

20 September 2022

FORTESCUE ANNOUNCES EXECUTION PLAN FOR INDUSTRY LEADING DECARBONISATION

- **US\$6.2 billion capital investment by 2030 to eliminate fossil fuel risk and reduce operating costs by US\$818 million per year.**

Fortescue Metals Group Ltd (Fortescue, ASX: FMG) has today updated its world leading heavy industry decarbonisation strategy, aiming to eliminate fossil fuel use and achieve real zero terrestrial emissions (Scope 1 and 2) across its iron ore operations by 2030. The investment will eliminate Fortescue's fossil fuel risk profile and enable it to supply its customers with a carbon free product.

The strategy will see the Company lead the market in terms of its response to growing customer, community and investor expectations to reduce/eliminate carbon emissions. Fortescue expects to generate attractive economic returns from its investment arising from the operating cost savings due to the elimination of diesel, natural gas, and carbon offset purchases from its supply chain. Fortescue is well positioned to capitalise on first-mover advantage and the ability to commercialise decarbonisation technologies.

Fortescue made the announcement at the invitation of US President Biden's First Movers Coalition and the United Nations Global Compact, with the Secretary General of the United Nations at the CEO roundtable on "Business leadership to rescue the Sustainable Development Goals". As a founding member of the First Movers Coalition, today's announcement is a strong step forward for the decarbonisation of heavy industry.

Fortescue also announces that the Science Based Targets Initiative (SBTi), will verify and audit its emissions reduction. This technical auditing initiative was instituted to ensure companies reach their Paris Agreement goal to limit global warming to 1.5 degrees.

Fortescue's decarbonisation journey started on the commencement of the first major trip on 25 August 2020 during the advent of COVID-19 to secure technology, demand and resources for the green energy ecosystem. It consolidated further at the successful completion of the 100-day sprint to create the world's first mining truck to run on hydrogen. Two and a half years later the United States has introduced the historical Inflation Reduction Act, that is driving investment and production into the green energy ecosystem on global scale. The passing of such initiatives will be followed by other Governments endorsing Fortescue's earlier strategy.

When fully implemented, Fortescue's decarbonisation strategy and associated investment will provide significant environmental and economic returns by 2030, including:

- Avoidance of 3 million tonnes of CO₂ equivalent emissions per annum
- Net operating cost savings of US\$818 million per annum from 2030, at prevailing market prices of diesel, gas and Australian Carbon Credit Units (ACCUs)¹

¹ Assumed prevailing market prices: US\$1.00/litre for diesel, US\$4.50/GJ for gas and US\$20/unit for ACCUs.

- Cumulative operating cost savings of US\$3 billion by 2030 and payback of capital by 2034, at prevailing market prices
- Elimination of Fortescue's exposure to fossil fuels and associated fossil fuel price volatility which in turn, will de-risk the operating cost profile
- Removal of the Company's exposure to price risks associated with relying on carbon offsets as well as carbon tax regulatory risk
- Establish a significant new green growth opportunity by producing a carbon free iron ore product and through the commercialisation of decarbonisation technologies
- Ensuring future access to green driven capital markets.

The capital estimate is US\$6.2 billion, with the investment largely planned in FY24-28. This investment includes the deployment of an additional 2-3 GW of renewable energy generation and battery storage and the estimated incremental costs associated with a green mining fleet and locomotives. The capital expenditure to purchase the fleet will be aligned with the scheduled asset replacement life cycle and included in Fortescue's sustaining capital expenditure. Studies are underway to optimise the localised wind and solar resources.

The investment is expected to generate a positive net present value (NPV) through enabling the displacement of approximately 700 million litres of diesel and 15 million GJ of gas per annum by 2030, as well as the associated reduction in CO₂ emissions.

Fortescue Executive Chairman, Dr Andrew Forrest AO said, "There's no doubt that the energy landscape has changed dramatically over the past two years and this change has accelerated since Russia invaded Ukraine.

"We are already seeing direct benefits of the transition away from fossil fuels - we avoided 78m litres of diesel usage at our Chichester Hub in FY22 - but we must accelerate our transition to the post fossil fuel era, driving global scale industrial change as climate change continues to worsen. It will also protect our cost base, enhance our margins and set an example that a post fossil fuel era is good commercial, common sense.

"Fortescue, FFI and FMG, is moving at speed to transition into a global green metals, minerals, energy and technology Company, capable of delivering not just green iron ore but also the minerals, knowledge and technology critical to the energy transition.

"Consistent with Fortescue's disciplined approach to capital allocation, this investment in renewable energy and decarbonisation is expected to generate attractive economic returns for our shareholders through energy cost savings and a sharp reduction in carbon offset purchases, together with a lower risk cost profile and improvement in the integrity of our assets."

Fortescue has already made significant effort in decarbonising its iron ore operations through its successful green fleet trials and innovation, acquisition of Williams Advanced Engineering (WAE), and its partnership with Liebherr in June this year. Building on Fortescue's announcement in March 2022 to develop with FFI and WAE the world's first regenerating battery electric iron ore train, feasibility studies are progressing, with delivery of the first parabolic (gravity powered) drive trains to the Infinity locomotives scheduled to be operational by the end of 2026.

A presentation on Fortescue's decarbonisation strategy is attached.

Notes to editors:

Real zero refers to no fossil fuels and wherever possible no offsets. Offsets must only be used as a temporary solution while the technology or innovation required to completely decarbonise is developed.

Iron ore operations refers to Fortescue's total Scope 1 and 2 emissions.

The SBTi was established in 2015 following the Paris Agreement announcement, in collaboration between the [United Nations Global Compact](#), [World Wide Fund for Nature \(WWF\)](#), [CDP](#) (formerly known as the Carbon Disclosure Project), and the [World Resources Institute](#) (WRI). It aims to promote good practice in science-based target setting and encourages all companies to set science-based emissions reduction targets. Targets are considered science-based if they are in line with what is necessary to meet the goals of the Paris Agreement, according to the latest climate science. Targets set under the SBTi show how far and at what pace companies need to go to reduce their GHG emissions.

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Decarbonisation strategy

We are Fortescue

SEPTEMBER 2022

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Forward Looking Statements Disclaimer



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Important Notice

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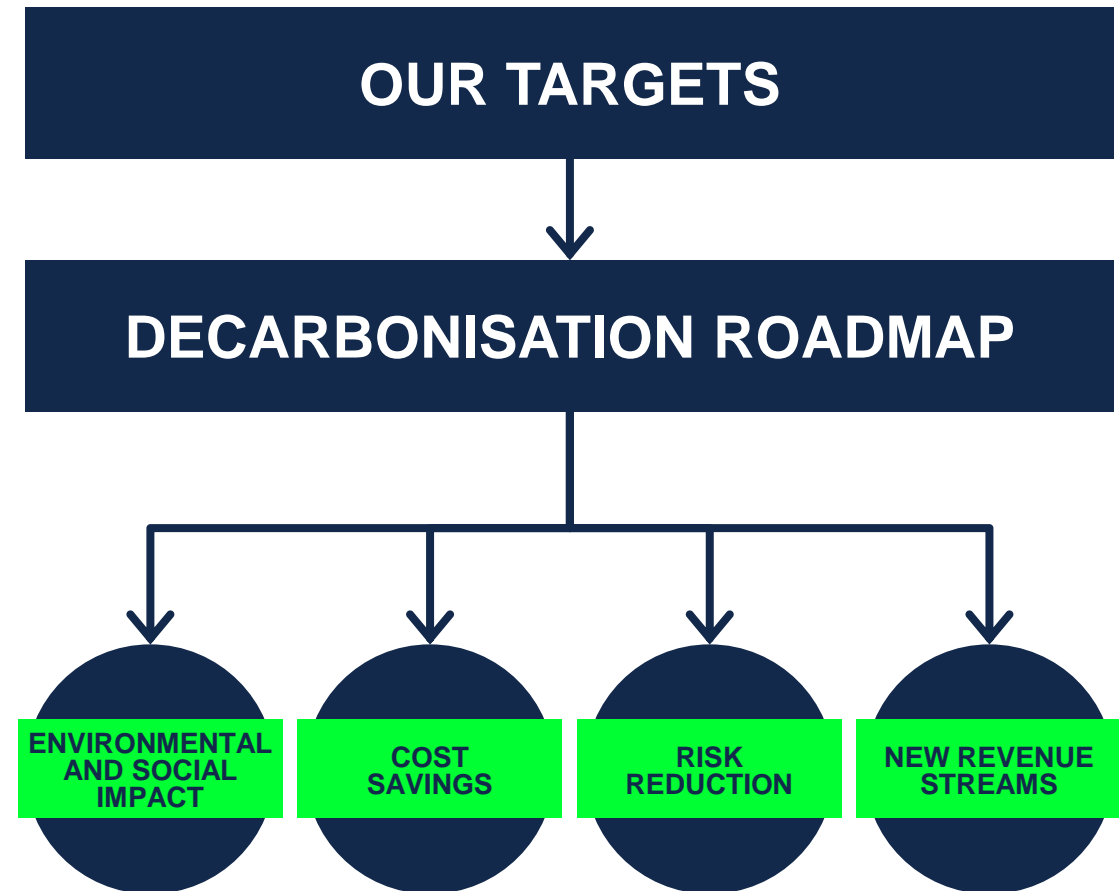
Additional Information

This presentation should be read in conjunction with the Annual Report at 30 June 2022 together with any announcements made by Fortescue and/or FFI in accordance with Fortescue's continuous disclosure obligations applying to it as a company listed on the Australian Securities Exchange. Any references to reserve and resources estimations should be read in conjunction with Fortescue's Ore Reserves and Mineral Resources statements released to the Australian Securities Exchange on 26 August 2022. Fortescue confirms in the subsequent public report that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of estimates of mineral resources or ore reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. All amounts within this presentation are stated in United States Dollars consistent with the functional currency of Fortescue and FFI, unless otherwise stated. Tables contained within this presentation may contain immaterial rounding differences.

Decarbonise, profitably



- Fully-costed decarbonisation roadmap this decade
- Why act:
 - Financial, commercial, environmental and social risk is avoided
 - Future-proof the business:
 - Lower operating cost
 - Supply of carbon-free product and new revenue streams



SBTi* Audit



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BY 2030:

**Real zero
Scope 1 and 2 emissions
across iron ore operations**

Iron ore operations refers to Fortescue's total Scope 1 and 2 emissions, excluding its Scope 1 shipping emissions

REAL ZERO:

No fossil fuels

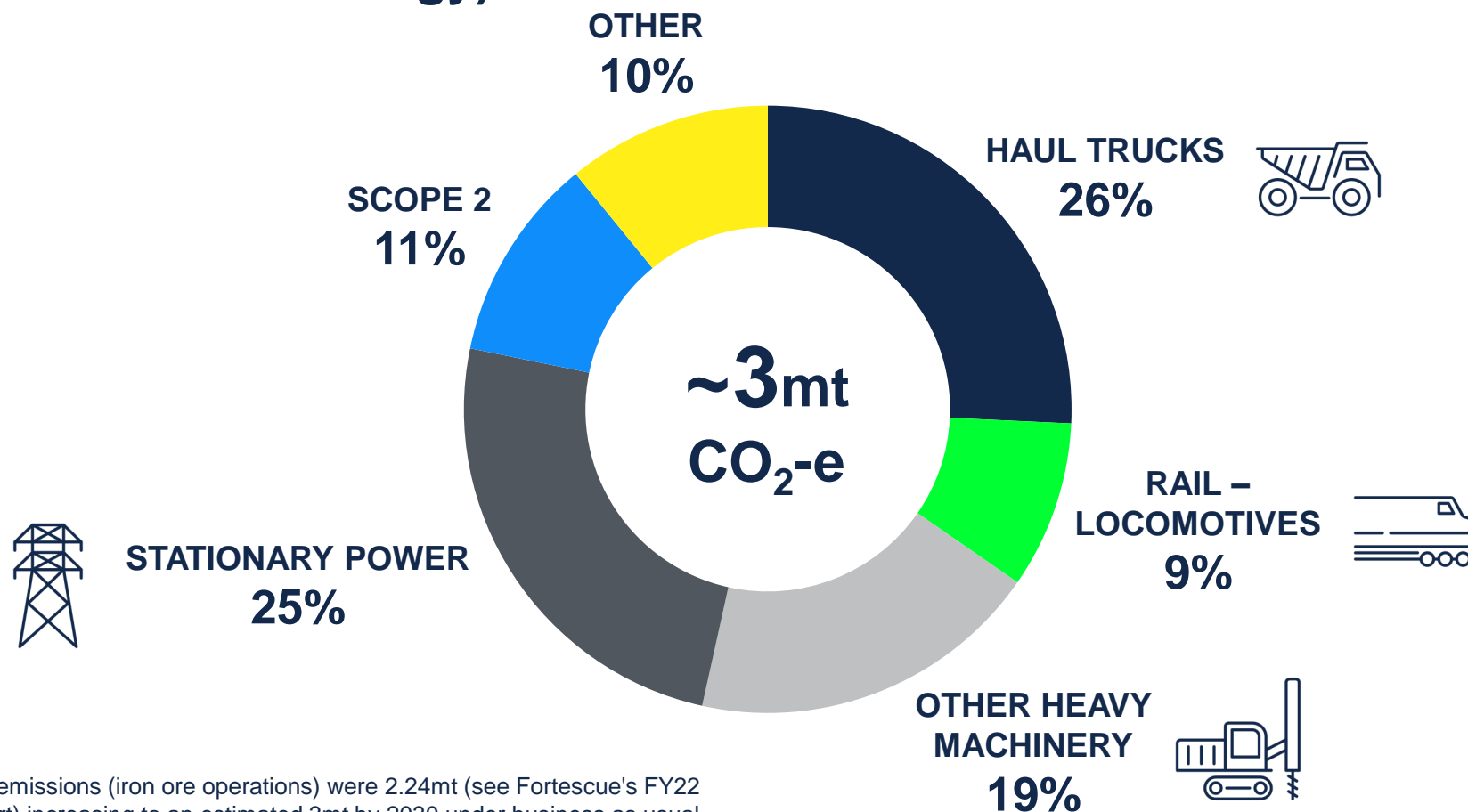
Offsets must only be used as a temporary solution while the technology or innovation required to completely decarbonise evades us

*United Nations Science Based Target initiative

Iron ore operations emissions



FY30 projected Scope 1 and 2 emissions under business as usual
(no decarbonisation strategy)



FY22 Scope 1 and 2 emissions (iron ore operations) were 2.24mt (see Fortescue's FY22 Climate Change report) increasing to an estimated 3mt by 2030 under business as usual

Positive environmental impact



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Through our decarbonisation roadmap Fortescue alone will prevent

~3mt OF CARBON EQUIVALENT EMISSIONS

PER YEAR FROM 2030

Estimated consolidated saving of ~10mt CO₂-e by 2030

**If we reduce emissions by 3mtpa in 2030,
that would be >1% of Australia's 43% reduction target**

Calculated based on Australia's 2005 emissions baseline of 621.1mt, upon which Australia's 43% reduction commitment is based
The 43% 2030 target is 267mt, and ~3mt = 1.1% of this

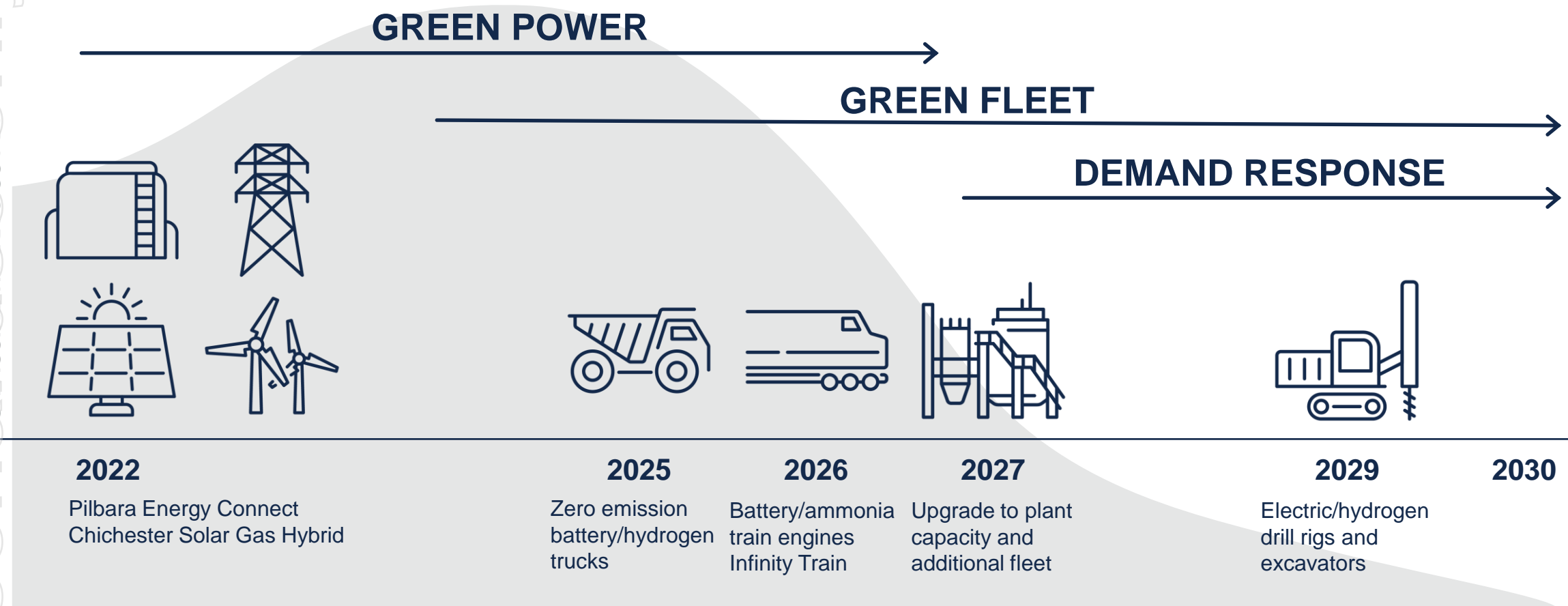
Decarbonisation roadmap

Scope 1 and 2 emissions



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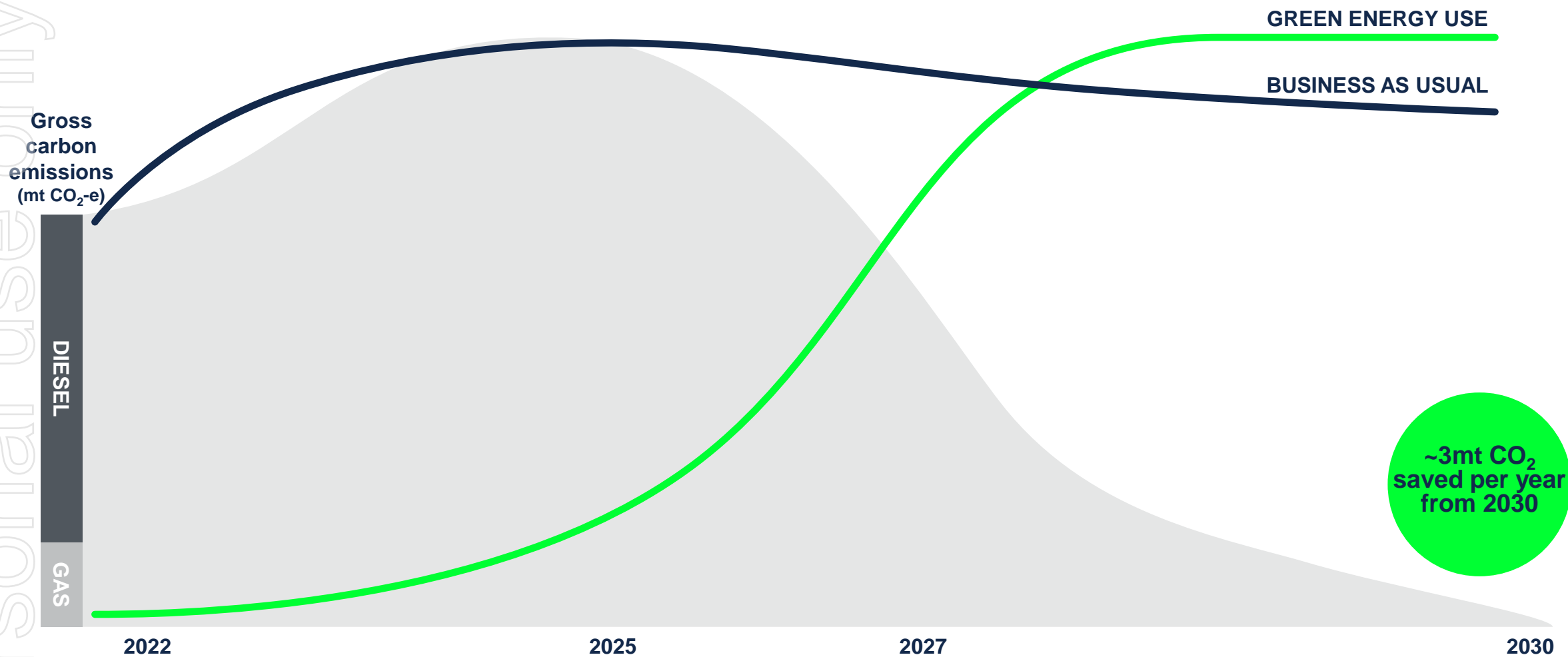
Energy use and emissions pathway

Scope 1 and 2 emissions (iron ore operations)



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~3mt CO₂
saved per year
from 2030

Capital investment – US\$6.2bn

Most expenditure FY24-28

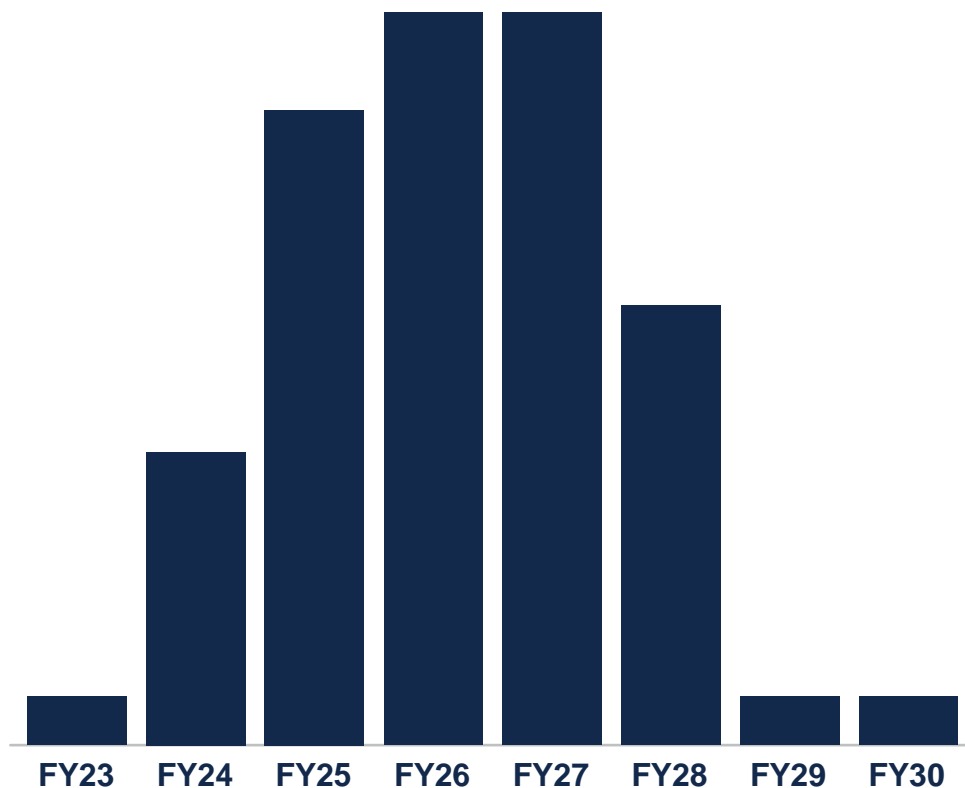


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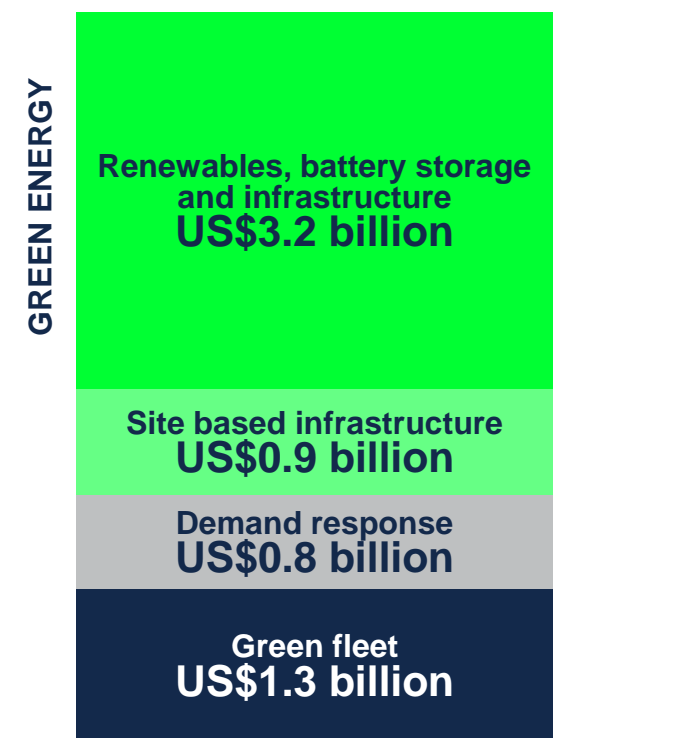
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MAXIMUM ANNUAL EXPENDITURE US\$1.5bn



CAPITAL INVESTMENT BREAKDOWN



OPEX Savings – US\$3bn by 2030



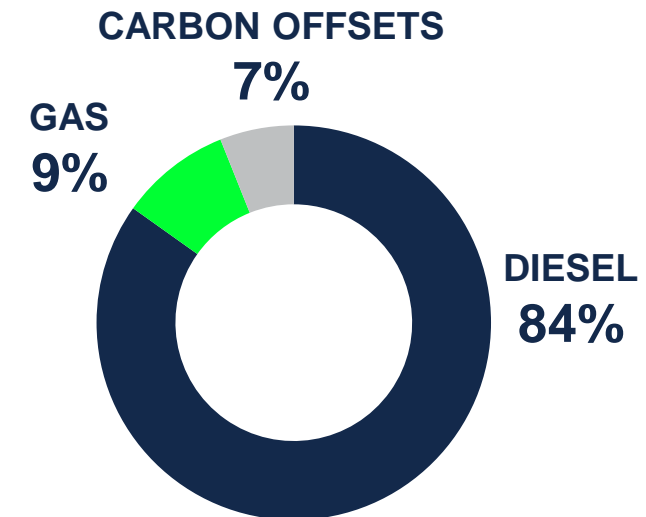
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- Will generate a positive net present value (NPV)
- Net operating cost saving of US\$818m pa at prevailing market prices
 - Diesel
 - Gas
 - Australian Carbon Credit Units

Cost savings from elimination of



- elimination of diesel and natural gas from supply chain
- displacement of approximately 700 million litres of diesel
- displacement of approximately 15 million GJ of gas
- elimination of carbon offset purchases wherever possible

Assumed prevailing market prices: US\$1.00/litre for diesel, US\$4.50/GJ for gas and US\$20/unit for ACCUs

US\$3bn savings by 2030



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Cumulative
savings

US\$3bn

US\$2bn

US\$1bn

0

2023

2024

2025

2026

2027

2028

2029

2030

Investment required

Green power

- Investment includes:
 - deployment of additional 2-3 GW of renewables and battery storage
 - interconnected transmission network
 - site infrastructure (charging stations, power reticulation, etc.)



RENEWABLE GENERATION



**ZERO-EMISSION BACKUP
AND STORAGE**



**TRANSMISSION AND
DISTRIBUTION**



**DEMAND RESPONSE
AT SITES**

Investment required

Green fleet



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- Investment includes incremental costs associated with green mining and rail fleet
- Capital expenditure to purchase fleet aligned with scheduled asset replacement life cycle, included in sustaining capital expenditure
- Acquired Williams Advanced Engineering in March 2022
- Partnered with Liebherr in June 2022 to develop and supply green mining haul trucks



GREEN FLEET

Risk reduction



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- **De-risk the Company's operating cost profile by eliminating:**
 - Exposure to fossil fuel price volatility
 - Exposure to price risks associated with relying on carbon offsets
 - Exposure to credible independently endorsed carbon offset acquisition risk

Risk reduction



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- **De-risk the Company's operating cost profile by eliminating:**
 - Carbon regulatory risk
 - Risk against a future carbon tax
 - Risk access to growing green capital markets

Access to capital



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- Access to growing pools of sustainability and green sources of capital
- Mitigates being excluded from capital providers
- Supports higher price to earnings (PE) ratios

New revenue opportunities

Value creation



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- Creating significant value for our shareholders by:
 - improving the integrity of our assets and operating model
 - producing a carbon free iron ore product
 - commercialising technology and intellectual property
 - attracting the best talent as a result of world-leading decarbonisation approach



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