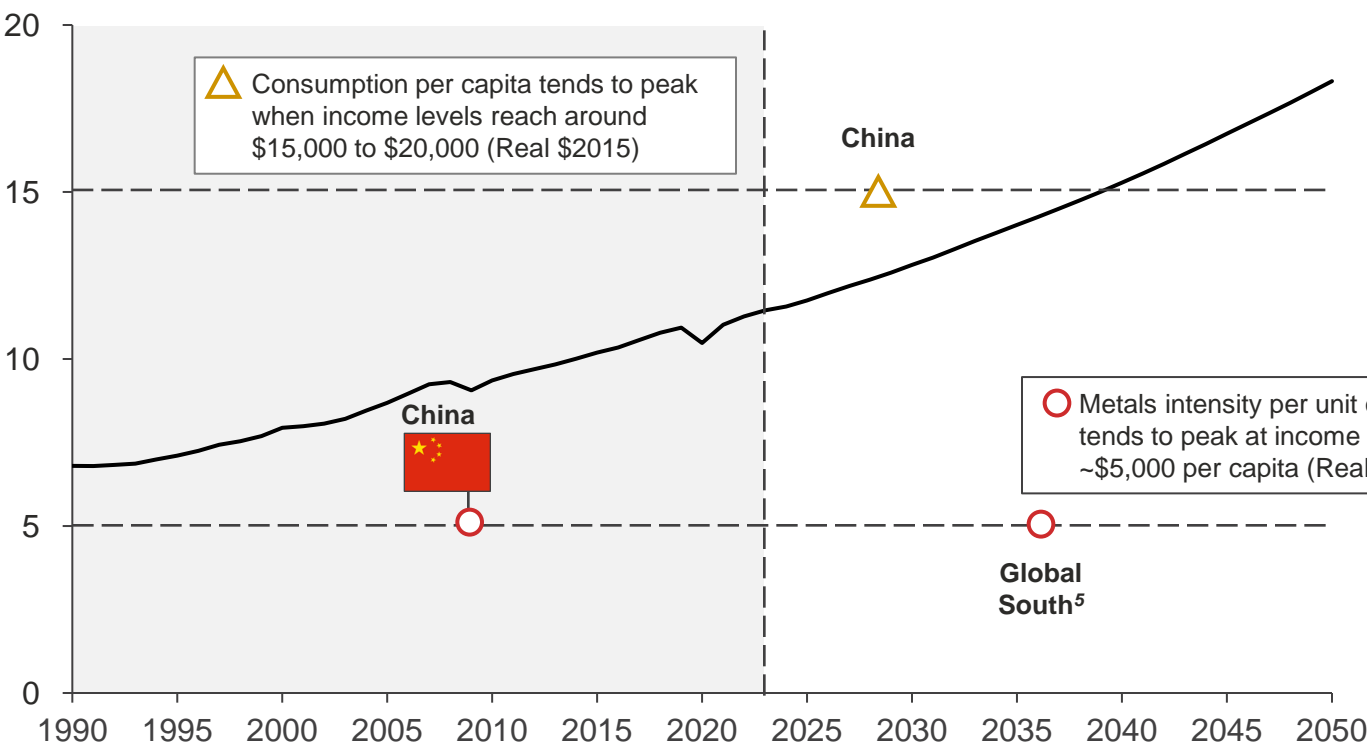


## Other key themes

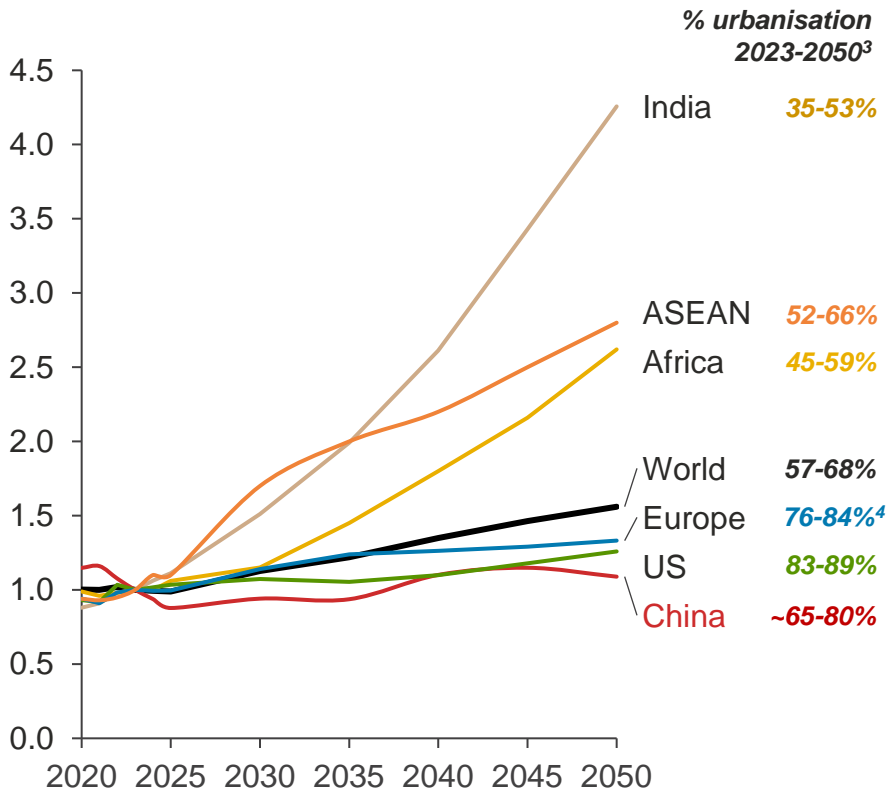
- Rise of the Global South
- Resource access and ESG requirements
- Processing and supply chains
- Rise of recycling

# Traditional demand fundamentals around urbanisation and industrialisation remain strong...

Global GDP per capita evolution<sup>1</sup>  
Real 2015\$ per person - Market Exchange Rates



Construction investment outlook<sup>2</sup>  
\$bn investment index (1=2023)



# ...but we are convinced demand will be enhanced materially by the energy transition

## Attractive long-term demand fundamentals

Demand growth<sup>1</sup>

	2023		2050
Copper	32Mt	⊃	~1.8x
Aluminium	97Mt	⊃	~1.8x
Lithium	1Mt	⊃	>6.0x
Finished steel	1.8Bt	⊃	~1.2x





The image displays a periodic table of elements, with each element's symbol, atomic number, and name clearly visible. The table is set against a scenic background of a sunset over a field of tall grass. The elements are color-coded by groups: alkali metals (red), alkaline earth metals (orange), transition metals (various shades of blue and green), post-transition metals (light green), metalloids (yellow), nonmetals (pink), and noble gases (light blue). The lanthanide and actinide series are shown at the bottom of the table.



1

H

Hydrogen

3

Li

Lithium

4

Be

Beryllium

5

B

Boron

6

C

Carbon

7

N

Nitrogen

8

O

Oxygen

9

F

Fluorine

10

Ne

Neon

11

Na

Sodium / salt

12

Mg

Magnesium

13

Al

Aluminium

14

Si

Silicon

15

P

Phosphorus

16

S

Sulphur / Sulphuric Acid

17

Cl

Chlorine

18

Ar

Argon

19

K

Potassium

20

Ca

Calcium

21

Sc

Scandium

22

Ti

Titanium

23

V

Vanadium

24

Cr

Chromium

25

Mn

Manganese

26

Fe

Iron

27

Co

Cobalt

28

Ni

Nickel

29

Cu

Copper

30

Zn

Zinc

31

Ga

Gallium

32

Ge

Germanium

33

As

Arsenic

34

Se

Selenium

35

Br

Bromine

36

Kr

Krypton

37

Rb

Rubidium

38

Sr

Strontium

39

Y

Yttrium

40

Zr

Zirconium

41

Nb

Niobium

42

Mo

Molybdenum

43

Tc

Technetium

44

Ru

Ruthenium

45

Rh

Rhodium

46

Pd

Palladium

47

Ag

Silver

48

Cd

Cadmium

49

In

Indium

50

Sn

Tin

51

Sb

Antimony

52

Te

Tellurium

53

I

Iodine

54

Xe

Xenon

55

Cs

Caesium

56

Ba

Barium

57

REE

Lanthanides / Rare Earths

72

Hf

Hafnium

73

Ta

Tantalum

74

W

Tungsten

75

Re

Rhenium

76

Os

Osmium

77

Ir

Iridium

78

Pt

Platinum

79

Au

Gold

80

Hg

Mercury

81

Tl

Thallium

82

Pb

Lead

83

Bi

Bismuth

84

Po

Polonium

85

At

Astatine

86

Rn

Radon

87

Fr

Francium

88

Ra

Radium

89

Actinoid elements

104

Rf

Rutherfordium

105

Db

Dubnium

106

Sg

Seaborgium

107

Bh

Bohrium

108

Hs

Hassium

109

Mt

Meitnerium

110

Ds

Darmstadtium

111

Rg

Roentgenium

112

Cn

Copernicium

113

Nh

Nihonium

114

Fl

Flerovium

115

Mc

Moscovium

116

Lv

Livermorium

117

Ts

Tennessine

118

Og

Oganesson

57

La

Lanthanum

58

Ce

Cerium

59

Pr

Praseodym

60

Nd

Neodymium

61

Pm

Promethium

62

Sm

Samarium

63

Eu

Europium

64

Gd

Gadolinium

65

Tb

Terbium

66

Dy

Dysprosium

67

Ho

Holmium

68

Er

Erbium

69

Tm

Thulium

70

Yb

Ytterbium

71

Lu

Lutetium

89

Ac

Actinium

90

Th

Thorium

91

Pa

Protactinium

92

U

Uranium

93

Np

Neptunium

94

Pu

Plutonium

95

Am

Americium

96

Cm

Curium

97

Bk

Berkelium

98

Cf

Californium

99

Es

Einsteinium

100

Fm

Fermium

101

Md

Mendelevium

102

No

Nobelium

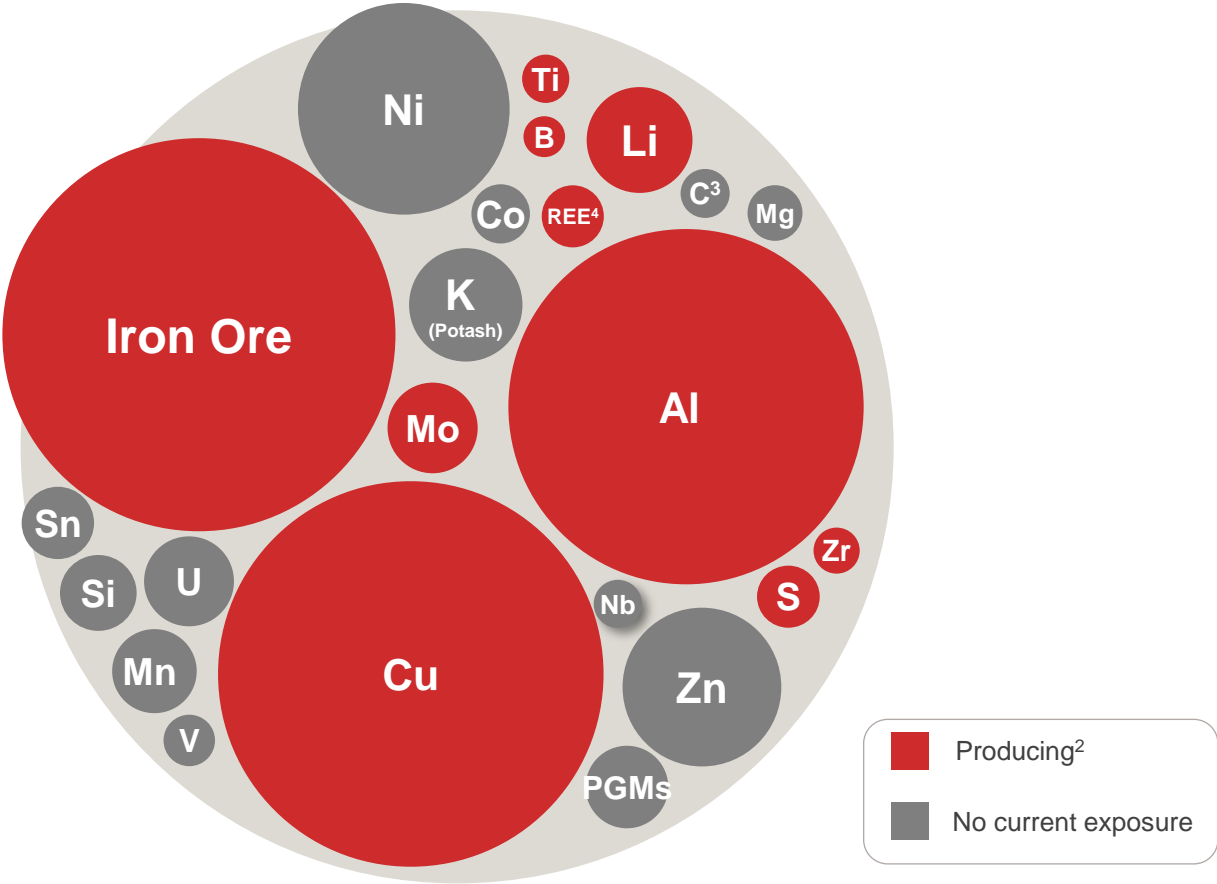
103

Lr

Lawrencium

# Our deep analysis informs where we operate

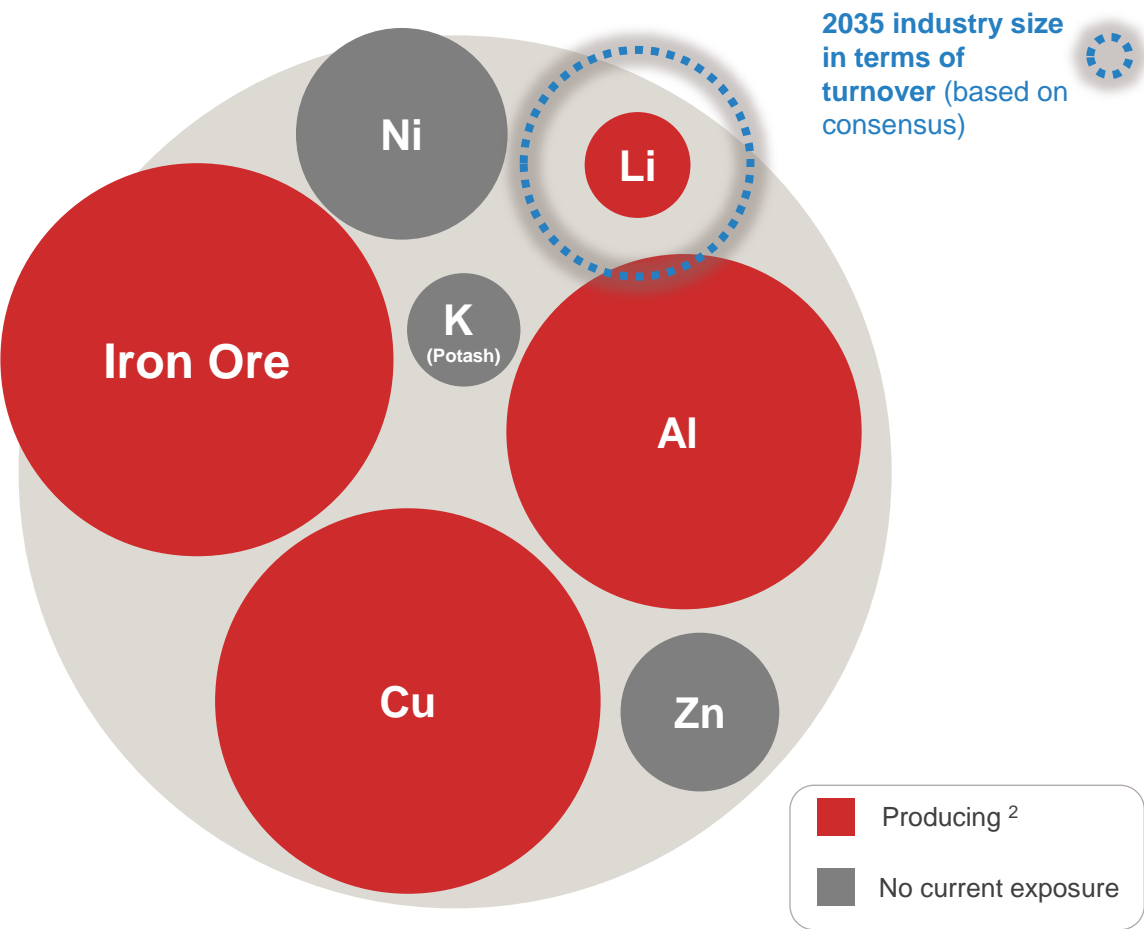
Bubbles indicate current industry size in terms of turnover<sup>1</sup>



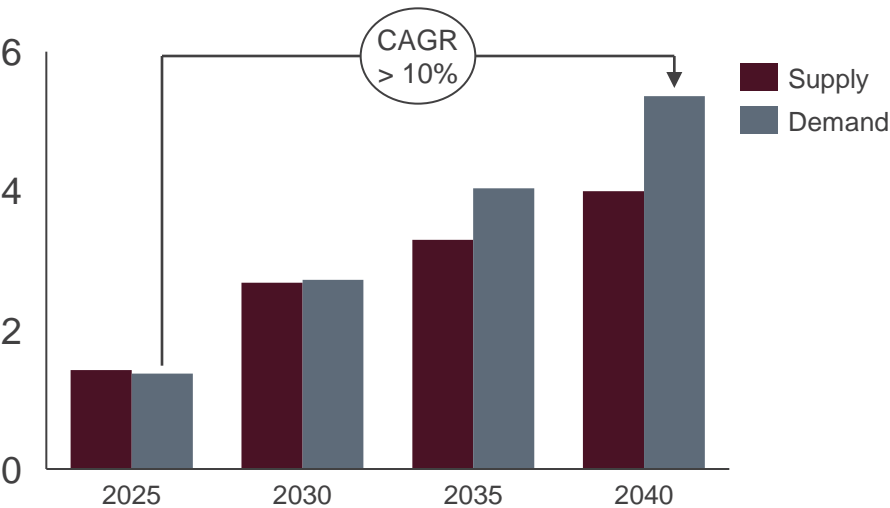
- Energy transition materials
- Market size / industry structure
- Supply security

# The growth rate in lithium demand makes it a highly attractive industry

Bubbles indicate current industry size in terms of turnover <sup>1</sup>



Lithium demand / supply  
Mtpa LCE <sup>3</sup>

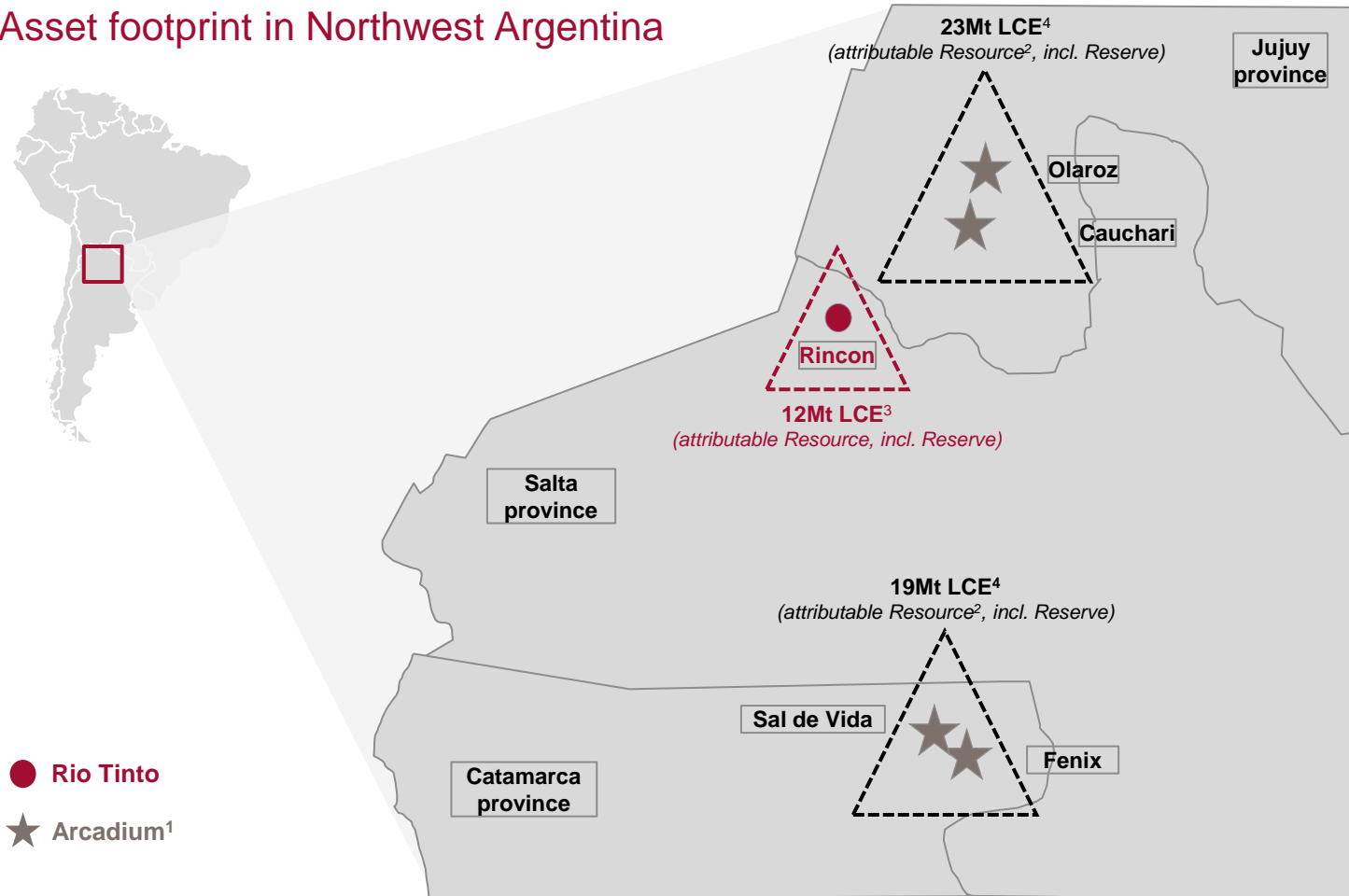


Our **growing lithium footprint** gives us significant exposure to four of the largest commodity industries next decade

<sup>1</sup> Market sizes are based on volume-weighted 2024 price estimates. Volumes are based on primary production.  
<sup>2</sup> First battery grade lithium production expected in 2025.  
<sup>3</sup> Benchmark Mineral Intelligence supply and demand forecast for lithium carbonate equivalent (LCE) as of September 2024.

# Development of super sites in Argentina with production costs in the lower quartile of cost curve

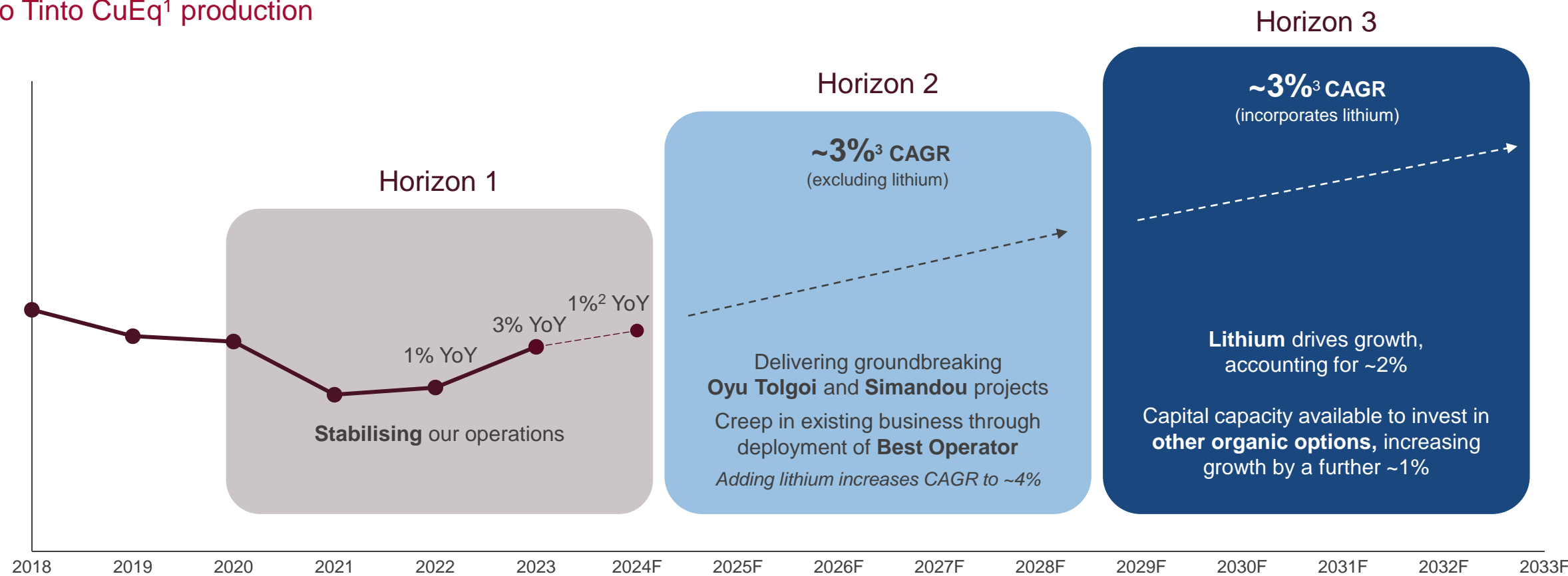
## Asset footprint in Northwest Argentina



- Tier 1 resource base
- At the bottom of cost curve
- Leading DLE technology
- Impeccable ESG
- Improving investment environment (RIGI<sup>5</sup>)

# A decade of ~3% CAGR driven by Oyu Tolgoi, Simandou and our new lithium portfolio

Rio Tinto CuEq<sup>1</sup> production



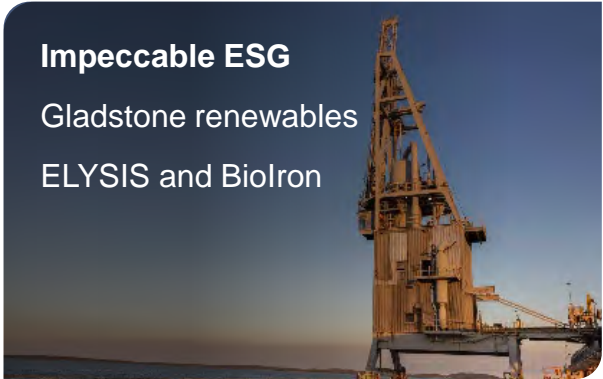
1. Copper equivalent production based on Rio Tinto share of volumes and long-term consensus pricing  
2. 2024F copper equivalent production is a forecast based on mid-point production guidance or top / bottom of the range as noted in our Third Quarter Operations Review  
3. Ambition for compound annual growth rate (CAGR) for copper equivalent production from 2024 to 2033.



# We remain committed to our four objectives and are intensifying efforts to achieve Best Operator



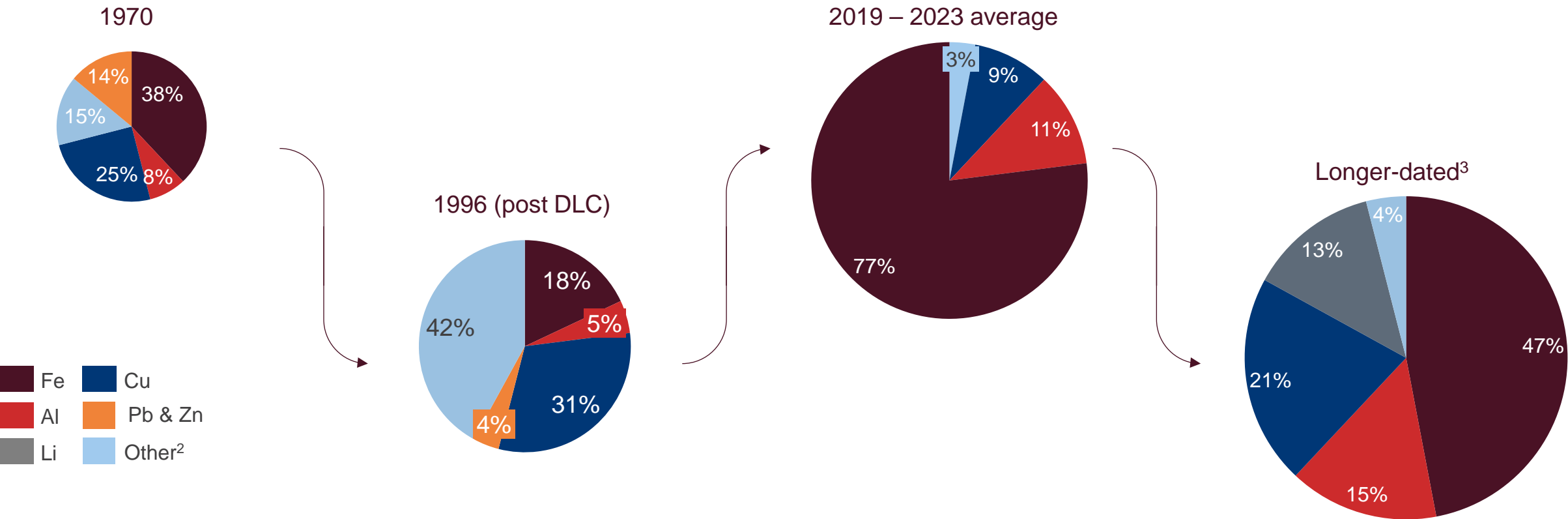
Growing value and future dividend potential



Staying the course on cultural change

# During our long history, we have constantly evolved our portfolio

Rio Tinto EBITDA<sup>1</sup> (%)



Finding better ways to provide the materials the world needs





**Strong scientific and  
economic base**

**Deep analysis informs  
our strategy**



**Excel in development**

**Accelerate learning through  
strong execution of major  
global growth projects**



**Best Operator**

**Consistent roll out of  
Safe Production System**

**Significant value-creating growth**



# RioTinto

## Intensifying our efforts to achieve Best Operator

Mark Davies





# Intensifying our efforts to achieve Best Operator unlocks value

## Kaizen results

### Hope Downs, Australia

↓ 39%<sup>1</sup> unscheduled loss  
on conveyor breakdowns



### IOC, Canada

↓ 27%<sup>1</sup> shut overrun  
in concentrator



### Oyu Tolgoi, Mongolia

↑ 8.5khrs of  
labour capacity  
in the concentrator<sup>1</sup>



### Alma, Canada

Alumina silo  
shutdown ↓ from  
3 months to 5 days



## Safe Production System in 2024

- On track for another ~5Mt uplift in 2024 attributable to SPS at Pilbara Iron Ore in addition to the ~5Mt delivered in 2023
- Maintained the 10% improvement in AIFR achieved in 2023
- 79% of employee satisfaction drivers improved at mature SPS sites<sup>2</sup>
- 25% fewer equipment failures that stop production at mature SPS sites<sup>2</sup> within Pilbara Iron Ore



# RioTinto

## Excel in development

Mark Davies



# We are exploring for 8 commodities in 17 countries

90  
projects

~\$250m<sup>1</sup>  
annual spend

- Bauxite
- Copper
- Iron Ore
- Heavy mineral sands
- Potash
- Lithium
- Nickel
- Diamonds
- Brownfield
- Greenfield



# Mobilising projects to deliver compelling growth





# Advantaged by our in-house capability

## Safe and sustainable

Embedded HSE and CSP protocols  
Safe and efficient project delivery  
Strong foundation for operations  
SPS principles applied

## Innovation

Decades of in-house R&D capability  
Bundoorra Technical Development Centre

- Jadar flowsheet
- Direct Lithium Extraction

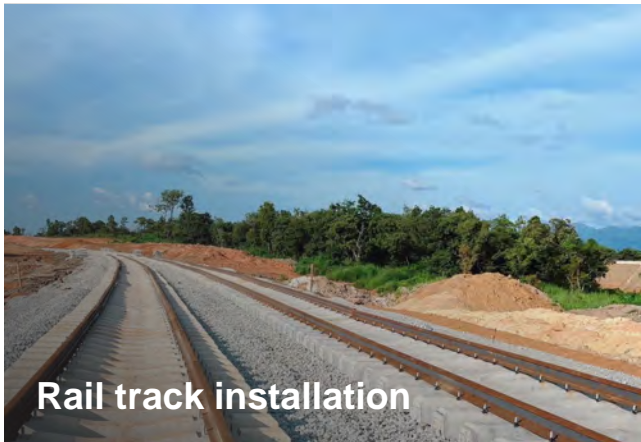
Digital tools, AI, big data, remote sensing

## Optimised value

Studies to drive value, competitiveness  
New projects office in China to leverage end-to-end supply chain



# Simandou construction on plan, embedding lessons learned



## Rapid delivery

Simple, modular construction, off the shelf solutions

Efficient fabrication, rapid replication

Digital delivery, data science, machine learning

---

## People

Talent development

Transfers between projects:  
from Oyu Tolgoi to Simandou, Rincon and Resolution

Globally mobile workforce

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## ESG

Embedded HSE and CSP

AI potential for species monitoring

Agility to succeed in a complex environment



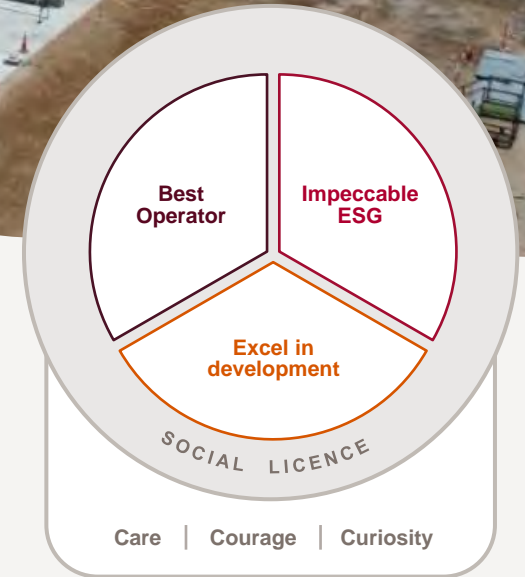


# Excel in development

**Competitive advantage** through in-house capability

Finding, studying and building more **efficiently**, while continuously embedding lessons

Developing strong **technical and construction talent**



# Minerals – optimising operations and unlocking lithium

Sinead Kaufman





# Portfolio of market-leading, high-value specialty products integrated across the supply chain

## Boron



Western leader in refined **borates**, supplying ~30% of global demand

## Iron Ore Company of Canada



Producer of **high-grade** (>65% Fe<sup>1</sup>) and **low-impurity iron ore**

## Iron & Titanium



Global leader in **TiO<sub>2</sub>** (**14% market share**) with capacity to grow

## Diavik



**Optimising value of** remaining production in partnership with iconic brands

**Providing minerals essential to a low-carbon future**

Integrated business | Global footprint | Downstream expertise | Processing excellence

# First lithium achieved at Rincon with expansion to 60ktpa<sup>1</sup> pending permits and Board approval

## Acquired in March 2022



## Progress by October 2024

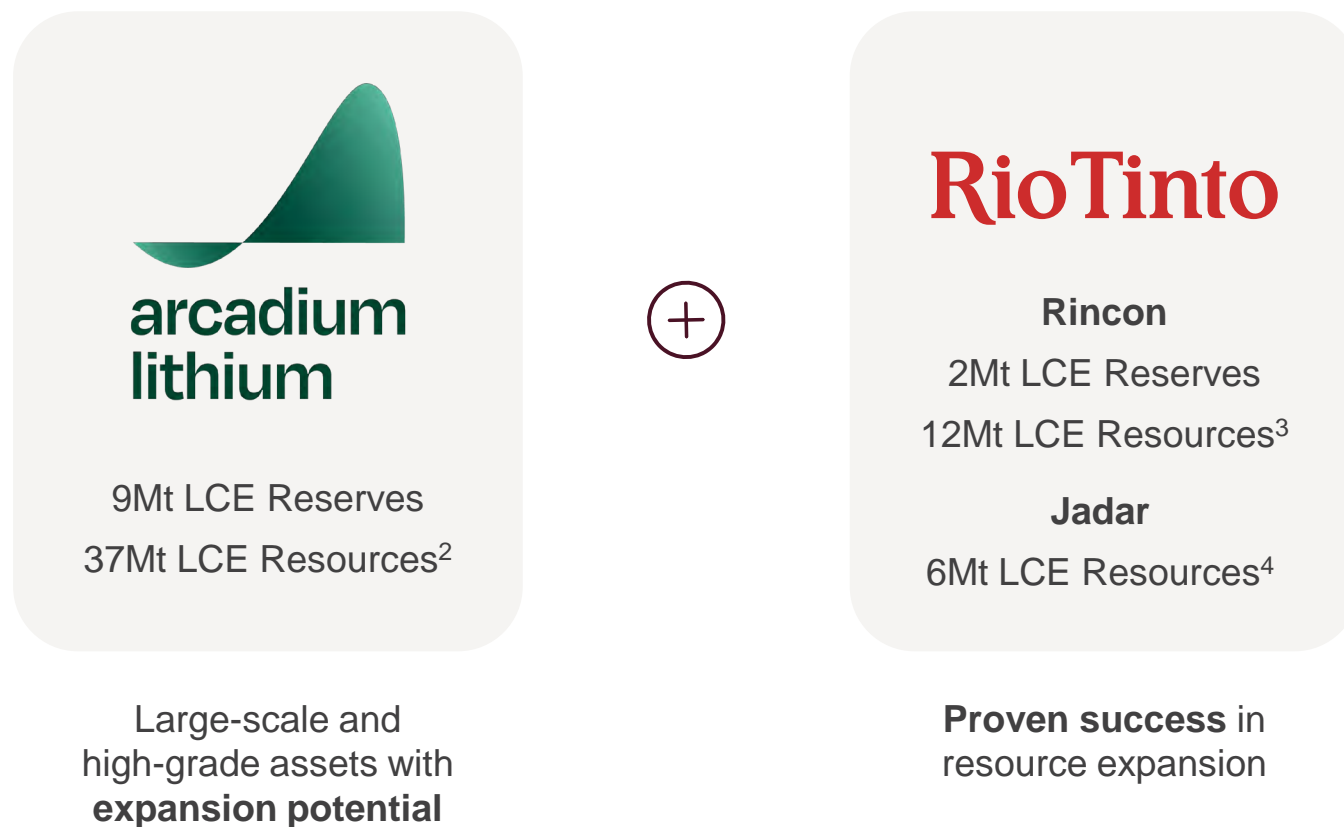


## Rapid progress and significant learnings since acquisition of early-stage project

- Delivered first lithium from the 3ktpa pilot plant just 32 months after acquisition
- Learnings related to infrastructure permitting, engineering, logistics and construction to be leveraged for full-scale operation
- Direct Lithium Extraction (DLE) conserves water and reduces waste, with faster production and better consistency
- Work to date has informed Arcadium acquisition and given us confidence in our ability to scale-up operations
- Targeting capacity of 60ktpa<sup>1</sup> subject to Board approval and receipt of permits

# Multi-generational asset base with significant production upside

Industry leading resource endowment<sup>1</sup> ...



1. Mineral Resources and Ore Reserves are shown on an attributable basis. See slide 93 for the supporting material in relation to these Mineral Resources and Ore Reserves estimates, including for the basis of conversion to Lithium Carbonate Equivalent (LCE).

2. Arcadium Mineral Resources are reported on this slide **exclusive** of Ore Reserves (contrasting with slide 18 where they are reported **inclusive** of Ore Reserves). Excludes additional Arcadium capacity to be unlocked by Rio Tinto.

3. Rincon Mineral Resources are reported **inclusive** of Ore Reserves.

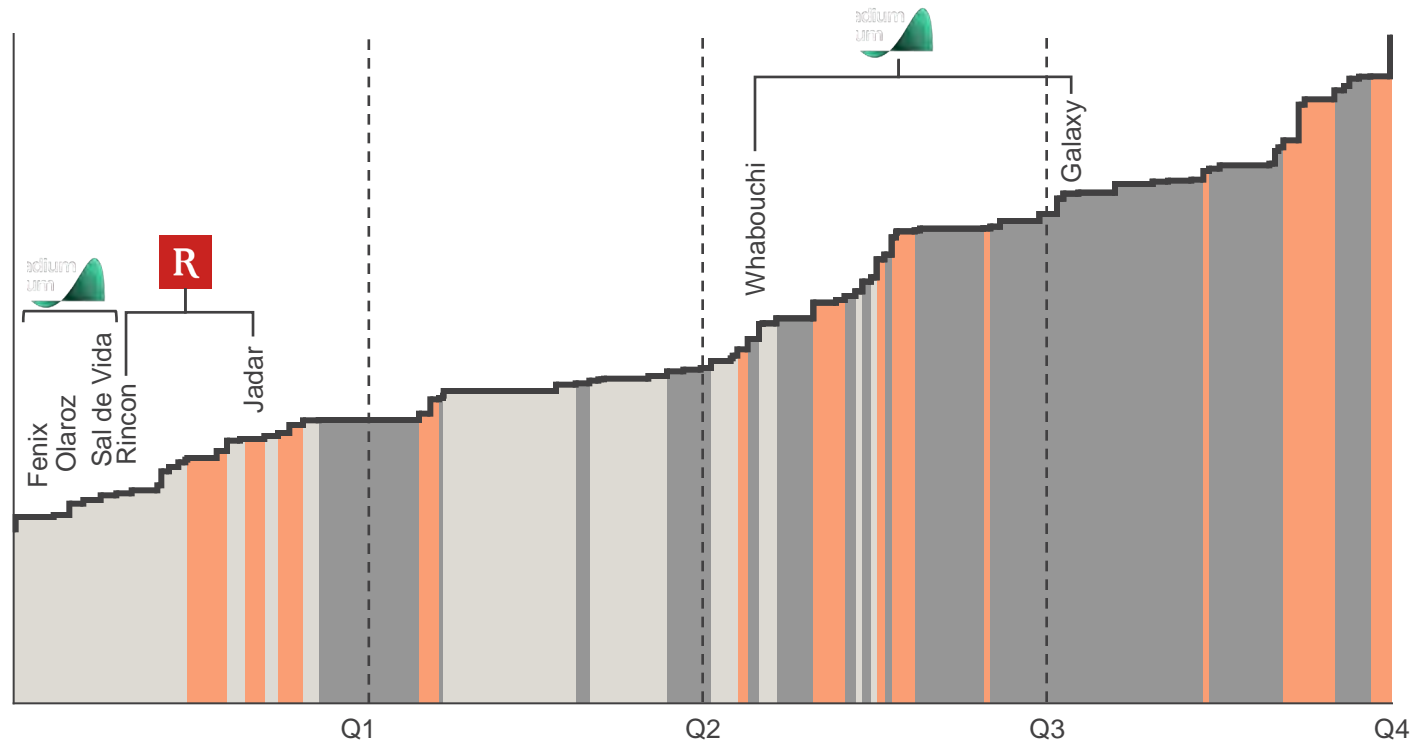
4. Jadar Mineral Resources are reported **exclusive** of Mineral Reserves.



# Arcadium acquisition delivers a Tier 1 asset footprint

## 2035 lithium cost curve<sup>1</sup> \$/t LCE

Brines Hard-rock Other

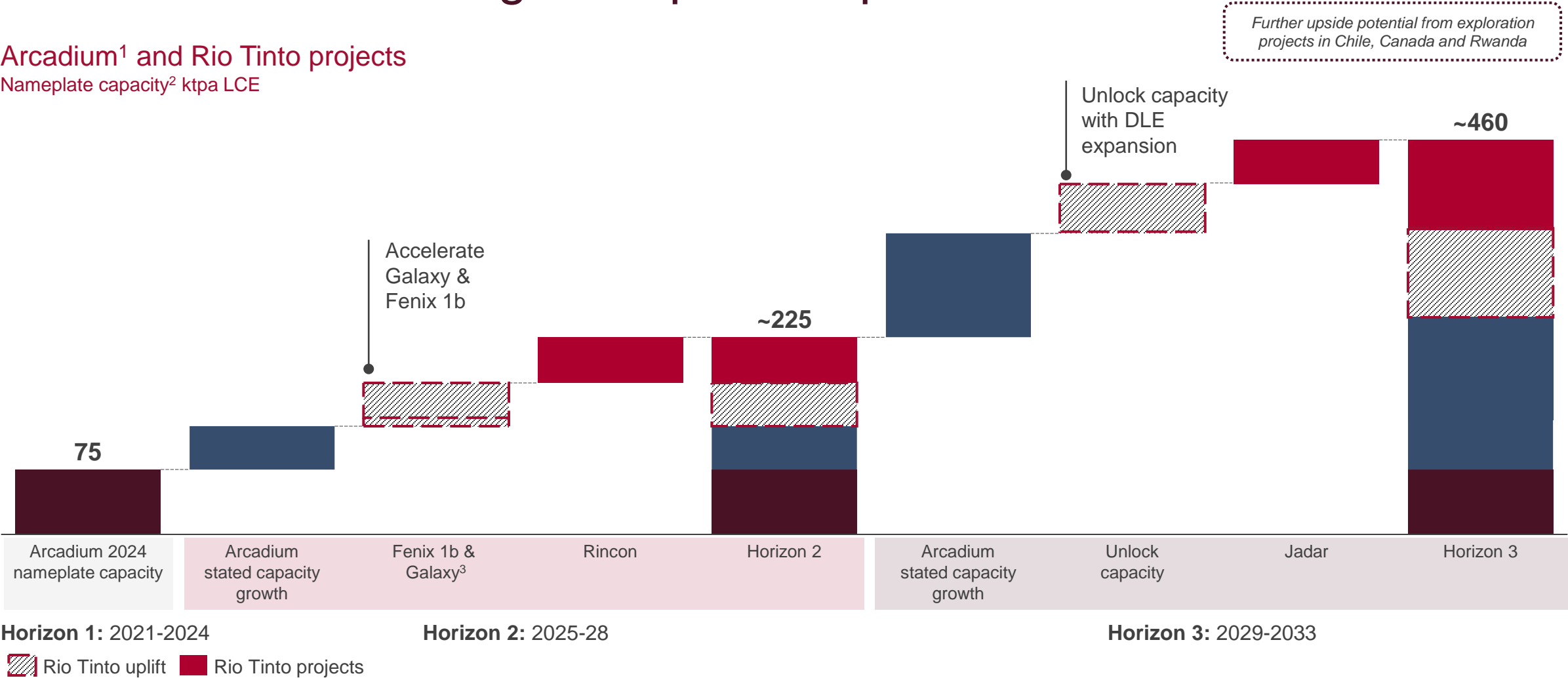


Arcadium and Rio Tinto assets expected to generate strong returns through the cycle

- Combined assets represent the **top lithium resource endowment** in the world, well positioned on the cost curve
- Downstream capability with **multiple product offerings** and **flexibility** to meet customer needs
- Acquisition expected to close in mid-2025

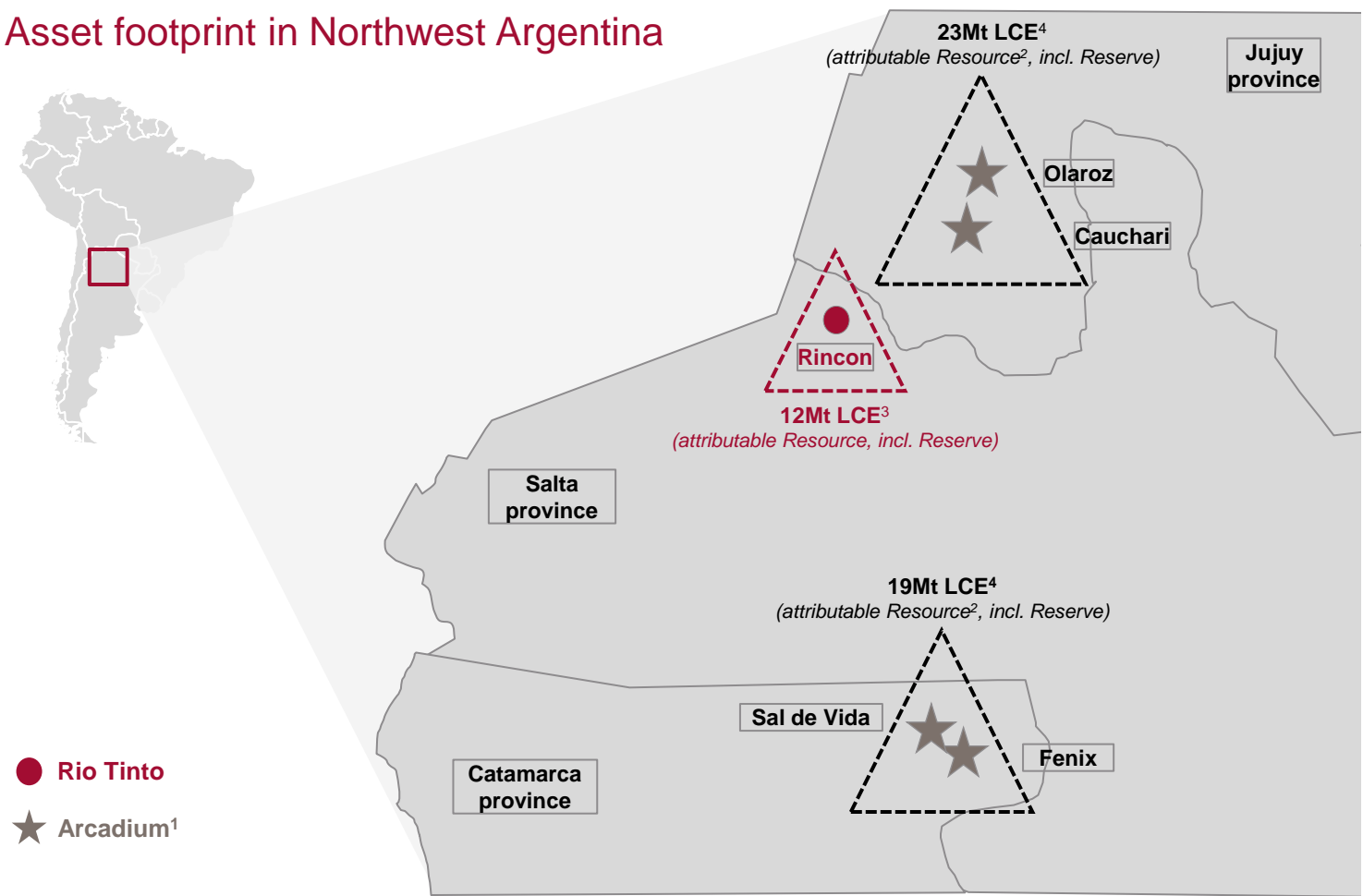
# Our financial strength and project delivery expertise will enable us to realise Arcadium’s growth post-acquisition

Arcadium<sup>1</sup> and Rio Tinto projects  
Nameplate capacity<sup>2</sup> ktpa LCE



# Development of Argentina super sites with production costs in the lower quartile of cost curve

## Asset footprint in Northwest Argentina



## Opportunities for economies of scale and regional approach

- Our strong balance sheet permits acceleration of Fenix 1b
- Superior DLE capability and advancement in reinjection technology to unlock additional capacity
- Optimise supply chain and logistics for key raw materials
- Improving investment environment supported by RIGI policies<sup>5</sup>



# Lithium portfolio: future global optionality

## Jadar



**Spatial plan reinstated** by the Government of Serbia  
Progressing **Environmental Impact Assessments**  
**Ongoing public consultations** and community engagement

## Exploration

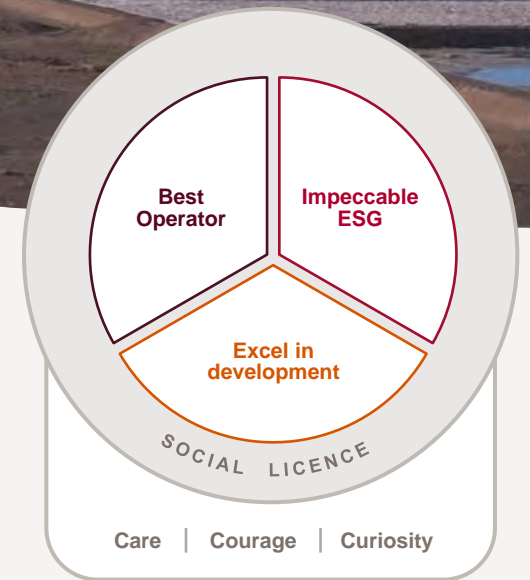


Encouraging **initial drilling results** at the Galinée pegmatite project in Quebec  
Pursuing **attractive brine opportunities** in Chile  
Multiple pegmatites identified from **early reconnaissance** in Rwanda

# Our Minerals business

**Optimising value** from our Minerals operations

**Growth options** from long-life, Tier 1, low-cost lithium assets



**2025 production guidance:**  $\text{TiO}_2$  1.0 to 1.2Mt | IOC 9.7 to 11.4Mt | Borates ~0.5Mt

# Iron Ore – advancing our cornerstone business

Simon Trott





# Our priorities are unchanged

We are committed to being the ‘**Most Valued**’ resource business with strong progress in 2024<sup>1</sup>



## Best Operator

Equal highest employee satisfaction score<sup>2</sup>, and progress on Everyday Respect

>50% reduction in Potentially Fatal Incidents 2018-2023

5Mt uplift from Safe Production System



## Impeccable ESG

Electric Smelting Furnace pilot plant with BHP and BlueScope

80MW solar farm partnership with Ngarluma

Biolron™ pilot plant / research and development facility



## Excel in development

Western Range first ore expected H1 2025

Rhodes Ridge PFS on track for 2025

Gudai-Darri approaching sustainable 50Mtpa run-rate



## Social licence

Resource co-design and development

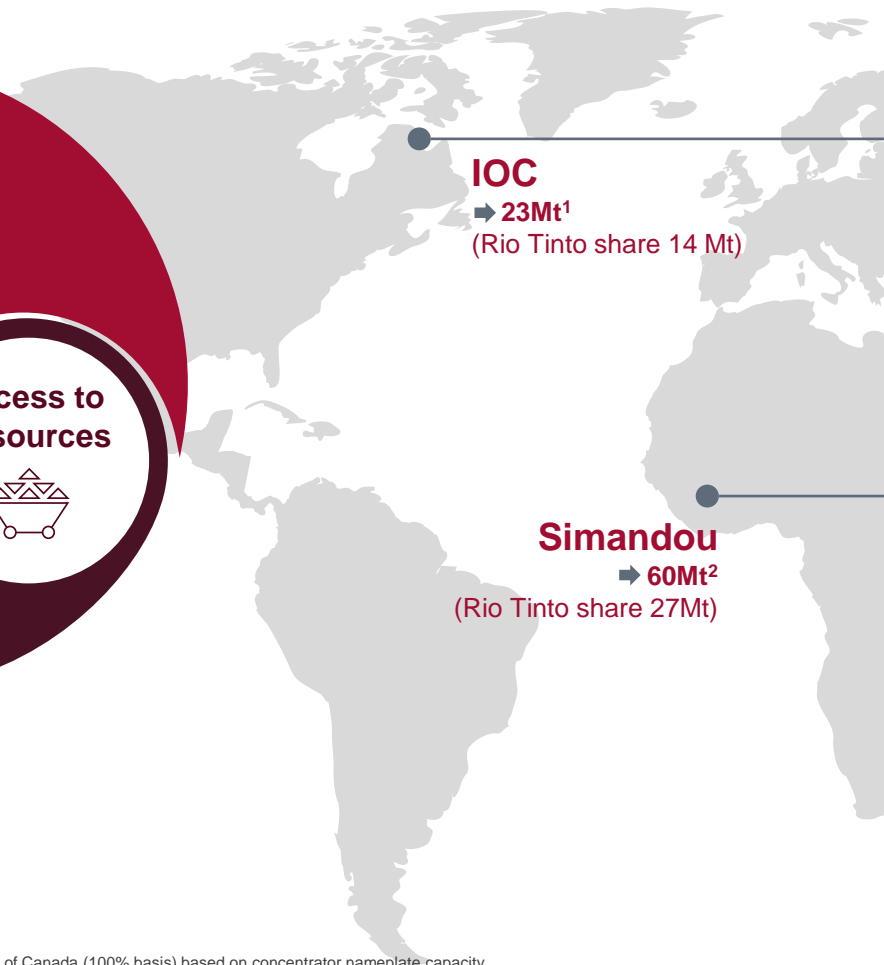
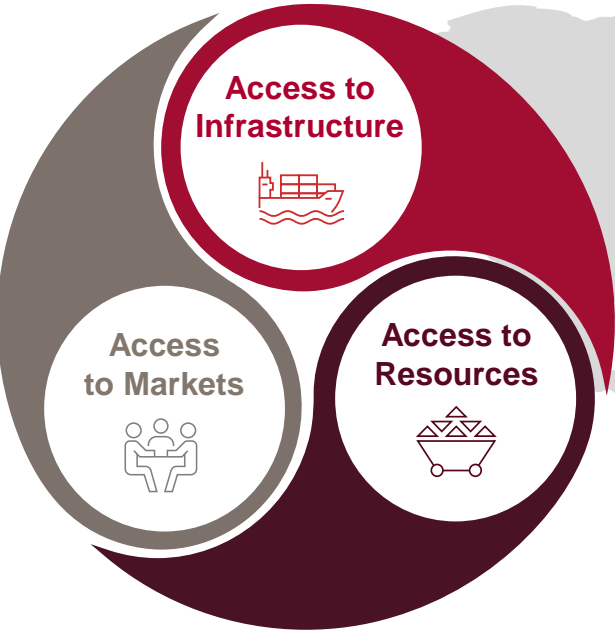
Coastal desalination plant on track for 2026 start-up

>20% increase in Traditional Owner spend year-on-year<sup>3</sup>

Values-based performance culture



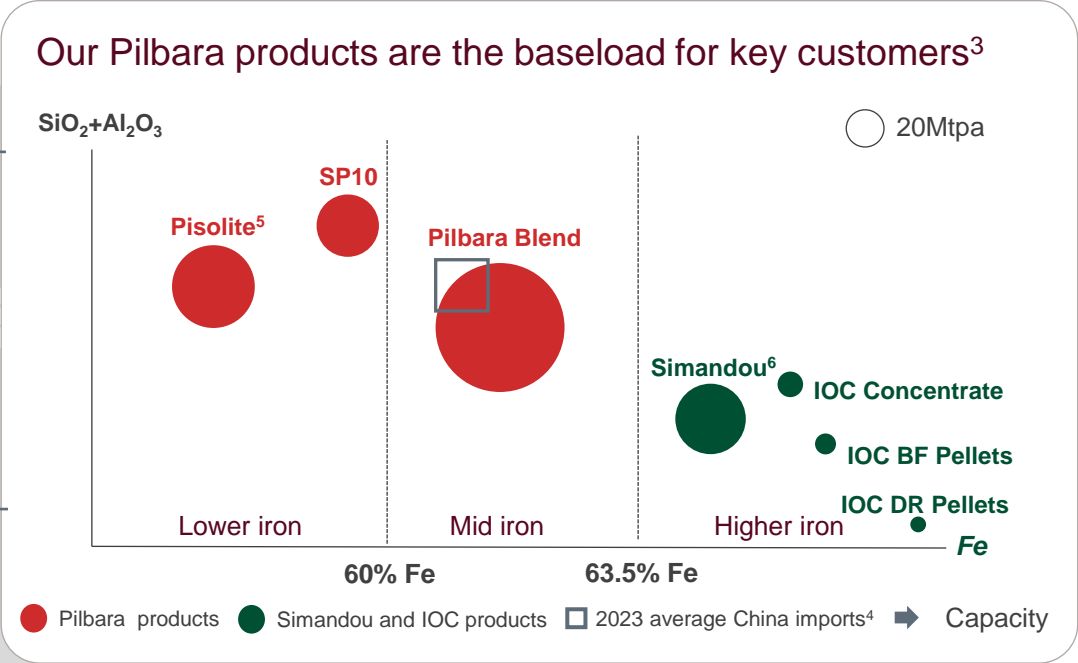
# Our global operations produce an unrivalled product suite



**IOC**  
➔ 23Mt<sup>1</sup>  
(Rio Tinto share 14 Mt)

**Simandou**  
➔ 60Mt<sup>2</sup>  
(Rio Tinto share 27Mt)

**Pilbara**  
➔ 332Mt<sup>7</sup>  
(Rio Tinto share 281Mt)



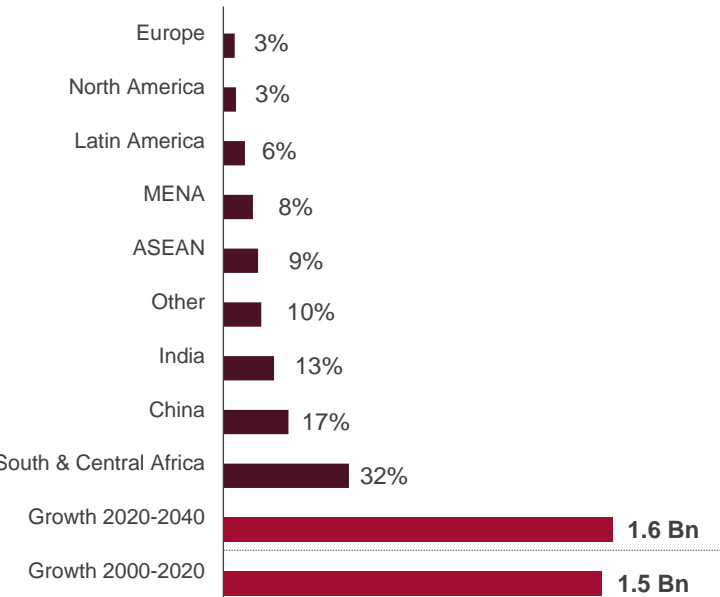
# The long-term outlook for our global iron ore portfolio is robust

## Urban population growth is the engine to support further steel demand growth

⬆️ ~36% growth to 2040<sup>1</sup>

Global urbanisation remains significant, matching historical levels

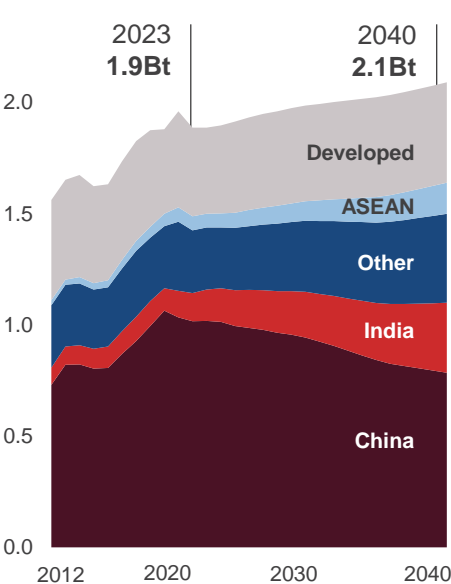
Growth in global urban population, 2020 to 2040  
Billion and percentage of total



⬆️ ~0.2Bt steel output to 2040

As much steel will be made in the next 20 years as the last 30 years<sup>2</sup>

Crude steel production by region<sup>2</sup>  
Billion tonnes



Chinese blast furnaces ~13yrs old vs 50-70yrs in developed regions<sup>5</sup>

CO<sub>2</sub> abatement driving DRI growth

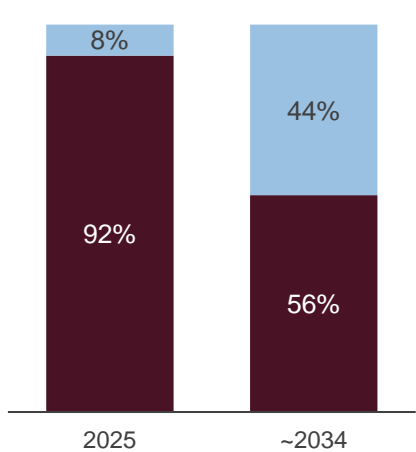
Current scrap recycling weaker than industry expectations

## Iron ore supply pressures remain

>40% of supply to be replaced<sup>3</sup>

Advancing projects remains challenging across the industry

Approved tonnes for major producers<sup>3</sup>  
Percent of total production



Approvals timeframes for major projects have increased by 12-18 months since 2018<sup>4</sup>

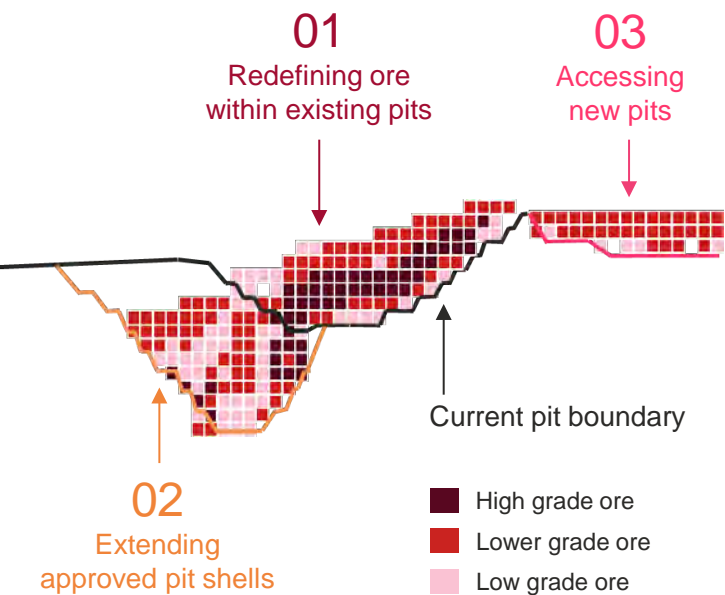
1. From 4.4bn global urban population to 6.0bn (Source: Oxford Economics)  
2. Average of forecasts from Wood Mackenzie, CRU and MineSpans. Historical data: World Steel Association and Rio Tinto  
3. Production to be replaced in the next 10-years from major producers Rio Tinto (Pilbara), BHP (Pilbara), FMG, HanRoy and Vale (Source: Rio Tinto analysis of public information)  
4. Increase in Western Australian approvals timeframes for major mine projects since 2018 (Source: Rio Tinto)  
5. Source OECD



# Product strategy review underway

## Enhancing utilisation of our leading Pilbara resource base

Conceptual iron ore pit representation

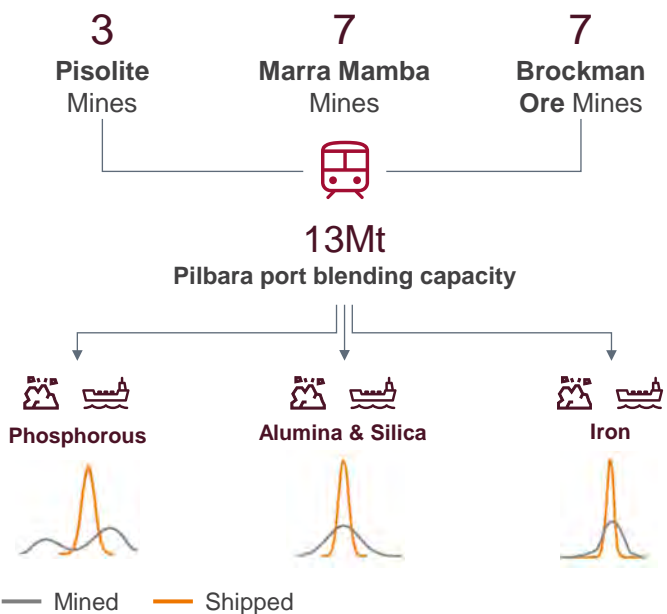


Short and long-term production uplift

Development flexibility and cost benefits

## Pilbara mines & infrastructure strength support a consistent product

Products blended from multiple sources<sup>1</sup>



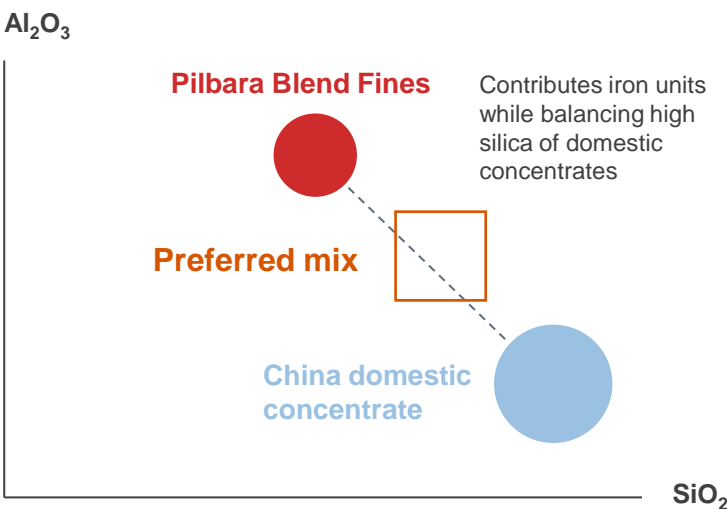
High volumes, low variability

Port infrastructure in place for ore blending

## Our product mix will remain fundamental to key markets

Essential contributor to customers' burden mix<sup>2</sup>

Products technical profile



Base load for Chinese steel mills

Collaboration with customers and partners

# We are driving system wide improvement to achieve Best Operator

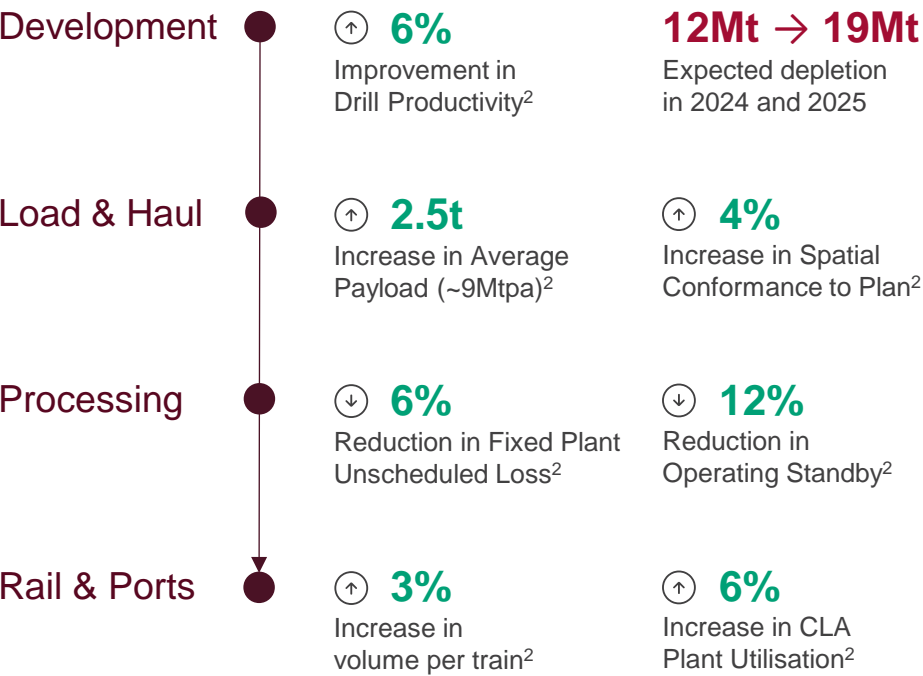
SPS is fully deployed in the Pilbara<sup>1</sup>

2022  
2 x site trials

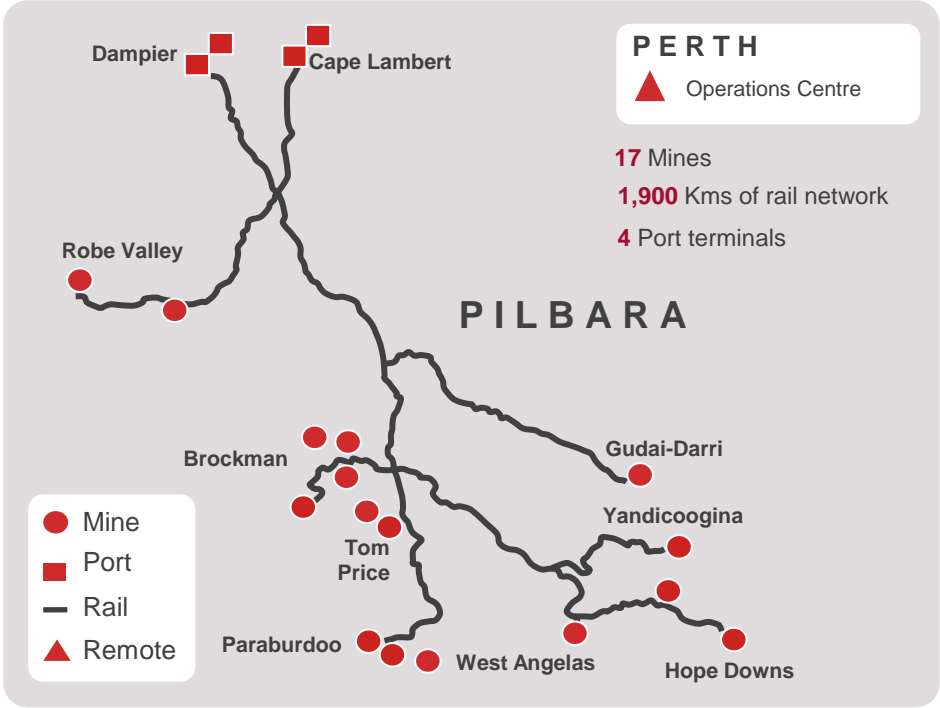
2023  
80% coverage<sup>1</sup>

2024  
100% coverage<sup>1</sup>

Strong operational performance is offsetting headwinds, providing a platform for system level improvement



Moving focus to **system wide improvement** to optimise our integrated supply chain



Key enablers

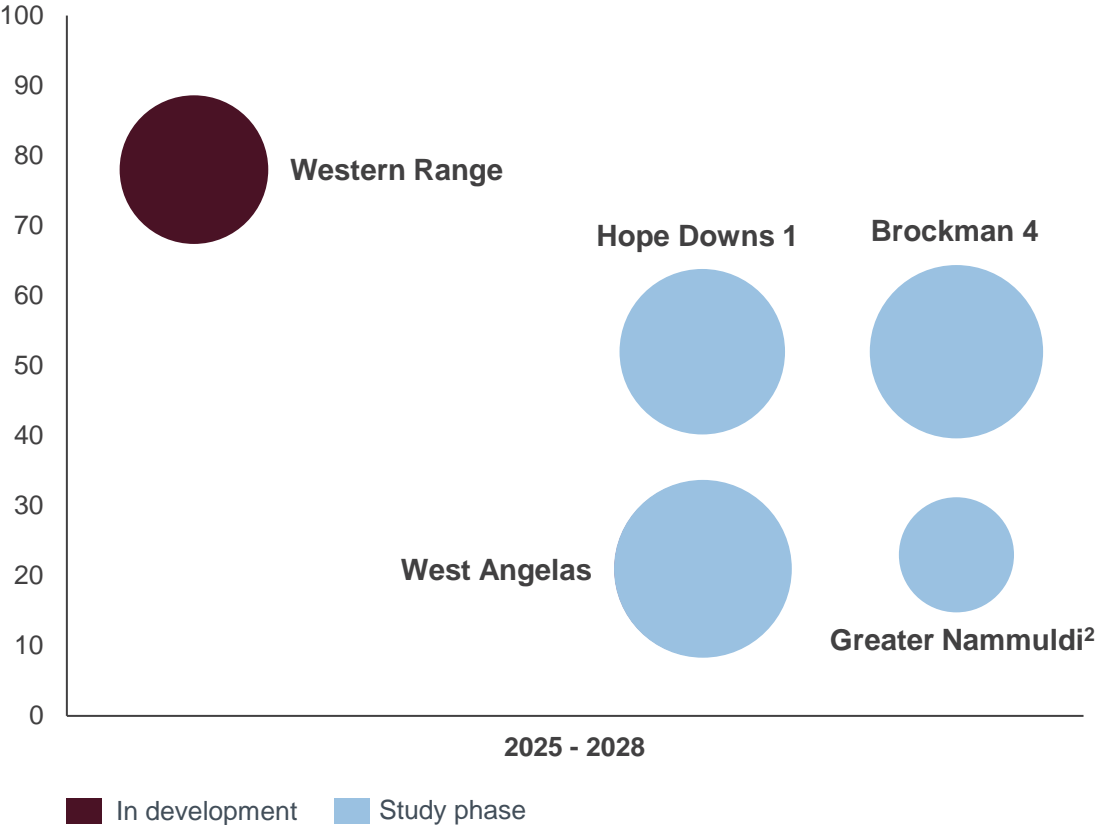
Organisation design & workflows

Operational routines

Digital applications

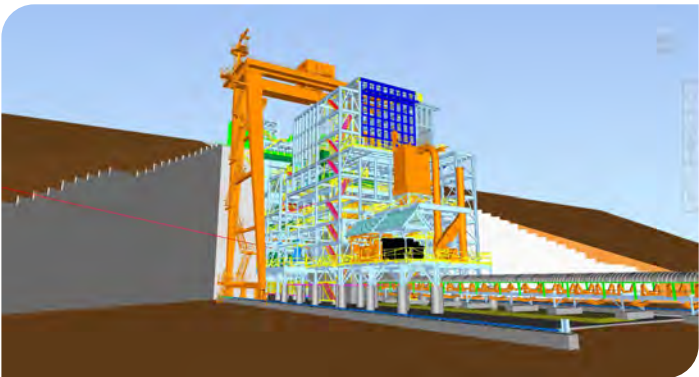
# Our replacement projects and Rhodes Ridge are advancing

Replacement mine capital intensity outlook<sup>1</sup>  
\$/t installed capacity

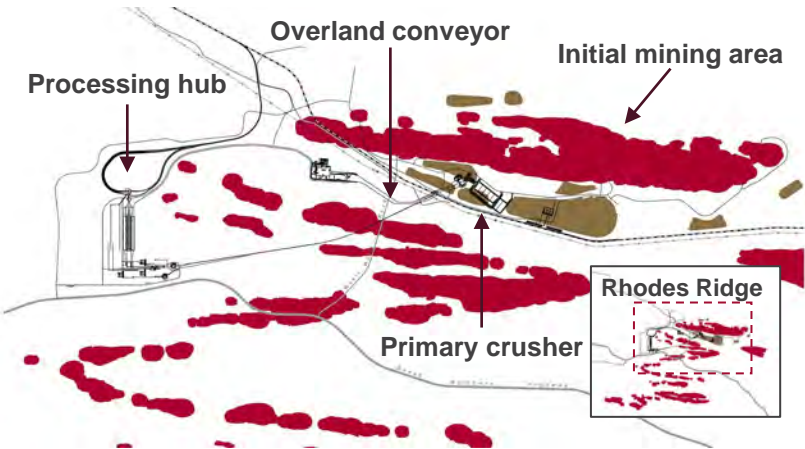


Rhodes Ridge pre-feasibility study due in 2025

Excel in development  
40+ Mtpa Phase 1  
Replicating Gudai-Darri plant



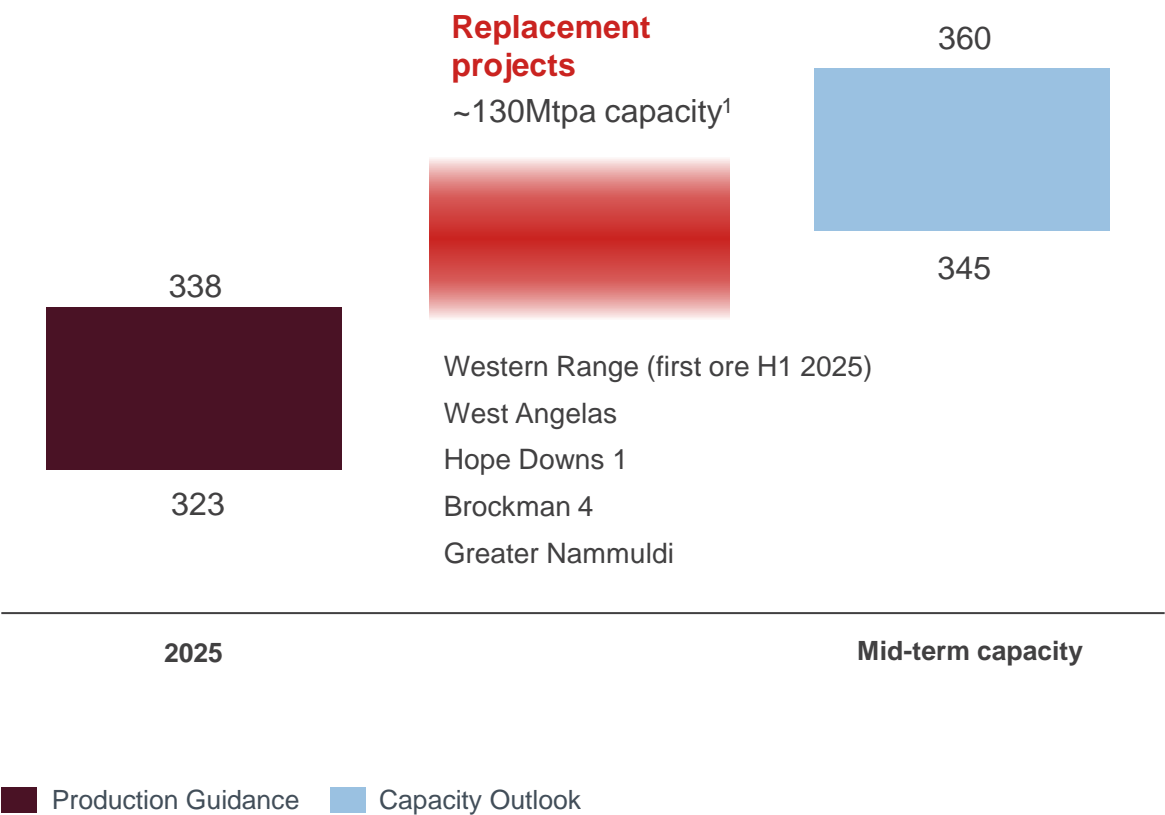
Social licence  
Traditional Owner engagement  
informing co-design





# Shipments guidance unchanged in 2025

## Shipments guidance and mid-term capacity<sup>2</sup> (Mt, 100% basis)



### Guidance and product mix

- 2025 shipments guidance 323 – 338Mt
- SP10 65 – 70Mt in 2024
- Year-to-date SP10 price realisation >93% of 62% index

### Productivity and mine capacity depletion

- Safe Production System: 5Mt uplift in each of 2023, 2024 & 2025
- Depletion: 19Mt in 2025, 5 – 10Mt in 2026 & 2027

### Outlook

- 345 – 360Mtpa mid-term capacity
- ~\$20/t mid-term<sup>3</sup> unit costs

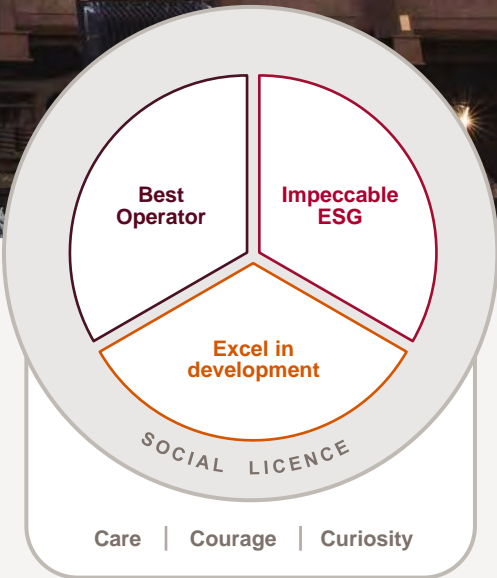


# Our Iron Ore business

Progress towards  
**Best Operator**

Effective  
**partnerships**

**Values-based**  
performance culture



2025 shipments guidance: 323 to 338Mt



# Q&A



# Break



# Panel 1: Culture panel

Isabelle Deschamps  
James Martin  
Kellie Parker  
Simon Trott





# Copper – targeting 1Mtpa this decade

Katie Jackson





# Strong copper market fundamentals

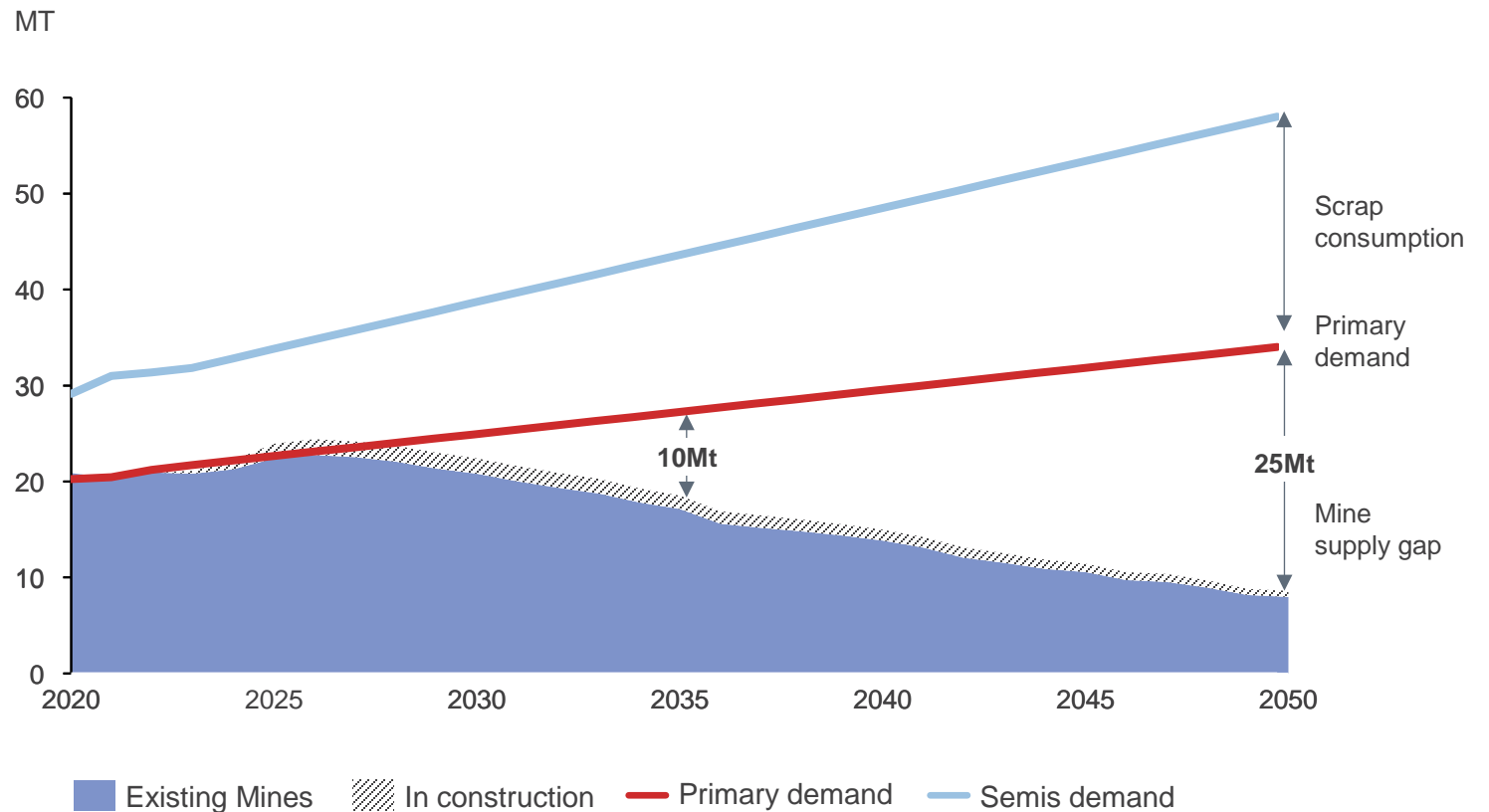
## Robust demand growth

- Demand for semis to nearly double by 2050
- Renewable electricity generation and vehicle electrification to drive ~50% of demand growth
- Material increase in primary supply required
- Supplemented by rising scrap supply

## Persistent supply-side challenges

- Challenging geographies, declining grades, impurities, and shift to underground
- Social license, environmental footprint (water scarcity and tailings), permitting and regulatory constraints
- Rising capital intensity and operating costs

## 2050 primary supply gap estimated at 25Mt



# Well positioned portfolio of core assets and growth projects

## Geographically diversified asset base



## Targeting 1Mtpa of copper this decade

- Attractive ore bodies underpin sustainable and profitable growth
- Record annual copper production expected in 2025<sup>2</sup>
- Oyu Tolgoi drives medium-term production
- Addressing near-term geotechnical challenges at Kennecott. Options to extend mine life and expand underground
- Progressing projects: Winu, Nuton™ industrial scale deployment, Resolution and Nuevo Cobre
- Industry-leading partners and capabilities across the value chain

# Best Operator focus: >50% Oyu Tolgoi production growth in 2025

## Underground infrastructure to complete next year

- Panel 0 operational excellence, cave performing above expectation
- Conveyor to Surface operational to meet 2025 plan levels
- Concentrator Conversion and Primary Crusher 2 completion in 2025
- Focus shifts to development of next cave panels

## Catalyst for national development and future growth

- 97% Mongolian employees, \$18.4bn total in country spend<sup>1</sup>
- >85% water recycling, investing in water security and biodiversity
- Delivering impactful investment in South Gobi region
- Focused on outstanding shareholder issues to secure mid- and long-term development pathways



Panel 0 Material Handling System complete



First ore on Conveyor to Surface belt in October 2024



Investing in Khanbogd and Umnugovi regional development



Partnering with Mongolia's Forestry Department to plant 100 million trees by 2030



# Kennecott reset to address near-term mine constraints – long-term optionality remains

## Near-term measures

- Access to primary ore face reduced by worsening geotechnical conditions in 2024
- Revised mine plan for 2025/26
- Reducing fixed costs and optimising capital expenditure
- Supplementing smelter feed with third-party concentrate
- Underground to add over 30ktpa by 2027<sup>1</sup>

## Long-term conviction

- Attractive Total Ore Reserves<sup>2</sup> at a fully permitted brownfield site
- Exploring underground potential beyond current Mineral Resources and Ore Reserves<sup>3</sup>
- 1 of only 2 operating copper smelters in the US
- Among the lowest carbon footprints of any US copper mine, 80% lower emissions since 2018



Bingham Canyon open pit



North Rim Skarns  
underground ramping up



Smelter rebuilt in 2023



99.99% pure copper cathode

<sup>1</sup> See supporting references for the 30ktpa Kennecott underground production target on slide 94

<sup>2</sup> Kennecott Total Ore Reserves: 834Mt @0.38% Cu; see supporting references for the Kennecott Ore Reserves categorisation and reporting on slide 94

<sup>3</sup> Kennecott underground Mineral Resources 26Mt @2.62% Cu and Ore Reserves: 5Mt @2.22% Cu; see supporting references for the Kennecott underground Mineral Resources and Ore Reserves categorisation and reporting on slide 94

# Advancing Winu: new joint venture with Sumitomo Metal Mining

## Attractive asset profile

Low-risk, long-life, copper-gold deposit  
Highly prospective for expansion

## High calibre joint venture partner

SMM to acquire 30% equity share for \$399m including \$204m deferred conditional consideration<sup>1</sup>  
Derisks investment and delivers technical, processing and commercial synergies  
Broader strategic partnership

## 2025 focus

Finalisation of definitive agreement H1 2025  
Deepening relations with Nyangumarta and Martu Traditional Owners to deliver mutual benefit  
Environmental Review Document submission for initial processing capacity up to 10Mtpa, expected H2 2025





# Strong growth pipeline of global projects with a range of partners

## Resolution, USA



World-class deposit, 1.9Bt of Mineral Resources at 1.52% Cu<sup>1</sup>, potential to meet up to 25% of US demand

2025 focus on Final Environmental Impact Statement and actions necessary for the land exchange

Advancing partnership discussions with Native American Tribes

## Winu, Australia



Attractive starter operation with potential for growth

Stable jurisdiction, co-located near Pilbara iron ore assets in copper-rich Paterson Province

Ongoing consultations with Traditional Owner Groups to advance agreements

## Nuton™ technology



First copper from industrial scale deployment at Johnson Camp Mine expected in 2025

Demonstration 40x scale of prior pilot. Leach pad construction underway

Second industrial scale deployment for potential implementation in 2025

## Nuevo Cobre, Chile

Good progress in exploration joint venture with Codelco in prospective Atacama region

Ongoing geological field programs, environmental studies and community engagement

## La Granja, Peru

Joint venture with First Quantum Minerals (FQM) working to unlock one of the largest undeveloped copper deposits in the world

FQM progressing community engagement and engineering study



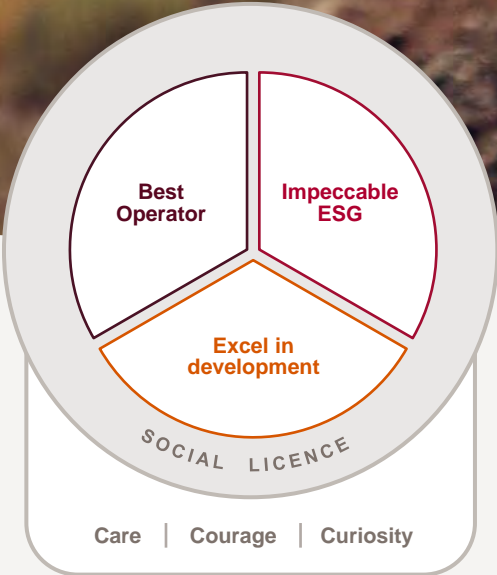


# Our Copper business

Maximising value  
from our existing  
assets

Delivering **profitable**  
**growth**

Investing in **quality**  
**partnerships**



2025 production guidance: 780 to 850kt

# Aluminium – stabilised, growing and decarbonising

Jérôme Péresse



# Aluminium is a key differentiator for Rio Tinto



We have a **global footprint** of world-class, primarily low-carbon, aluminium assets



We have **strong relationships** with governments and communities where we operate



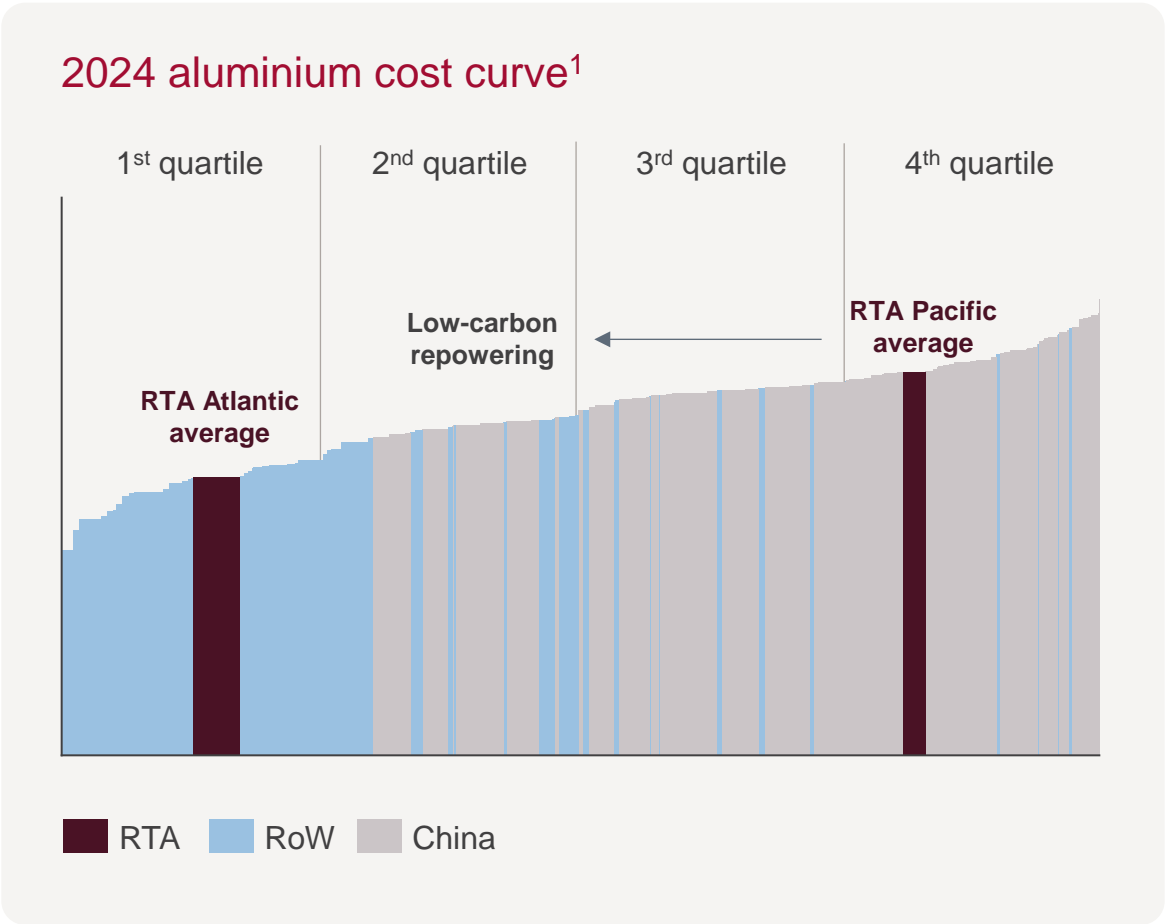
We have stabilised our assets and have a clear pathway to **deliver greater returns**

- Journey to Best Operator
- Repowering of Pacific Operations
- Robust technology foundation
- Access into most attractive market with a strong commercial position in North America





# Our smelters are competitively positioned on the cost curve, with repowering providing an opportunity to further improve



## Atlantic: Sustaining our advantage in renewable energy

We own our hydro power assets in Canada, sustained by long-standing water rights

### Quebec Operations

- 6 powerhouses and 3 reservoirs, with a total installed capacity of 3GW
- Serves >90% of our regional energy needs

**Kitimat:** Kemano hydro installed capacity of 1GW which is above smelter load

**ISAL:** energy supplied entirely by hydro power

## Pacific: Repowering and moving down the cost curve

- Secured 2.2GW of renewable energy for Boyne Island smelter through PPAs, with the remaining requirements and associated firming in progress
- Concluded a new 20-year renewable electricity supply agreement for Tiwai Point smelter in New Zealand

# We have secured the long-term future of our Tiwai Point smelter in New Zealand

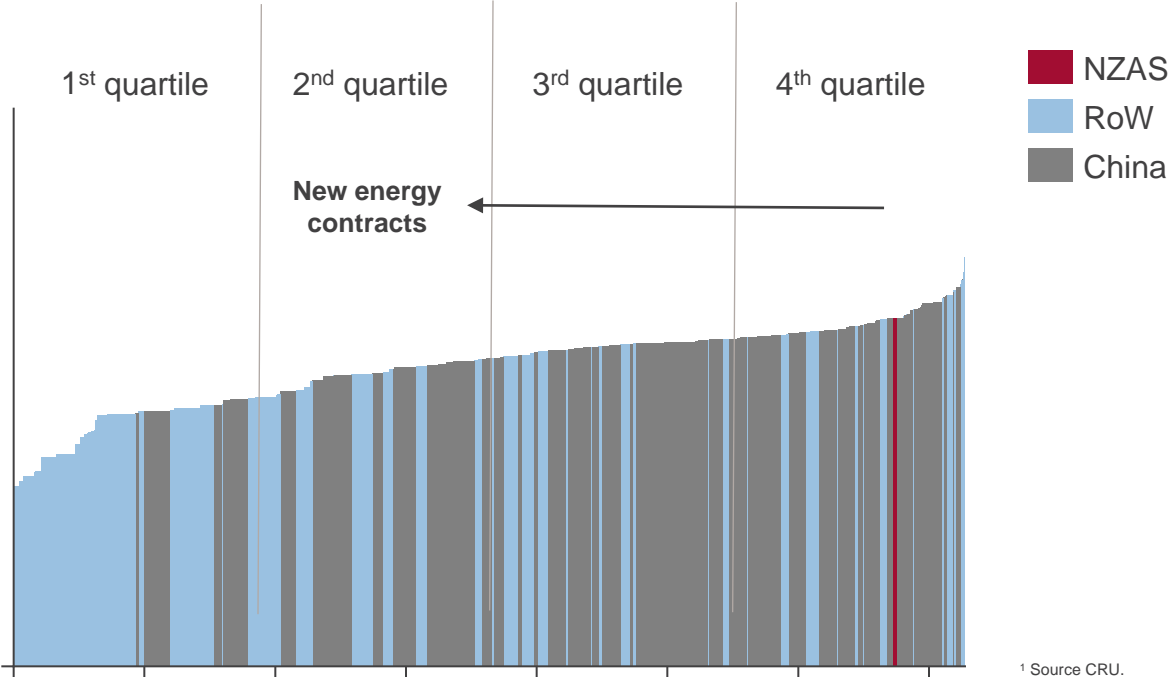
- ☑ Concluded 20-year renewable energy supply agreement, securing long term supply and derisking with competitive renewable energy
- ✂ With the repowering contract, there has been a structural change in the competitiveness of NZAS

Completed acquisition of Sumitomo Chemical's 20.64% interest in NZAS, it is now wholly owned; ~70kt full-year production increase

Strengthens relationship with Ngāi Tahu, local community and New Zealand government

Best Operator practices and innovation allow us to continuously improve our flex-power capabilities

2024 smelter cost curve<sup>1</sup>



<sup>1</sup> Source CRU.



# We have stabilised our operations and are delivering strong performance in 2024

## 2024 production guidance

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### 3.2 to 3.4Mt Aluminium

On track to deliver guidance

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### 53 to 56Mt Bauxite

Expect to exceed top end of guidance on back of record production, especially at Amrun

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### 7.0 to 7.3Mt Alumina

Expect to achieve upper end of guidance

Alumina force majeure lifted, with return to 95% gas supply in Gladstone. Refineries back to full capacity by year-end

## Markets

---



Strong underlying fundamentals despite short term uncertainties

---



Benefiting from China's import and geographical diversification needs

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Alumina markets expected to remain tight in the short-run



# Our continued focus on Best Operator objective is delivering

## SPS case study: Amrun mine<sup>1</sup>

Reducing scheduled losses

⬇️ 229hr p.a.

Increasing plant feed rate<sup>2</sup>

⬆️ 9%

## Successful materials handling Kaizen has improved feed stability

- Procedure developed to address feed instabilities
- Automation enhancements were implemented at crude ore circuit
- Shear beam added to the apron feeder to improve feed stability

Feed instability



Shear beam installed

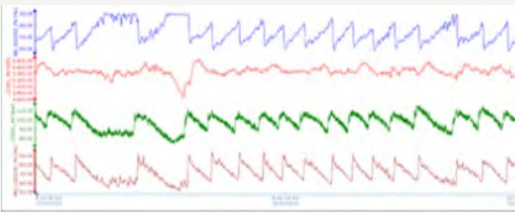


Feed stability re-established

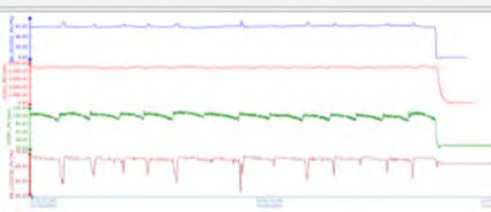


Record Q2 at Amrun

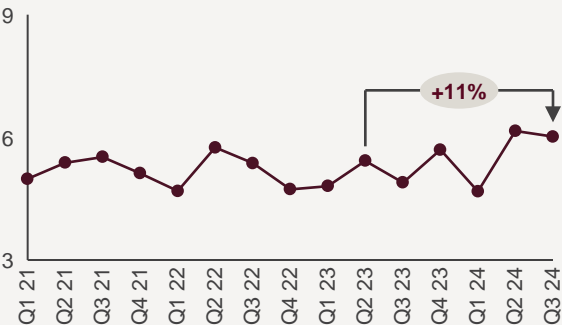
Before



After

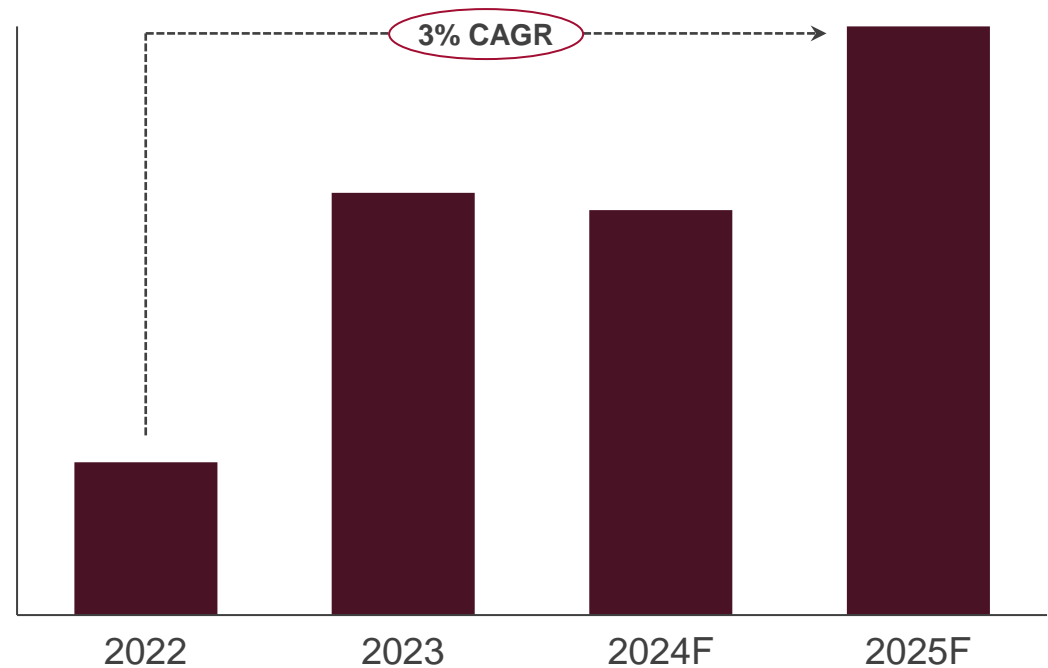


Now operating above nameplate  
Production, Mt per quarter (dry)

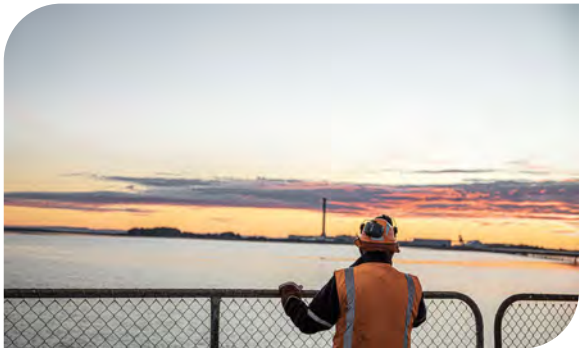


# We are growing in aluminium

Consolidated bauxite, alumina and aluminium production to achieve ~3% CuEq CAGR from 2022 to 2025<sup>2</sup>



Low-carbon business underpins our growth



Matalco: growth in North America with primary and recycled value-added products through 50% joint venture with Giampaolo Group

7 casthouses with 640kt billet and 160kt slab annual effective capacity<sup>1</sup>



AP60: expanding production line, delivering some of the most efficient and lowest emission aluminium

Project on budget and on track for first hot metal in 2026

# Expanding our low-carbon footprint in Europe

## Greenfield primary aluminium opportunity in Kokkola, Finland

### Overview

First project of its kind in continental Europe for over 30 years

First deployment of AP60 outside Quebec

### Partnership

Partnership with Vargas, Mitsubishi and local partners

Assessing sourcing of low-carbon competitive electricity from Fortum. Other partners include TESI

Feasibility study and environmental impact assessment to follow

### Strategy

We intend to be a significant investor and commercial off-taker

Strengthens our global leadership in low-carbon aluminium



AP60 simulation



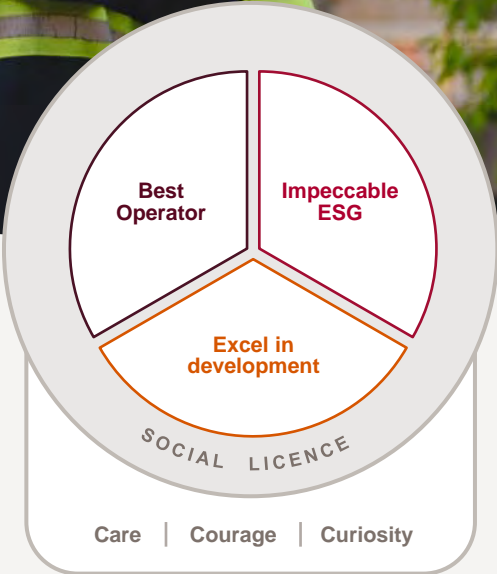


# Our Aluminium business

Clear vision to be the **leader** in **sustainable** and **low-carbon** western aluminium production

Backed by our competitive advantages including our **superior product offering**

Focused **strategic priorities** anchored in our four Group objectives



**2025 production guidance:** Bauxite 57 to 59Mt | Alumina 7.4 to 7.8Mt | Aluminium 3.25 to 3.45Mt





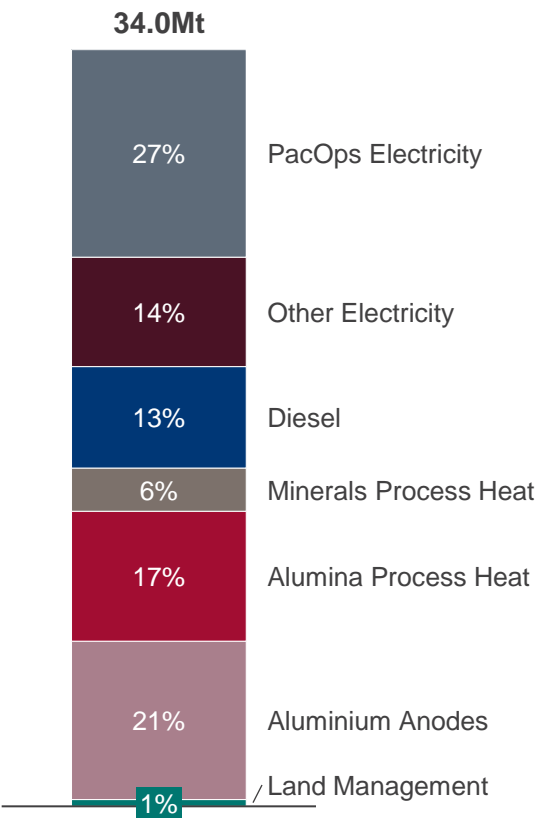
# Panel 2: Markets and Decarbonisation

Bold Baatar  
Mark Davies  
Jérôme Péresse

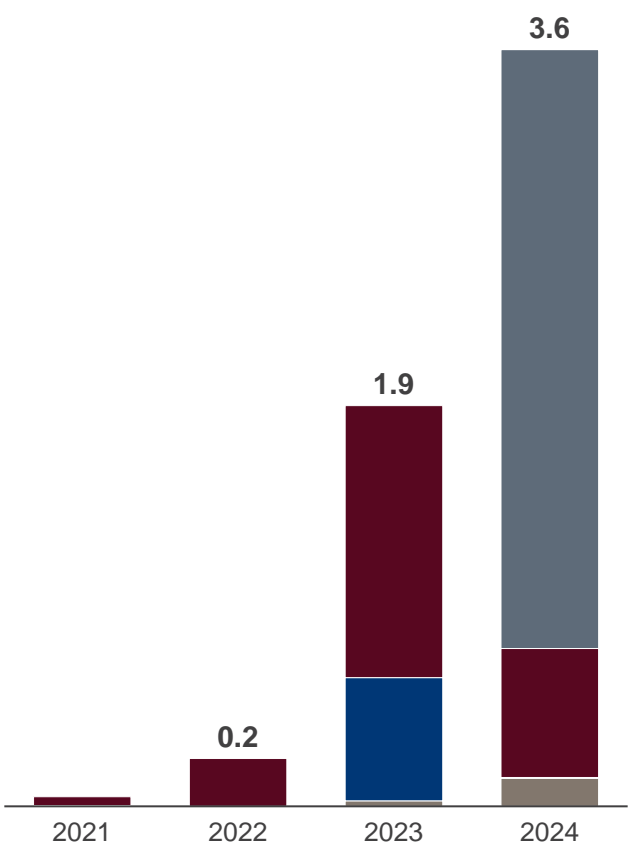


# A new era in decarbonisation commitments

2023 emissions<sup>1</sup>  
% by source



Annual abatement commitments  
Mt CO<sub>2</sub>e equity basis





# We have been making large scale investments for many years, positioning Rio Tinto for the future

## Repowering our assets to transition to a sustainable future



**2.2GW PPAs for Boyne**  
Bringing online new renewables equivalent to 10% of Queensland's power demand



**Pilbara renewables**  
Progressing solar projects with Ngarluma (80MW) and Yindjibarndi (75MW)



**NZAS future secured**  
20 year low-carbon arrangements supporting local grid and new wind development



**140MW Khangela Emoyeni wind farm**  
Second major PPA for RBM in South Africa

## Developing industry breakthroughs



**Battery electric truck pilots**  
Rio Tinto – BHP industry collaboration and SPIC battery swap trial



**Renewable diesel production**  
Pongamia seed biofuel farming trial in Australia



**Évolys Québec biocarbon**  
Partnership with Aymium for renewable metallurgical biocarbon



**Hydrogen calcination pilot**  
Construction is underway at Yarwun for this world first technology

## Partnering to invest in value chain decarbonisation



**Blast furnace basic oxygen furnace**  
Commissioned low-carbon sintering demonstration plant with Shougang



**Investing in low-carbon technology**  
Supplying high-grade direct reduction iron ore pellets to GravitHy from 2028

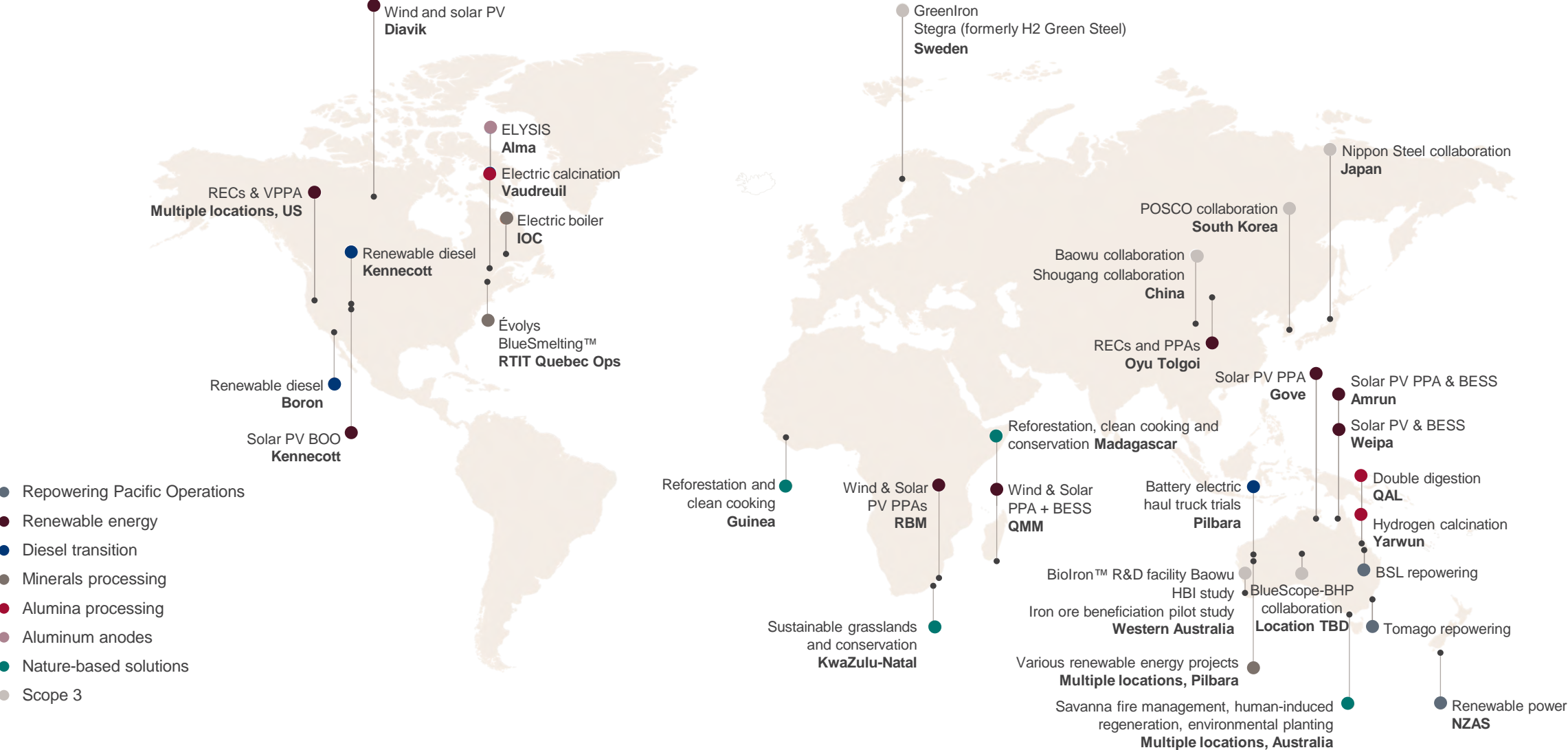


**Biolion™ R&D facility**  
\$143m pilot in low carbon steelmaking technology in Western Australia



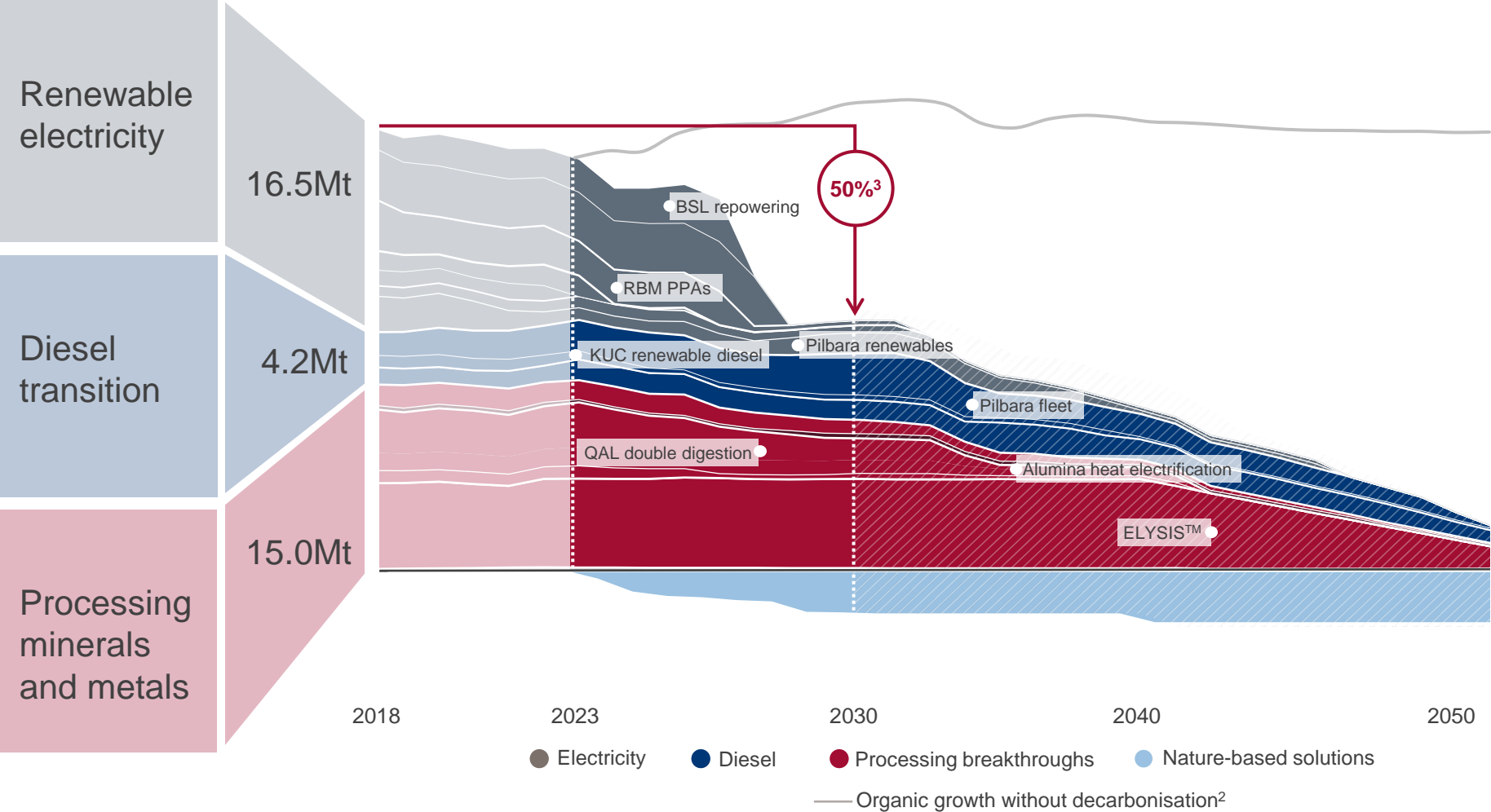
**Shipping carbon intensity**  
Achieved 40% reduction across fleet, ahead of company and industry targets

# Delivering projects to achieve our Scope 1, 2 and 3 objectives



# Roadmap to net zero

Group decarbonisation pathway<sup>1</sup>  
(Mt CO<sub>2</sub>e equity basis, 2018 baseline)



Pathway to 2030 targets underpinned by repowering of electricity supply

Net zero requires scale up and economic deployment of technology breakthroughs

Nature-based solutions play a role in addressing climate change and nature loss, offset use limited to 10% of our 2018 baseline<sup>4</sup>

1. Totals shown represent 2018 baseline emissions, reflecting increased equity at BSL, NZAS  
2. Baseline emissions extended post-2040 using assumed asset life extensions  
3. Represents net emissions reduction vs 2018 baseline.  
4. We anticipate the use of high-integrity offsets (including compliance credits) towards our 2030 target (up to 10% of 2018 baseline).



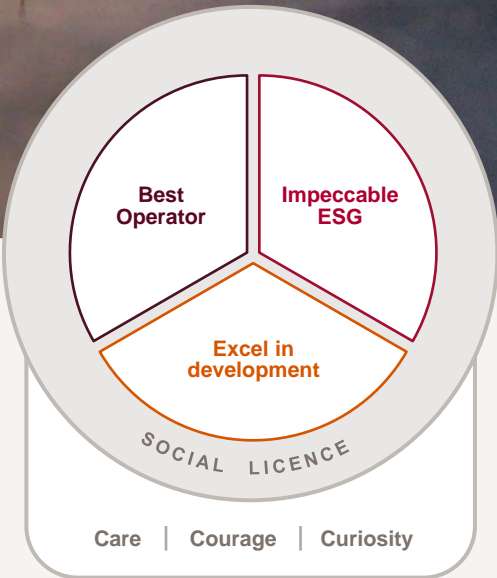


# Decarbonisation

**Record year of commitments - >3Mt CO<sub>2</sub>e in 2024; >110Mt CO<sub>2</sub>e over 20 years<sup>1</sup>**

**On track for our 2030 operational emissions targets – targeting 50% net reduction**

**Advancing a strong R&D pipeline towards our net zero goal**



1. Calculation is based on full rate of decarbonisation over 20 years



# Compelling investment drives diversification

Peter Cunningham



# Strategy execution delivering strong cash flow

Enhancing cash flows through:

**Best Operator**

**Profitable growth**

**Disciplined  
decarbonisation**



Underpinned by:

**Consistent capital allocation**

**Strong balance sheet**





# Deepening our Best Operator journey

## Strong progress at primary cash generation assets

### Pilbara

- +5Mtpa production in 2023, 2024 and 2025

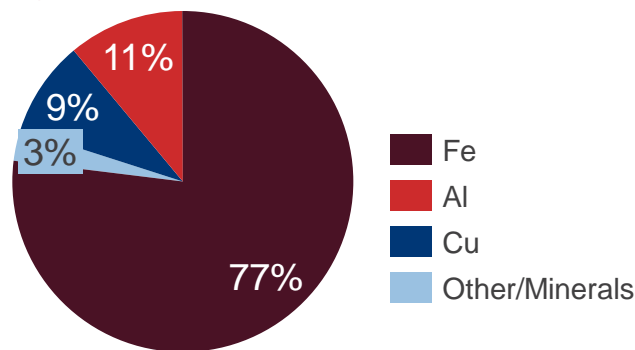
### Bauxite

- Amrun operating above nameplate
- +9% increase in plant feed

### Aluminium

- +5pp structural uplift in ROCE by 2030

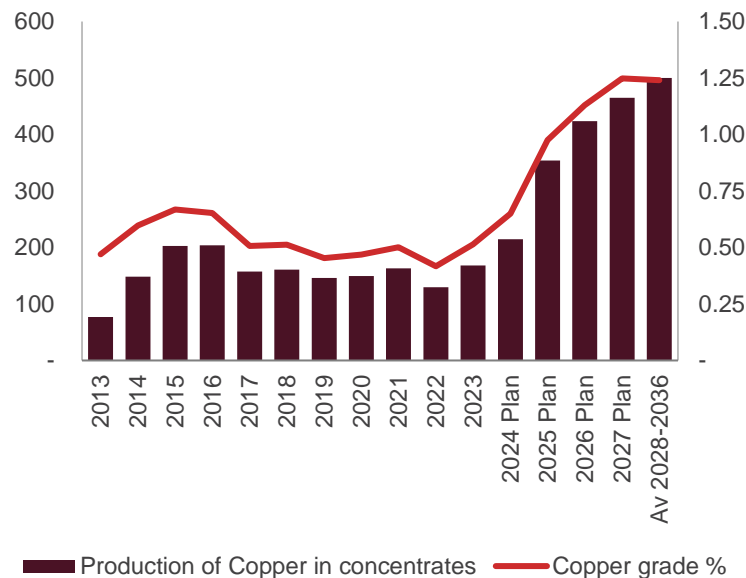
Average EBITDA (2019-2023)



## Best Operator at Oyu Tolgoi supporting ramp-up of underground

- On track for 500ktpa average copper production<sup>1</sup>

Oyu Tolgoi copper in concentrate (LHS) and head grade (RHS)<sup>1</sup>



## Opportunities to unlock value

### IOC - focus on stability

- Clear pathway to 23Mtpa concentrator capacity

### RTIT - unlock of products

- Improving ROCE from 6% to 15% by 2030 with volume enhancement and by-product optimisation

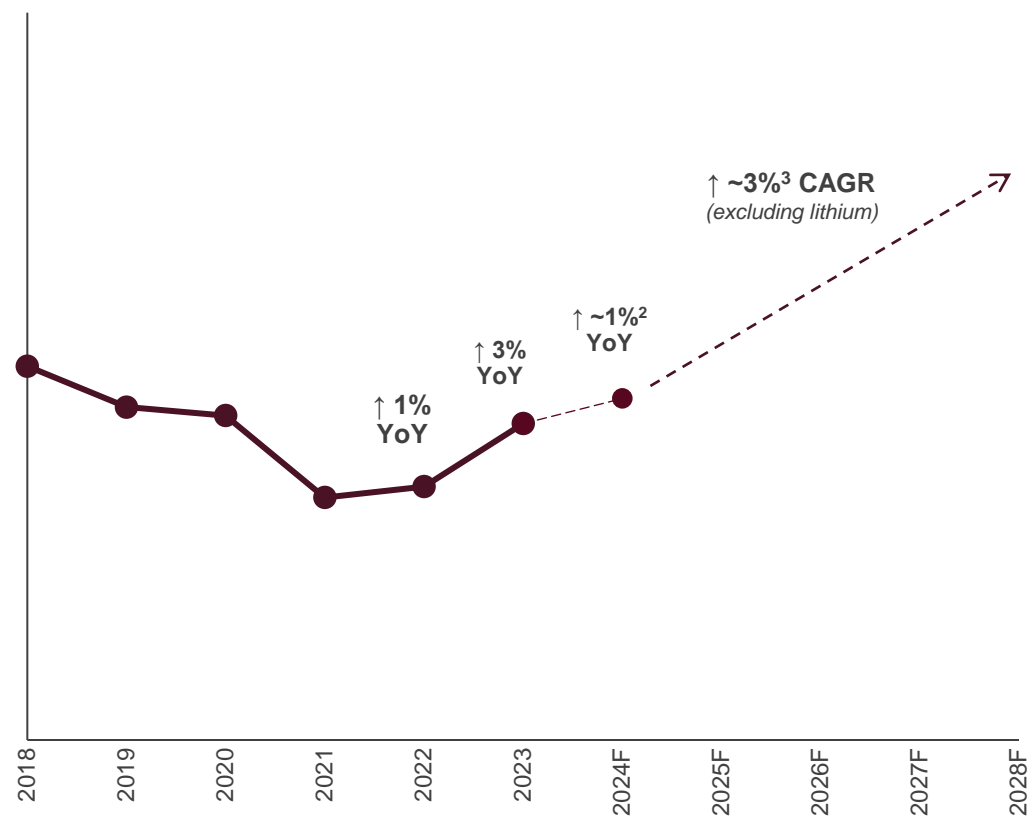
### Kennecott - long-term conviction

- Addressing near-term geotechnical challenges
- Attractive orebody, underground optionality (>30ktpa by 2027<sup>1</sup>)

1. See supporting references for the 500ktpa Oyu Tolgoi production target and production profiles and the 30ktpa Kennecott underground production target on slide 94

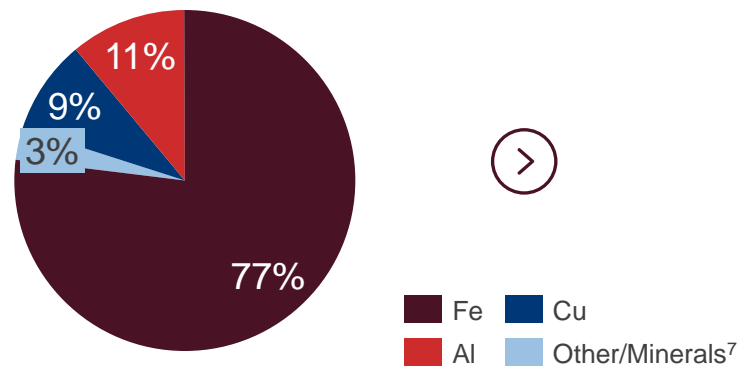
# Profitable growth at Oyu Tolgoi delivering diversification

Growing in CuEq<sup>1</sup> terms in the near term  
With existing asset improvements and organic growth

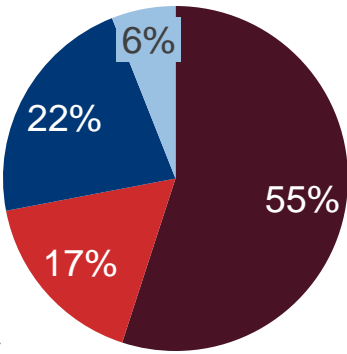


Diversifying portfolio  
Total % of EBITDA **excluding lithium**

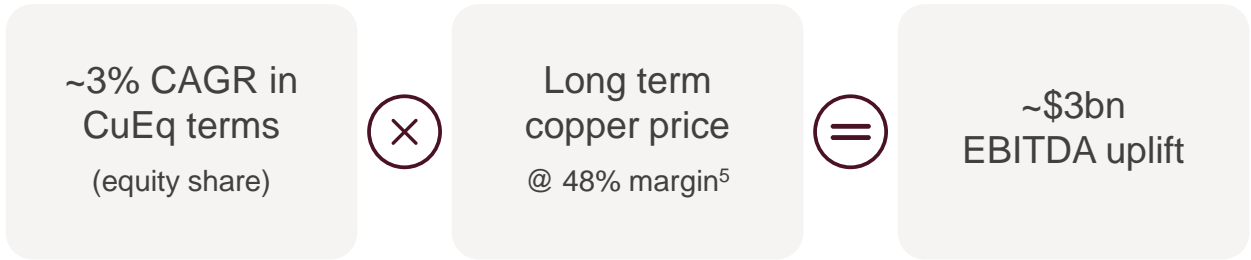
2019 – 2023 Average



Mid-term<sup>6</sup>



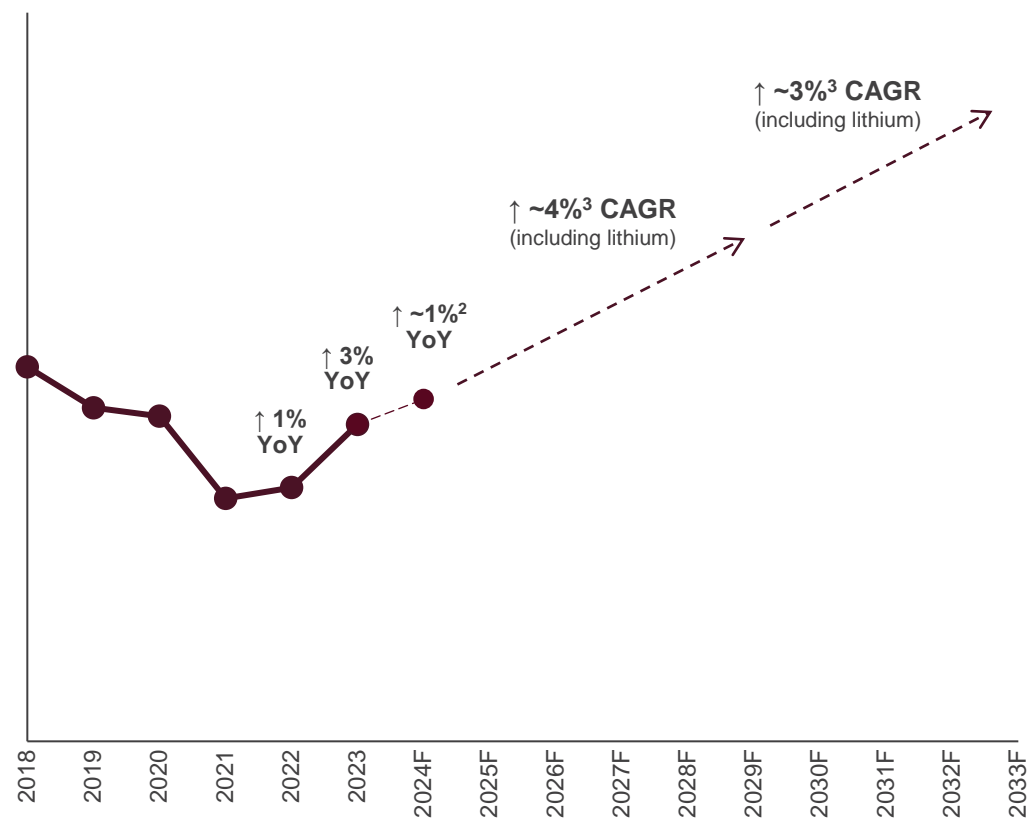
Enhanced cash flow in 2028<sup>4</sup>



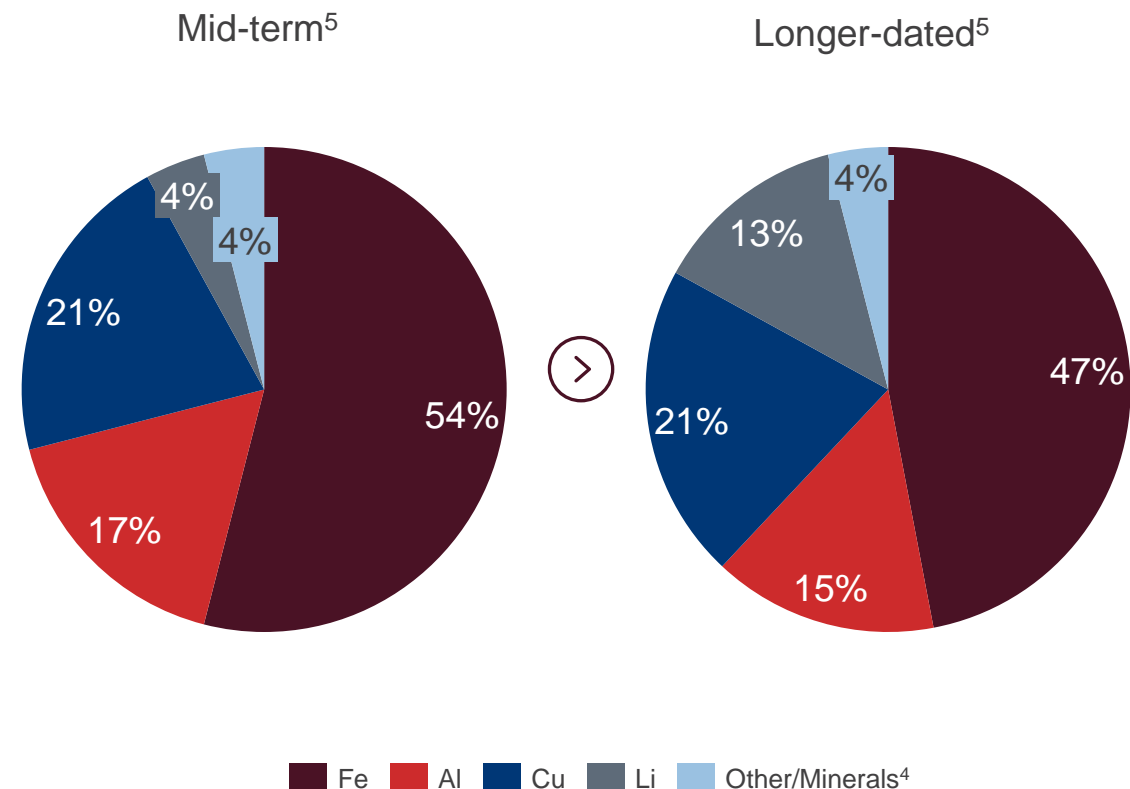
1. Copper equivalent production based on long-term consensus pricing  
2. 2024F copper equivalent production is a forecast based on mid-point production guidance or top / bottom of the range  
3. Ambition for compound annual growth rate (CAGR) for copper equivalent production from 2024 to 2028 from existing portfolio and projects already in execution  
4. This statement is an indicative target and is not intended to be a profit forecast.  
5. Average EBITDA margin over past 5 years  
6. Based on long-run consensus pricing  
7. Other includes Molybdenum, Silver, Borates, Diamonds, Salt, TiO<sub>2</sub>

# Lithium options underpin growth for the next decade

Growing in CuEq<sup>1</sup> terms for the next decade  
With inorganic lithium a key driver







Diversifying portfolio  
% of EBITDA including lithium



1. Copper equivalent production based on long-term consensus pricing  
2. 2024F copper equivalent production is a forecast based on mid-point production guidance or top / bottom of the range.  
3. Ambition for compound annual growth rate (CAGR) for copper equivalent production from 2024 to 2033  
4. Other includes Molybdenum, Silver, Borates, Diamonds, Salt, TiO<sub>2</sub>  
5. Based on long-run consensus pricing



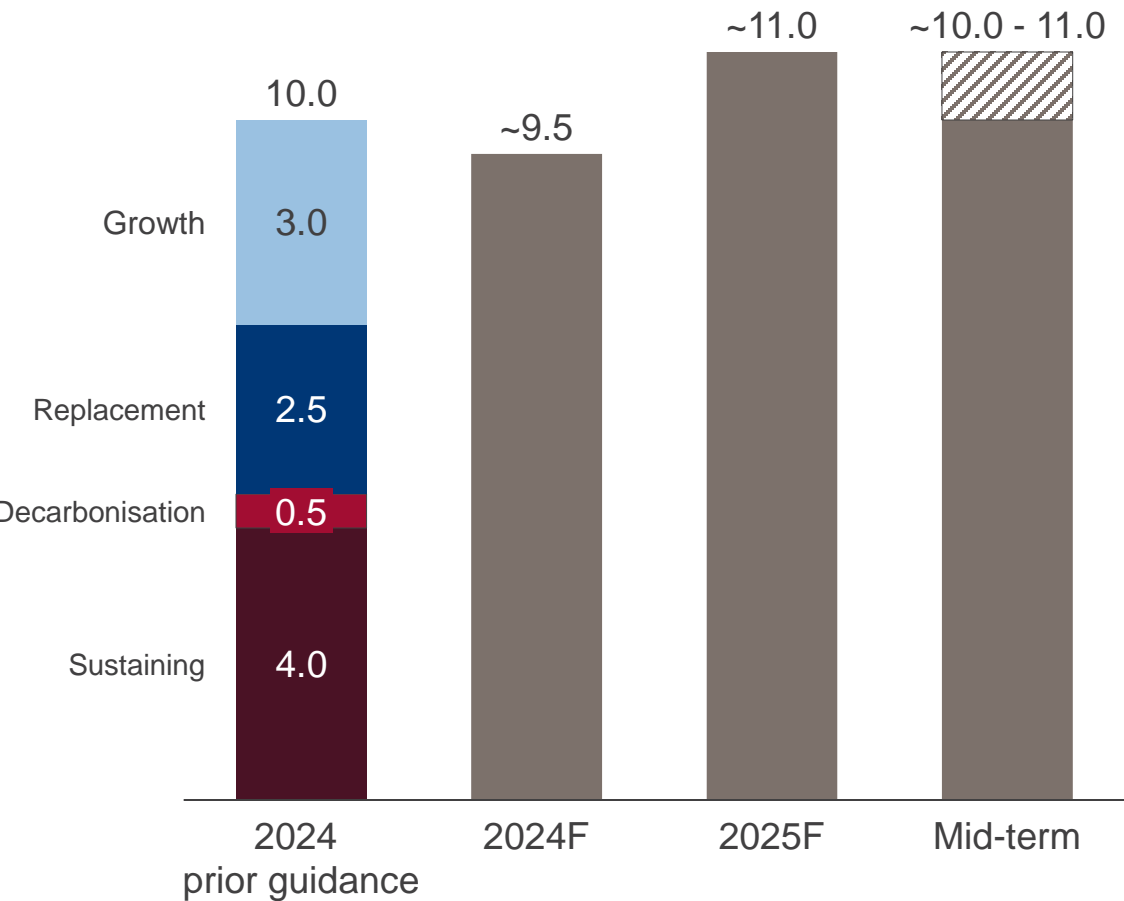
# Continuous optimisation for carbon reduction and shareholder value

	2021	2024
 Target	50% by 2030	50% by 2030
 Capex	\$7.5bn	\$5bn-\$6bn (lower end) Seeking further opportunities to lower capex intensity
 Returns	WACC <sup>1</sup> for Rio Tinto	12-15% IRR <sup>2</sup> Portfolio allocation Carbon price evolution
 Delivery		>30 partnerships

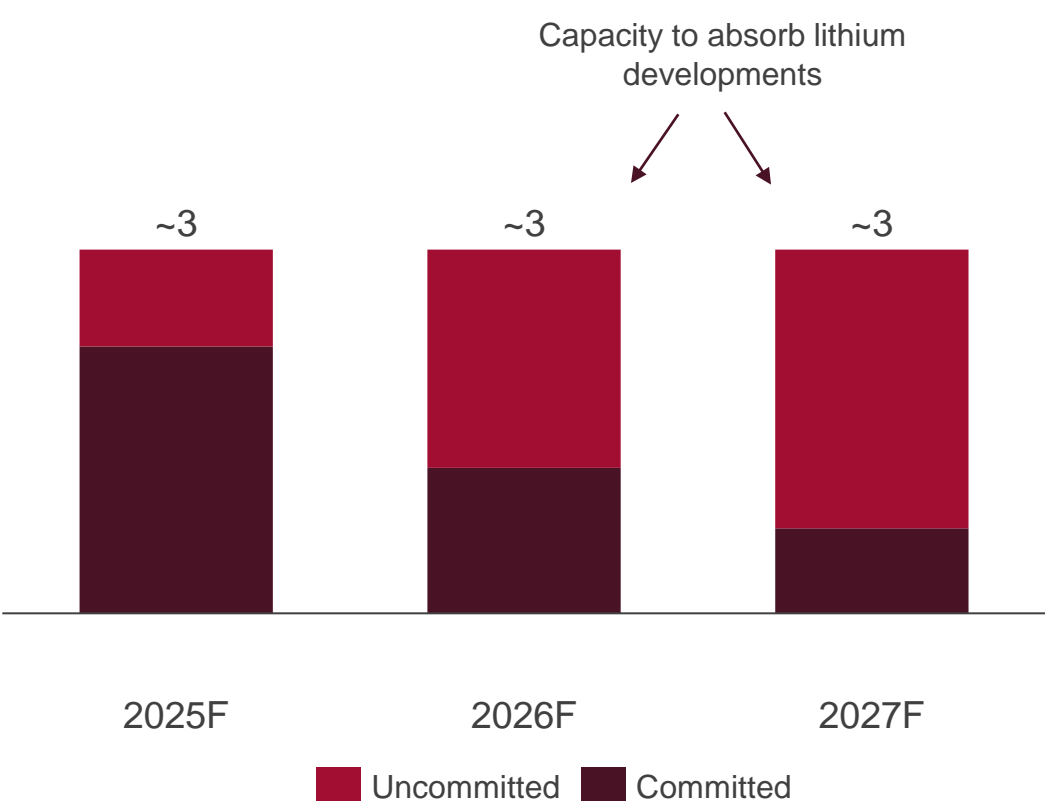


# Consistent and disciplined capital allocation

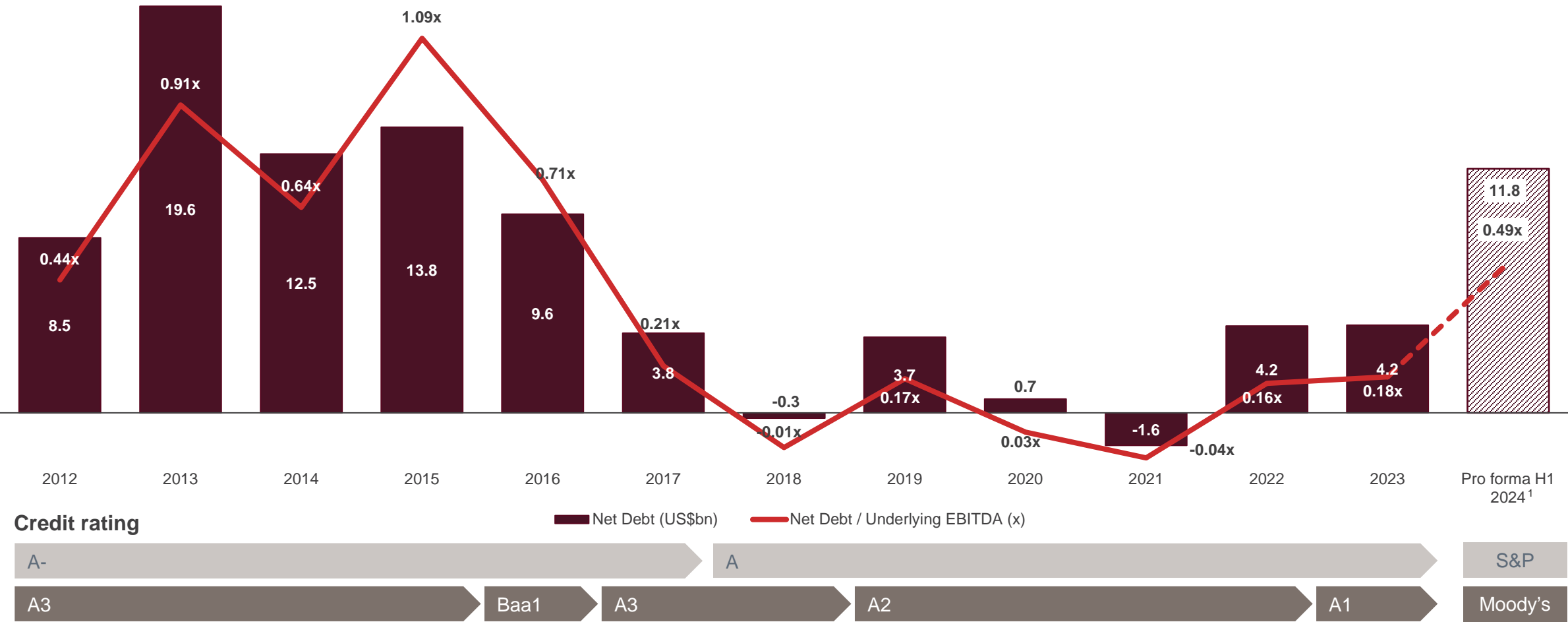
Enhanced investment in replacement capacity  
\$bn



Growth capital  
\$bn



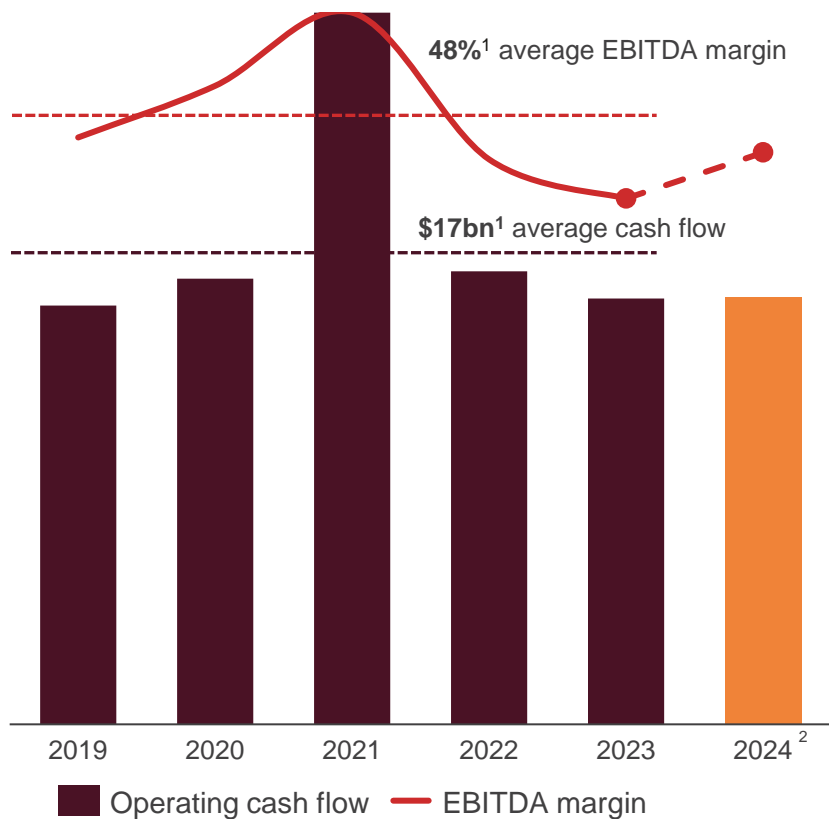
# Balance sheet remains strong



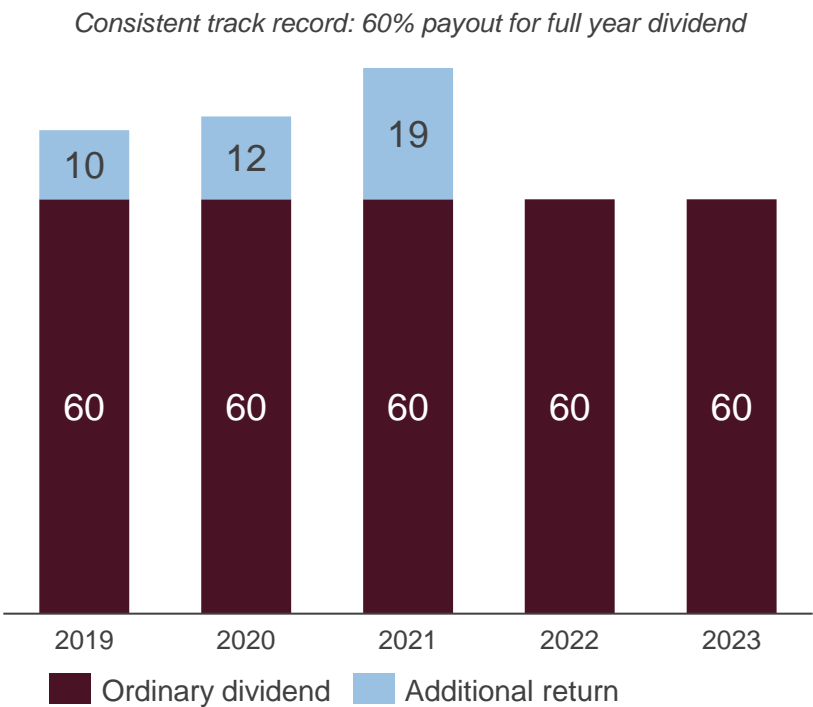


# Robust financial health as investments support future cash flows

Attractive operating cash flows and margin  
\$bn (RHS), % (LHS)



Continuing to deliver attractive shareholder returns<sup>3</sup>  
Payout ratio (%)



# RioTinto

## Executing our strategy for long-term value

Jakob Stausholm



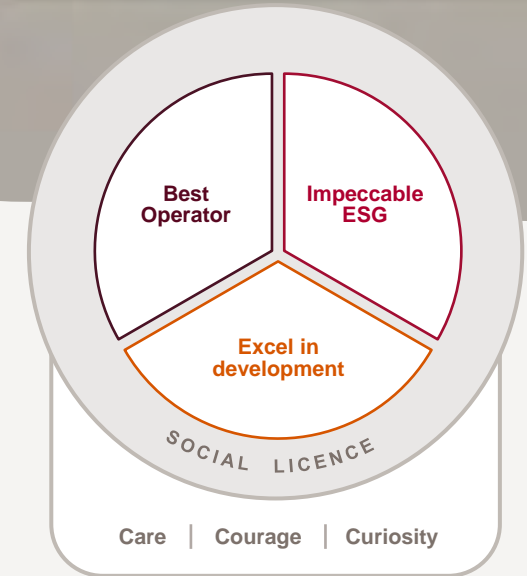


# Executing our strategy

Unlocking the full potential of our assets through  
**Best Operator**

Shaping our portfolio of  
**the materials the world needs**

**A decade of ~3% CAGR**  
driven by Oyu Tolgoi,  
Simandou and our new  
lithium portfolio





# Q&A

# Guidance

# Production guidance

	2023 Actual	2024 Guidance	2025 Guidance
<b>Pilbara iron ore shipments<sup>1</sup> (100% basis)</b>	331.8Mt	323 – 338Mt	323 – 338Mt
<b>Copper</b>			
Mined Copper (consolidated basis) <sup>2</sup>	620kt	660 – 720kt <sup>3</sup>	780 – 850kt <sup>4</sup>
Refined Copper	175kt	230 – 260kt	
<b>Aluminium</b>			
Bauxite	54.6Mt	53 – 56Mt <sup>5</sup>	57 – 59Mt
Alumina	7.5Mt	7.0 – 7.3Mt <sup>7</sup>	7.4 – 7.8Mt
Aluminium	3.3Mt	3.2 – 3.4Mt	3.25 – 3.45Mt
<b>Minerals</b>			
TiO <sub>2</sub>	1.1Mt	0.9 – 1.1Mt	1.0 – 1.2Mt
IOC pellets and concentrate <sup>6</sup>	9.7 Mt	9.1 – 9.6Mt	9.7 – 11.4Mt
B <sub>2</sub> O <sub>3</sub>	0.5Mt	~0.5Mt	~0.5Mt

<sup>1</sup> Pilbara shipments guidance remains subject to weather, market conditions and management of cultural heritage

<sup>2</sup> Includes Oyu Tolgoi on a 100% consolidated basis and continues to reflect our 30% share of Escondida

<sup>3</sup> Around the bottom end

<sup>4</sup> From Q1 2025, we will report copper production and guidance as one metric, in order to simplify reporting and align with peer practices. Further details on slide 90

<sup>5</sup> Expected to exceed the top end of guidance. | <sup>6</sup> Iron Ore Company of Canada | <sup>7</sup> Expect to achieve upper end guidance.



# Group level financial guidance

	2024F	2025F	Mid-term (per year)
<b>Capex</b>			
<b>Total Group</b>	~\$9.5bn	~\$11bn	~\$10-11bn
Growth capital	~\$3.0bn	~\$3.0bn	
Sustaining capital	~\$4.0bn	~\$4.0bn	
<i>Including Pilbara sustaining<sup>1</sup></i>	~\$1.8bn	~\$2.0bn	
Replacement capital	~\$2.5bn	~\$3-4bn	
Decarbonisation capital	~\$0.3bn	~\$0.3bn	
<b>Effective tax rate</b>	~30%	~30%	~30%
<b>Shareholder returns</b>	Total returns of 40 – 60% of underlying earnings through the cycle		

# Updated methodology to report copper production and guidance

## Current approach: separate reporting for mined and refined copper

	Production share	2020	2021	2022	2023	2024 Q3 YTD
<b>Mined Copper</b>						
<u>Kennecott</u>						
Production of metal in copper concentrates	100%	140	159	179	152	92
<u>Escondida</u>						
Mill production (metal in concentrates)	30%	287	245	258	265	236
Recoverable copper in ore stacked for leaching	30%	51	35	41	35	18
<u>Oyu Tolgoi</u>						
Production of metal in concentrates	100%	150	163	129	168	149
<b>Total Mined Copper (kt)</b>		<b>627</b>	<b>602</b>	<b>607</b>	<b>620</b>	<b>495</b>
<b>Refined Copper</b>						
<u>Kennecott</u>						
Production of refined metal	100%	85	143	148	109	138
<u>Escondida</u>						
Refined production from leach plants	30%	70	59	61	67	42
<b>Total Refined Copper (kt)</b>		<b>155</b>	<b>202</b>	<b>209</b>	<b>175</b>	<b>180</b>

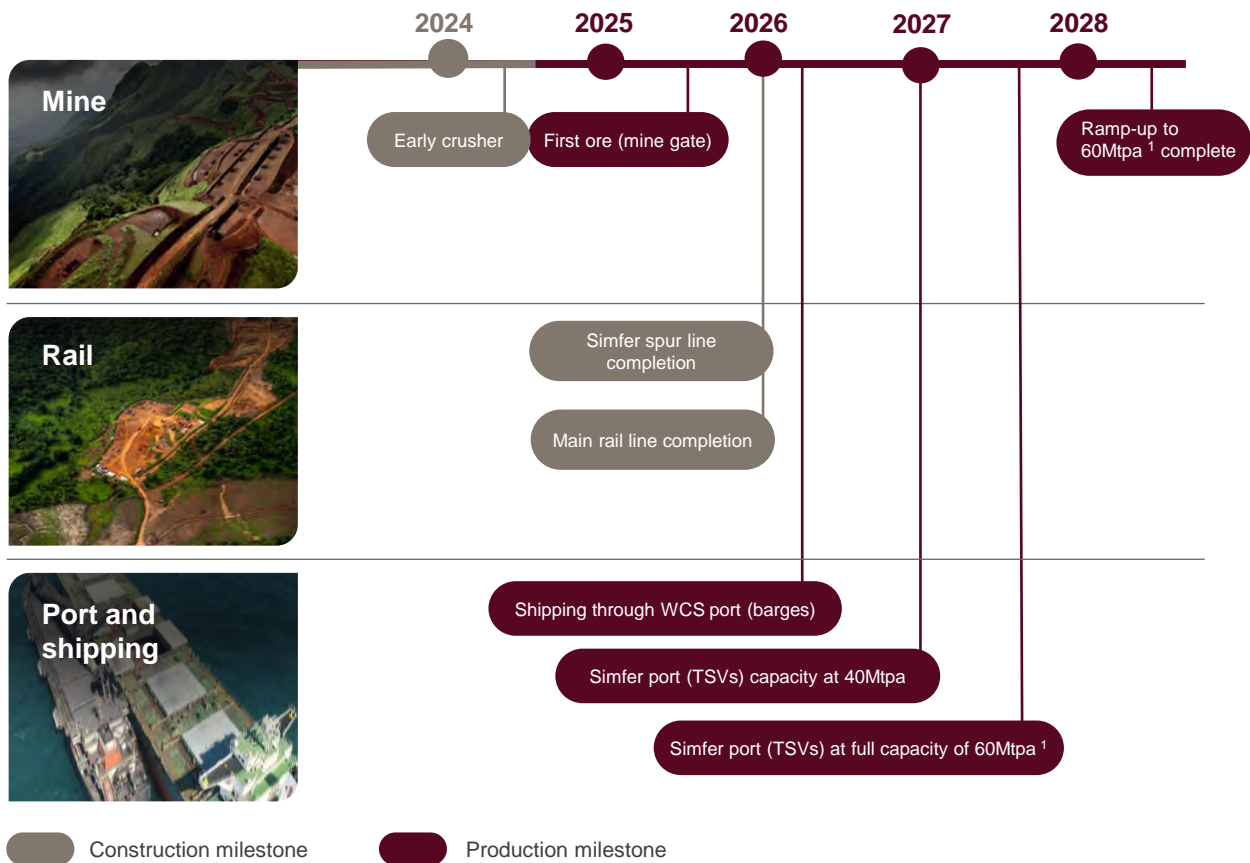
- Single combined metric for simplified reporting
- Alignment with peer practices
- New approach will be adopted for 2025 production guidance and included in reporting from our Q1 2025 quarterly operations report onwards
- 2025 production guidance of 780 – 850kt total copper production provided using new approach

## New approach: a single metric for copper production

	Production share	2020	2021	2022	2023	2024 Q3 YTD
<u>Kennecott</u>						
Production of refined metal	100%	85	143	148	109	138
<u>Escondida</u>						
Mill production (metal in concentrates)	30%	287	245	258	265	236
Refined production from leach plants	30%	70	59	61	67	42
<u>Oyu Tolgoi</u>						
Production of metal in concentrates	100%	150	163	129	168	149
<b>Total Copper Production</b>		<b>592</b>	<b>610</b>	<b>596</b>	<b>608</b>	<b>565</b>

# Simandou high-grade iron ore project advancing at pace

## Project milestones



<sup>1</sup>See supporting references for the Simandou production target on slide 94



# Supporting statements

## Arcadium - Mineral Resources and Mineral Reserves on slide 18 and 37

Arcadium Lithium's lithium Mineral Resources for Olaroz and Cauchari referenced on slides 18 and 37 are a LCE estimate based on:

1. the 16.87 Mt LCE lithium brine Mineral Resources as reported in the Allkem Olaroz NI43-101 Technical Reporting dated 27 October 2023, which comprise 8.33 Mt LCE of Measured Resources, 2.66 Mt LCE of Indicated Resources and 5.88 Mt LCE of Inferred Resources; and
2. the 5.95 Mt LCE lithium brine Mineral Resources as reported in the Allkem Cauchari NI43-101 Technical Reporting dated 27 October 2023, which comprise 1.85 Mt LCE of Measured Resources, 2.60 Mt LCE of Indicated Resources and 1.50 Mt LCE of Inferred Resources.

Arcadium Lithium's lithium Mineral Resources for Sal de Vida and Fenix referenced on slide 18 and 37 are an LCE estimate based on:

1. the 7.17 Mt LCE lithium brine Mineral Resources as reported in the Allkem Sal de Vida NI43-101 Technical Reporting dated 27 October 2023, which comprise 3.52 Mt LCE of Measured Resources, 3.00 Mt LCE of Indicated Resources and 0.65 Mt LCE of Inferred Resources; and
2. the 11.8 Mt LCE lithium brine Mineral Resources as reported in Livent Salar de Hombre Muerto (Fenix) Feasibility Study amended 14 November 2023, which comprise 2.78 Mt LCE of Measured Resources, 4.29 Mt LCE of Indicated Resources and 4.75 Mt LCE of Inferred Resources.

In reporting Arcadium Lithium's lithium brine Mineral Resources as LCE, lithium metal is converted to LCE by multiplying by a factor of 5.323.

Mineral Resources are reported **inclusive** of Mineral Reserves.

# Supporting statements (cont.)

## Arcadium - Mineral Resources and Mineral Reserves on slide 34

Arcadium Lithium's lithium Mineral Resources referenced on slide 34 are a LCE estimate based on:

1. the 85.9 Mt of hard-rock lithium Mineral Resources as reported in Arcadium Lithium's Form 10-K annual report filed with the US Securities Exchange Commission (SEC) for the year ended 31 December 2023 (Arcadium Lithium's 2023 Form 10-K), which comprise 0.1 Mt of Measured Resources @ 1.00% Li<sub>2</sub>O, 25.2 Mt of Indicated Resources @ 1.23% Li<sub>2</sub>O and 60.6 Mt of Inferred Resources @ 1.30% Li<sub>2</sub>O; and
2. the 6.4 Mt of lithium brine Mineral Resources (expressed as lithium metal) as reported in Arcadium Lithium's 2023 Form 10-K annual report, which comprise 2.8 Mt of Measured Resources, 1.2 Mt of Indicated Resources and 2.4 Mt of Inferred Resources.

Arcadium Lithium's lithium Mineral Reserves referenced on slide 34 are an LCE estimate based on:

1. the 62.1 Mt of hard-rock lithium Mineral Reserves at 1.28% Li<sub>2</sub>O as reported in Arcadium Lithium's 2023 Form 10-K, which comprise 5.4 Mt of Proven Reserves @ 1.38% Li<sub>2</sub>O and 56.7 Mt of Probable Reserves @ 1.27% Li<sub>2</sub>O; and
2. the 1.4 Mt of lithium brine Mineral Reserves (expressed as lithium metal) @ 658 mg/L as reported in Arcadium Lithium's 2023 Form 10-K annual report, which comprise 0.3 Mt of Proven Reserves and 1.1 Mt of Probable Reserves.

These Mineral Resource and Mineral Reserve estimates have been prepared in accordance with the requirements of subpart 1300 of Regulation S-K ("Subpart 1300"), issued by the SEC.

In reporting Arcadium Lithium's hard-rock lithium Mineral Resources and Mineral Reserves as LCE, Li<sub>2</sub>O is converted to LCE by multiplying by 2.473. In reporting Arcadium Lithium's lithium brine Mineral Resources and Mineral Reserves as LCE, lithium metal is converted to LCE by multiplying by a factor of 5.323.

Mineral Resources are reported **exclusive** of Mineral Reserves.

Mineral Reserves as reported under Regulation S-K are the equivalent term to Ore Reserves under the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition (JORC Code).

## Jadar – Mineral Resources

Rio Tinto's Jadar lithium Mineral Resources referenced on slide 34 are an LCE estimate based on the Mineral Resources at Rio Tinto's Jadar project in Serbia as reported in Rio Tinto's 2023 Annual Report released to the Australian Securities Exchange (ASX) on 21 February 2024 and available at riotinto.com.

The Jadar Mineral Resources comprise 85 Mt of Indicated Resources @ 1.76% Li<sub>2</sub>O and 58 Mt of Inferred Resources @ 1.87% Li<sub>2</sub>O for a total of 144 Mt @ 1.80% Li<sub>2</sub>O. The Competent Persons responsible for the information in the 2023 Annual Report that relates to the Jadar project's Mineral Resources are Ivana Misailovic and Dusan Tanaskovic, both of whom are members of the European Federation of Geologists.

These Mineral Resources have been reported in accordance with the JORC Code and the Listing Rules of the ASX. Rio Tinto confirms that it is not aware of any new information or data that materially affects the Jadar Mineral Resources estimate reported in the 2023 Annual Report, that all material assumptions and technical parameters underpinning the estimate 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.

In reporting the Jadar Mineral Resource as LCE, Li<sub>2</sub>O is converted to LCE by multiplying by 2.473.

Mineral Resources are reported **exclusive** of Ore Reserves.

## Rincon Mineral Resources and Ore Reserves

Rio Tinto's Rincon lithium Mineral Resources and Ore Reserves referenced on slide 34 are LCE estimates based on the Mineral Resources and Ore Reserves at Rio Tinto's Rincon lithium brine project in Argentina as reported to the ASX on 4 December 2024 and available at riotinto.com.

The Rincon Mineral Resources comprise 748 Mm<sup>3</sup> brine volume @ 394 mg/L of Measured Resources for 0.29 Mt lithium metal, 3,419 Mm<sup>3</sup> brine volume @ 432 mg/L Indicated Resources for 1.48 Mt of lithium metal and 1,148 Mm<sup>3</sup> brine volume @ 374 mg/L Inferred Resources for 0.43 Mt lithium metal.

The Rincon Ore Reserves comprise 1,340 Mm<sup>3</sup> brine volume @ 350 mg/L of Probable Reserves for 0.39 Mt lithium metal.

The Competent Persons responsible for the information in the release that relates to the Rincon Mineral Resources and Ore Reserves are Megan Zivic and Michael Rosko, both of whom are Registered Members of the Society for Mining, Metallurgy & Exploration (SME-RM). The Competent Person responsible for the metallurgical perspective of the Ore Reserves is Brendan Foster who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM).

These Mineral Resources and Ore Reserves have been reported in accordance with the JORC Code and the Listing Rules of the ASX. Rio Tinto confirms that it is not aware of any new information or data that materially affects the Rincon Mineral Resources and Ore Reserves estimates, that all material assumptions and technical parameters underpinning the estimates 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.

In reporting Rincon's lithium brine Mineral Resources and Ore Reserves as LCE, lithium metal is converted to LCE by multiplying by a factor of 5.323.

Mineral Resources are reported **inclusive** of Ore Reserves.

# Supporting statements (cont.)

## Oyu Tolgoi - Production Targets

The 500ktpa copper production target (stated as recoverable metal) and associated production profiles for the Oyu Tolgoi underground and open pit mines for the years 2028 to 2036 referenced in slides 54 and 77 were previously reported in a release to the 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.

## Kennecott – Production Targets

The 30ktpa copper production target (stated as recoverable metal) for the Kennecott underground referenced in slides 56 and 77 was previously reported in a release to the ASX dated 27 September 2022 "Rio Tinto to start underground mining at Kennecott copper operations". All material assumptions underpinning that production target continue to apply and have not materially changed.

## Simandou – Production Targets

The estimated annualised capacity of approximately 60 million dry tonnes per annum (27 million dry tonnes Rio Tinto Share) iron ore for the Simandou life of mine schedule referenced in slide 91 was previously reported in a release to the ASX dated 6 December 2023 titled "Investor Seminar 2023". Rio Tinto confirms that all material assumptions underpinning that production target continue to apply and have not materially changed.

## Iron Ore Company of Canada – Ore Reserves

The grades referenced on slide 32 for the Iron Ore Company of Canada are based on the Ore Reserves as reported in accordance with the JORC Code and the ASX Listing Rules in Rio Tinto's 2023 Annual Report released to the ASX on 21 February 2024 (Rio Tinto's 2023 Annual Report) and available at riotinto.com

The Iron Ore Company of Canada Ore Reserves comprise 149 Mt of Proved Ore Reserves @ 65.0% Fe and 2.8% SiO<sub>2</sub> and 275 Mt of Probable Ore Reserves @ 65.0% Fe and 2.8% SiO<sub>2</sub> for a total of 423 Mt @ 65.0% Fe and 2.8% SiO<sub>2</sub>. The Competent Persons responsible for the information in the 2023 Annual Report that relates to Iron Ore Company of Canada Ore Reserves are Rodney Williams and Stephane Roche whom are both Members 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 2023 Annual Report, that all material assumptions and technical parameters underpinning the estimates in the 2023 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 **exclusive** of Ore Reserves. Mineral Resources and Ore Reserves are reported on a 100% basis.

## Copper Portfolio - Mineral Resources and Ore Reserves

The Kennecott and Resolution Mineral Resources and Ore Reserves referenced on slides 54, 56 and 58 are based on the Mineral Resources and Ore Reserves as reported in accordance with the JORC Code and the ASX Listing Rules in Rio Tinto's 2023 Annual Report released to the ASX on 21 February 2024 (Rio Tinto's 2023 Annual Report) and available at riotinto.com.

The Kennecott open pit Mineral Resources comprise 38 Mt of Measured Mineral Resources @ 0.47% Cu and 0.15 g/t Au, 22 Mt of Indicated Mineral Resources @ 0.39% Cu and 0.16 g/t Au, and 12 Mt Inferred Mineral Resources @ 0.26% Cu and 0.20 g/t Au for a total of 72 Mt @ 0.41% Cu and 0.16 g/t Au.

The Kennecott underground Mineral Resources comprise 0.2 Mt of Measured Mineral Resources @ 2.52% Cu and 1.27 g/t Au, 12 Mt of Indicated Mineral Resources @ 2.75% Cu and 1.17 g/t Au, and 14 Mt Inferred Mineral Resources @ 2.51% Cu and 0.91 g/t Au for a total of 26 Mt @ 2.62% Cu and 1.03 g/t Au.

The Kennecott open pit Ore Reserves comprise 470 Mt of Proved Ore Reserves @ 0.37% Cu and 0.18 g/t Au and 360 Mt of Probable Ore Reserves @ 0.36% Cu and 0.18 g/t Au for a total of 829 Mt @ 0.37% Cu and 0.18 g/t Au.

The Kennecott underground Ore Reserves comprise 5 Mt of Probable Ore Reserves @ 2.22% Cu and 1.39 g/t Au.

The Competent Persons responsible for the information in the 2023 Annual Report that relates to Kennecott Mineral Resources are Ryan Hayes, Ana Chiquini and Pancho Rodriguez, whom are all MAusIMM. The Competent Persons responsible for the information in the 2023 Annual Report that relates to Kennecott Ore Reserves are Charles McArthur and Brady Pett whom are all MAusIMM.

The Resolution Mineral Resources 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 Mineral Resources @ 1.52% Cu. The Competent Persons responsible for the information in the 2023 Annual Report that relates to Resolution Mineral Resources are Hamish Martin, Joanna Marshall and Adam Schwarz, whom are all MAusIM.

Rio Tinto confirms that it is not aware of any new information or data that materially affects the information included in the 2023 Annual Report, that all material assumptions and technical parameters underpinning the estimates in the 2023 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 **exclusive** of Ore Reserves. Mineral Resources and Ore Reserves are reported on a 100% basis.



# Common acronyms

<b>\$</b>	United States dollar	<b>DLE</b>	Direct lithium extraction	<b>LAES</b>	Liquid air energy storage	<b>RTIT</b>	Rio Tinto Iron Titanium
<b>AIFR</b>	All Injury Frequency Rate	<b>DR</b>	Direct Reduction	<b>LCE</b>	Lithium Carbonate Equivalent	<b>RTIO</b>	Rio Tinto Iron Ore
<b>AI</b>	Artificial Intelligence	<b>DRI</b>	Direct Reduction Iron	<b>LHS</b>	Left hand side	<b>RTZ</b>	Rio Tinto-Zinc Corporation
<b>Al<sub>2</sub>O<sub>3</sub></b>	Aluminium oxide	<b>EBITDA</b>	Earnings Before Interest, Taxes, Depreciation and Amortisation	<b>Mt</b>	Million tonnes	<b>SiO<sub>2</sub></b>	Silica dioxide
<b>ASEAN</b>	Association of Southeast Asian Nations	<b>ESG</b>	Environmental, Social, and Governance	<b>Mtpa</b>	Million tonnes per annum	<b>SPIC</b>	China's State Power Investment Corporation
<b>ASX</b>	Australian Securities Exchange	<b>F</b>	Forecast	<b>MW</b>	Megawatt	<b>SPS</b>	Safe Production System
<b>AUD</b>	Australian dollar	<b>FQM</b>	First Quantum Minerals	<b>NZAS</b>	New Zealand Aluminium Smelters Limited	<b>SQM</b>	Sociedad Química y Minera de Chile
<b>B<sub>2</sub>O<sub>3</sub></b>	Boric oxide	<b>FX</b>	Foreign Exchange	<b>OECD</b>	Organisation for Economic Co-operation and Development	<b>T</b>	Tonne
<b>BESS</b>	Battery energy storage system	<b>GDP</b>	Gross Domestic Product	<b>P.a.</b>	Per annum	<b>tCO<sub>2</sub>e</b>	Tonne of carbon dioxide equivalent
<b>BF</b>	Blast furnace	<b>GHG</b>	Greenhouse gas	<b>PGM</b>	Platinum-group metals	<b>TiO<sub>2</sub></b>	Titanium dioxide
<b>Bn</b>	Billion	<b>GW</b>	Gigawatt	<b>PPA</b>	Power Purchasing Agreement	<b>TSV</b>	Transshipment vessel
<b>BNEF</b>	BloombergNEF	<b>H1</b>	Half year (first half)	<b>PV</b>	Photovoltaic	<b>TWh</b>	Terawatt hour
<b>BOO</b>	Build, Own, Operate	<b>H2</b>	Half year (second half)	<b>QAL</b>	Queensland Alumina Limited	<b>UN</b>	United Nations
<b>BSL</b>	Boyne Smelter Limited	<b>HBI</b>	Hot briquetted iron	<b>R&amp;D</b>	Research and Development	<b>US</b>	United States
<b>Bt</b>	Billion tonnes	<b>Hr</b>	Hour	<b>RBM</b>	Richards Bay Minerals	<b>USA</b>	United States America
<b>CAGR</b>	Compound annual growth rate	<b>HSE</b>	Health, Safety and Enviroment	<b>RE</b>	Renewable Energy	<b>USD</b>	United States dollar
<b>CCS</b>	Carbon Capture and Storage	<b>ICE</b>	Internal combustion engine	<b>REC</b>	Renewable Energy Certificate	<b>VPPA</b>	Virtual power purchase agreement
<b>CLA</b>	Cape Lambert Port A	<b>IEA</b>	International Energy Agency	<b>REE</b>	Rare earth elements	<b>WACC</b>	Weighted average cost of capital
<b>CO<sub>2</sub></b>	Carbon dioxide	<b>IOC</b>	Iron Ore Company of Canada	<b>RHS</b>	Right hand side	<b>WCS</b>	Winning Consortium Simandou
<b>CO<sub>2</sub>e</b>	Carbon dioxide equivalent	<b>IRR</b>	Internal rate of return	<b>RIGI</b>	Regulation of the Incentive Regime for Large Investments	<b>YoY</b>	Year on Year
<b>CRA</b>	Conzinc Rio Tinto of Australia Limited	<b>k</b>	thousand	<b>ROCE</b>	Return on capital employed	<b>Yrs</b>	Years
<b>CSP</b>	Communities and Social Performance	<b>km</b>	kilometre	<b>RoW</b>	Rest of world	<b>YTD</b>	Year to date
<b>CuEq</b>	Copper equivalent	<b>Ktpa</b>	Kilo tonnes per annum	<b>RTA</b>	Rio Tinto Aluminium		

# 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*

RioTinto