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Fortescue Energy: Towards Real Zero

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Darwin Convention Centre

Thank you for your introduction.

I pay my respects to the Traditional Custodians of the land upon which we meet, the Larrakia people.

And I acknowledge their commitment to a green future, with plans for a partnership between Larrakia Energy and the Korea Midland Power Company for a 300MW solar plant near Middle Arm.

That's big vision stuff. It's also an achievable vision — and I wish them all speed in making it a reality.

It is a real pleasure to be back at Resources Week, this time in a very different capacity.

When I resigned as Chief Minister last May, the only thing that was certain about my next step was that I wanted to spend more time with my family — to be there as our boys grew up.

When Andrew Forrest offered me a role at Fortescue Future Industries, now known as Fortescue Energy, I knew I couldn't say "No."

But the truth is, because of my boys, I had to pause.

Because I found myself confronting an apparently stark contradiction.

Fortescue, or FMG, is the third-biggest exporter of Australian iron ore.

It's a major source of global greenhouse gas emissions, all the way from the Pilbara to the ships that transport it to the furnaces of China.

How then did it make sense that FMG could be such a part of the global emissions problem, while Fortescue Energy was simultaneously spearheading the global race for Real Zero?

Wasn't it kind of like the left hand not knowing what the right hand's doing?

In fact, it makes perfect sense.

You know what they say.

Clean up your own backyard.

Fortescue Energy was born precisely because Fortescue Metals had a giant problem.

Everyone involved in resources knows you've got to think differently when it comes to solving problems.

We know that because our extraction operations are usually in remote locations — and that means quick fixes are not immediately at hand.

But it also means that opportunities arise for those with skills and imagination.

And that's what's so exciting.

Fortescue Energy is a front-runner in developing and pioneering the Real Zero industry.

To be involved in decarbonising our mining operations while producing clean energy is an incredibly positive mandate.

And Fortescue is proudly taking leadership on this in the corporate world.

We are the biggest heavy industry company in the world with a genuine plan to reach Real Zero — and to get there we need green hydrogen.

Our target is to achieve Real Zero emissions — Scope One and Two — across our iron ore operations by 2030.

That's industry leading. But 2030 is coming at us fast.

Fine words and noble ambition won't get us there. Nor will selling a tall story about being green just to make ourselves feel better.

What's needed is urgent action.

Real Zero means no fossil fuels and, where possible, no offsets.

It is not acceptable that wealthy companies can absolve themselves of responsibility by paying to pollute.

That's nowhere near good enough.

Offsets can only be a temporary solution while the innovation required to eliminate fossil fuels is developed.

Fortescue is investing US\$6.2 billion — that's more than \$9.5 billion in Australian dollars — to realise this aim by 2030 across all our iron ore operations.

Displacing most of our gas and diesel-fired generation with renewable energy is the straightforward part — we can put in a solar farms and batteries. And that's what we're doing.

For example, the 60MW solar farm which powers Fortescue's daytime operations at Cloudbreak and Christmas Creek displaces around 100 million litres of diesel every year.

But the toughest challenge is the last 20-25% within our carbon chain.

For that, we need to run carbon-free trucks, trains, ships, explosives — and we need reliable 24/7 green hydrogen.

But this stuff is scarce — and that scarcity has given heavy industry an excuse to say that it's all too hard.

Fortescue Energy does not buy that excuse.

Where the technology does not yet exist, we are going to make it happen — and we will partner with likeminded companies, governments and big thinkers to make it happen.

Avoiding catastrophic climate change is — of itself — a good enough reason to act.

But this is also a business decision.

Fortescue's investment will generate economic returns by eliminating our need for diesel, natural gas, and carbon offset purchases.

Our numbers people estimate that these cost savings will result in the payback of capital by 2034.

That's good for business and it's good for Australian jobs.

And it's great for Australian industry and mining.

This kind of ambition needs allies.

That includes governments willing to invest in the critical foundations for green industries.

Such as making land available on which to house shared common infrastructure.

The Northern Territory Government's and the Australian Government's investment into the Middle Arm Sustainable Development is a great example of this.

A blank canvas on which to paint a masterpiece.

Middle Arm is the blueprint for what industrial precincts need to today and into the future.

Zero emissions. Underpinned by government providing the place and the opportunity for an uncompromising renewable future.

Designed from inception to achieve decarbonisation.

Middle Arm is globally competitive because Middle Arm is a global destination.

Working together with industry, the Australian Government and the Territory Government have what it takes.

Industry needs the Middle Arm master plan. We need the environmental studies and clearances. We need the transmission corridor.

And I know that a huge amount of intelligent thinking has gone into Middle Arm to make it an outstanding place for green industry.

Fortescue Energy has reserved a significant parcel of land at Middle Arm to scope out green hydrogen production.

Within the precinct, we join others such as Total Eren, which aims to produce green hydrogen with solar, and Avenira, which wants to make battery cathode materials from critical minerals.

Earlier, I said something about cleaning up our own back yard.

At Middle Arm, I want to be able to look over our back fence and chat to a neighbour who's also an innovator and pioneer of the Real Zero movement.

That's what the Middle Arm hub is all about. A place where research and knowledge become reality on the road to Real Zero.

At Fortescue, we are backing R&D to decarbonise our hard-to-abate sectors while building a global portfolio of renewable energy projects.

In the Pilbara, we've made significant investments in renewable power and battery storage to displace diesel and gas power generation.

Our US\$700 million Pilbara Energy Connect means renewable electricity generated at our operations in Port Hedland, Iron Bridge, Cloudbreak, Christmas Creek, Solomon and Eliwana can be shared across 500km of linked transmission lines.

We have acquired UK-based Williams Advanced Engineering — the Formula One and Formula E people — to develop batteries for our haul trucks and the zero-emission Infinity Train.

You've no doubt seen the gargantuan creatures crawling through the awesome space-scape of the Pilbara.

The Infinity Train will use gravitational energy to recharge its battery electric systems without any additional charging requirements for the return trip to reload.

We're investing in research to transform our trains, trucks, and ships with zero-pollution fuels.

In 2021, our engineering team in Perth was set a target of 130 days to build the world's first hydrogen fuel cell big-haul mining truck.

They did it.

The silence of that haul truck could be heard around the world.

That told us something very important. That all we dream of for ourselves, for our kids, and for our planet is achievable.

In May this year, our dual-fuel ammonia-powered locomotive arrived at Solomon to undergo field tests.

In June, our first battery-electric haul truck arrived at Christmas Creek.

This is a big company that is fully committed to changing how it works.

I've already talked about how carbon emissions from Fortescue's mines have a long life within the carbon cycle.

That's why we're committed to Net Zero Scope Three emissions by 2040 — that is, tackling the indirect emissions that arise from our supply chains, such as the mills that turn our iron ore into steel.

And they want to be involved.

China Baowu, Fortescue's largest customer and the largest steel maker in the world, has committed to work with us on reducing emissions in their steel making.

We have just seven years to fully decarbonise Fortescue's mining operations. We're doing it, and we want others within the resources sector to join us.

Whether over the back fence at Middle Arm, or around the globe.

The more of us that use green hydrogen, the more accessible and cheaper it becomes.

That's good for business.

It also makes good sense for anyone who hopes their kids or grandkids might be able to enjoy life outside of something that looks like an off-planet bubble.

Fortescue Energy is not black, brown, grey, blue, pink, turquoise, or gold hydrogen. We are green hydrogen — that's hydrogen produced using 100% renewable energy.

Our Green Energy Manufacturing Centre in Gladstone, Queensland — backed by the Queensland Government — will be manufacturing PEM electrolyzers by the end of 2024.

PEMs were developed in the 1960s to produce electricity for NASA's Gemini Space Program.

And that makes you realise how much time we've lost and wasted on the march to Real Zero. We've had the knowhow — we just haven't used it.

Now, Fortescue is manufacturing our own PEM electrolyzers in Australia.

Advanced manufacturing in our own backyard. That's a story we can be proud of.

Fortescue is also joining forces with Incitec Pivot to convert an existing ammonia production facility at Gibson Island, an industrial area of Brisbane, to produce green ammonia from renewable energy.

The proposed project could see the construction of a ~500MW hydrogen electrolysis facility to produce green hydrogen, as well as the retrofitting of the existing ammonia manufacturing facility to produce up to 400,000 tonnes of green ammonia a year.

That's what it's all about. Producing commercial-scale green hydrogen for domestic markets and for export.

Fortescue has dozens of green energy and green hydrogen projects under development globally.

We are focused on five key regions — Australia, Norway, Kenya, Brazil and the United States, where the Biden Administration's Inflation

Reduction Act is the single largest investment in climate and energy in American history.

It's smart politics. It's excellent policy.

With a US hydrogen producer able to receive up to \$US3 a kilo — that's a generous subsidy — the IRA will make US-made green hydrogen the cheapest hydrogen in the world.

That's great, but also — or so we initially thought — a little concerning for Fortescue Energy, which is so heavily invested in this.

However, the great news is that Australian companies will receive the same incentives as any US company, and we are actively developing several potential green hydrogen projects in Arizona.

Ultimately, ladies and gentlemen, no single country can or will monopolise green hydrogen.

Green hydrogen will be produced anywhere and everywhere — that's the whole point of it.

But we've still got to get cracking. We're not going to sit back, waiting and watching, while others take the lead.

Fortescue Energy wants to be in the lead.

That's why we welcomed the Australian Government's \$2 billion investment into the Hydrogen Headstart program.

This is a critical first step to meeting the Australian Government's target of one-gigawatt of electrolyser capacity by 2030.

But if we are to have any chance of large-scale export and domestic green hydrogen, we need this investment deployed. Rapidly.

If Australia doesn't move with urgency, the technology and expertise will evaporate to overseas markets.

We'll lose out markets like the US and the Middle East. Along with the green industry skills and jobs.

We have got to take our place in the global business of green hydrogen.

That means investment decisions must be made at a pace that meets the scale of the challenge.

That's the value of NT Resources Week.

We get to see who's who. Who's got something to say. Who doesn't.

Ambition, ladies and gentlemen, needs allies.

None of us can do what needs to be done on our own.

Fortescue's commitment to green energy projects has ramifications far beyond Australian shores.

Last year, in Berlin, our chairman, Dr Forrest, signed an agreement with Patrick Lammers of E.ON, one of Europe's largest operators of energy networks and infrastructure, to work to deliver up to five million tonnes per annum of green hydrogen to Europe by 2030.

It was signed in the presence of German Vice Chancellor and Minister for Economic Affairs and Climate Action Robert Habeck, who has taken a leading role liberating Germany of Russian gas and oil.

Five million tonnes per annum by 2030.

Fortescue will meet that deadline.

Five million tonnes will help decarbonise thousands of medium-sized enterprises across Germany and the Netherlands, as well as in seven other European countries where E.ON distributes energy.

Fortescue, like E.ON, is no longer gambling that something will turn up in time to save the planet.

We already know what that something is.

We will build a hydrogen bridge from Australia to Germany and the Netherlands.

Not only providing green hydrogen but also partnering with companies, globally, to deliver our ambitious mega-scale projects.

If we falter on this, we will lose the opportunity to lock-in a local green hydrogen industry — and to be a renewable energy exporter.

From governments, we need supportive decisions without delay.

We need streamlined approvals processes.

And support for shared infrastructure to unlock Australia's potential.

Fortescue's commitment is real.

We are here — and we are green.

And we want to make it easier for other companies to follow the same path so that we all move in the same direction.

We're want the entire resources industry moving as one towards Real Zero.

It'll be good for all of us.

To get there, we need all hands-on deck. Not next week. Not next year. Now.

Thank you.