Whitehaven Coal

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WHITEHAVEN COAL

Address by Paul Flynn MD and CEO Whitehaven Coal to the Brisbane Mining Club

Good afternoon everyone.

First, let me thank the Brisbane Mining Club for the opportunity to address you today. It is a great pleasure to be here with you and I thankyou for your interest in Whitehaven Coal.

I've been given free licence on topic and content today so I thought I would indulge myself and talk about our industry given the rich backdrop provided by the recent development in our current energy market malaise, the Finkel Report, and of course the very recent Federal Government announcements.

Many of you will know that, for many years, Whitehaven have been passionate advocates for the coal industry. I want to continue that tradition of our advocacy efforts and draw the link to the current energy debate in Australia, which as you know is dominating discussion in our parliaments and the pages of our newspapers.

SETTING THE SCENE

Energy and resources has become one of the most hotly contested public policy debates in recent history. We are witnessing an incredibly complex interplay of economics, ideology, technology, political opportunism and compromise.

For the ideologues, it is about how we address the challenges of climate change and meet the kind of global moral obligations President Trump just recently decided to jettison.

For others, it's simpler: it's about keeping costs down, remaining locally and globally competitive or, simpler still, about keeping warm and being able to pay the energy bill at the end of the quarter.

These represent two ends of an enormous spectrum of interests, ideals and basic needs. They are significant challenges for governments to consider and, plainly, we now find ourselves standing at a crossroads – again.

Over the past decade, the public policy process has failed to produce outcomes that create certainty for investors or security for energy consumers.

In considering these challenges, governments of all persuasions at both the Federal and the State level have either dithered or made decisions that elevated principle over pragmatism, in some cases purely for political reasons; in some cases at considerable cost.

We are now arguably experiencing a boiling frog moment. The dire warnings of the past 10 years are coming to pass, and once again, we look to the Federal Government for leadership, for solutions.

And as we consider the future, it's worth reflecting on the past.

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To that end, the Renewable Energy Target has failed dismally in many respects, but it has delivered exactly what every sensible commentator at the time said it would deliver: higher priced electricity.

You simply can't guarantee a fixed portion of the electricity market to the highest cost providers and expect to get cheaper electricity. Even the Federal Government recognises this.

FINKEL – STRATEGIC CONTEXT

So into this frame has come Dr Finkel and his Independent Report into Australia's Energy Security.

Given the significance of the Chief Scientist's work and opportunities and questions it poses for all of us, it would be quite odd not to address it as I stand before you today.

I do need to preface my comments and observations however by reminding you, as the CEO of a pure export coal business, I'm perhaps a little Finkel-agnostic.

Which of course is not to say that I am not deeply interested in this topic as an energy consumer.

But with my CEO hat on, I should say that Whitehaven already sees itself, in a global context, as part of the energy and carbon abatement solution, not part of the 'problem', however that might be defined.

We are exporting cleaner coal to markets that have decided to take a different approach with their energy mix than the one Australia has taken, and perhaps even the ones we are contemplating.

We are making a real contribution to global carbon emissions reductions even if – currently – Australia's policy settings are somewhat hostile to coal, and to the idea of new coal fired generation technologies fulfilling that role here.

And while Whitehaven is not looking to develop or fuel an ultra-super critical coal-fired plant in Australia any time soon, the atmospherics around that discussion, and whether this nation could – or should – emulate the pragmatic position adopted by most of the countries Whitehaven exports to, is of real interest to us.

The role and reputation of coal and the coal industry is absolutely bound up in this debate.

This is a theme I will return to later.

I do want to say that the Prime Minister should be commended for setting out to bring much-needed balance and rigour to the analysis of the energy challenges we face, challenges, which – too often – have been dumbed-down, distorted or just deferred for another day.

When he commissioned Dr Finkel to conduct the Review, Mr Turnbull signalled a broad intention to try to get politics out of the energy debate; to separate environmental and other dogma from practical cost and carbon abatement outcomes.

And this is one of the things – not just in the Finkel context, but more broadly – which I think has frustrated efforts to achieve meaningful outcomes for Australian businesses and families in the short or medium term.

To someone from The Greens, the Australia Institute, 350.org or Greenpeace, it is inconceivable that coal, or coal companies could be part of the energy solution. Why?

It's because these groups live in a world entirely constructed on high ideals and binary propositions:

- Pro-coal / anti-coal
- Carbon / no carbon
- Fossil fuels / renewables
- Damage the environment / protect the environment

It's a novel way of seeing things, this absolutism, especially from a public policy standpoint.

Why should we adhere to such a framework? Who says we have to make these stark choices? I think Finkel was a very genuine attempt to redress the balance. But let's be clear about the fact that coal has powered the industrialised world's development and prosperity over the past century.

Cheap, affordable, scalable and accessible energy has lifted millions out of energy poverty and improved living standards and life expectancy across the entire world. Most developed nations stood, and still stand, on this platform to elevate themselves and their citizen's wellbeing.

Today, many millions more, mostly in our near region in countries such as China and India, and throughout South East Asia, want to share in coal's energy dividend.

The notion that – virtually overnight – we might do away with an entire form of cheap, proven and dependable generation, just as new technology is making it more environmentally friendly than ever before, and instead turn to intermittent, unreliable and expensive alternatives which are still dependent on significant technological advances, is one we have to seriously challenge.

The dumbing-down of the debate and its insensitivity to shades of grey or compromise is why we have wound up with highly polarised positions, and that, in turn, has made common ground so much harder to find.

FINKEL – SPECIFICS

So, to the Review itself.

Rightly, the Review's most important principle lies in its support for a technology neutral approach to energy markets. As a principle, this is a critical starting point.

As to whether the proposal for a Clean Energy Target has advantages or not over an Emissions Intensity Scheme or indeed other current policy settings, is up for debate, but at least there is recognition of the desperate need for a national approach.

The current patchwork approach to energy policy adopted by state governments has been an abject failure.

The States have introduced uncoordinated and aggressive renewable energy targets.

The South Australian Government with its recent announcement of a gas turbine and a 100MW battery are a good case in point.

Unfortunately, not to be outdone by the States, at a Federal level there is the commitment to doubling the size of Snowy Hydro. This represents further government intervention in a part-privatised National Electricity Market, which stifles further private sector investment.

It is absolutely time to seek harmonisation of energy policy and eliminate the costly, duplicative, 'bottom-up', state-based energy schemes. It is my strong view that if there could be one key legacy to emerge from Finkel, it should be this.

LIMITATIONS OF INTERMITTENT POWER

Which brings me to what I see as the key weaknesses of the Finkel Report and they relate, fundamentally, to the parameters set around the clean energy target and the modelling which underpins it.

What this modelling shows is that Dr Finkel's professed technology agnosticism – or neutrality – is only partial.

The Finkel Report implies a CET of 0.6 tonnes of CO_2 per megawatt hour, from 2020, based on the requirement that our emissions fall by 26-28 per cent by 2030 relative to 2005 – our Paris commitment. The report avoids recommending a level saying that this is the role for government, but then models a CET scenario where no new coal fired generation comes on line, hence the implied sub 0.6 level tonnes of CO_2 per megawatt hour level.

According to the modelling, wind power will go from 12 per cent in 2020, to 18 per cent in 2030 and 35 per cent in 2050 and that the costs of building renewable energy capacity fall by as much as 4.5 per cent a year until at least 2026, and 3.5 per cent a year beyond that.

By any measure these are ambitious and aggressive growth assumptions. Very much akin to the kind of assumptions made by some states in recent times.

If the world relied on wind and solar alone for our primary energy, we would have enough energy for nine days. In other words, if we started today, we would be out of light, heat, power and transport by the end of next week.

In fact, the world gets about 40 times as much energy from hydrocarbons (including coal) as we do from solar, wind, geothermal energy and biomass combined.

On a global scale, the IEA still predicts that despite a further $US3 trillion being spent on subsidies on renewables from now to 2040, the total wind output will be 1.9 per cent, the total solar output, 1 per cent of total energy output.

I spoke just a moment ago about the binary propositions put by the environmental movement about fossil fuels versus renewables and the narrative around wind power in particular.

They are nothing, if not evangelical. And plenty of energy retailers are getting in on the act too – eager to genuflect at the green altar.

But look a bit closer. If the greenies are the evangelists, the energy companies are a bit like those people who profess the faith but never bother turning up to church, let alone donate any money.

You have all seen the advertisements by AGL and we all know they will be getting out of coal fired generation at the half way point of this century – 2050.

It is interesting that, as the single largest coal fired generator, coal represents 66 per cent of AGL's generation capacity, 82% if you include gas and oil, but even more critically, it represents 84 per cent of its total generation despatched or 91% for all fossil fuel generation.

In other words, 34 per cent of their generation capacity is only delivering 16 per cent of the energy it sells.

So there is a real disconnect here between the slick marketing campaign and the fact their generation margins have expanded by 3 to 4 times as intermittent generation drives up the average price of each megawatt hour.

This explains the motive for giving themselves another three decades before they're out of coal.

With all due respect to AGL, a company I have known and advised for many years in a former life, there is a stack of profit to be made from coal between now and then. That's not something you will hear AGL say.

And so we come back to the basic problem of intermittent sources of power; power than cannot be generated when the sun is not shining and the wind is not blowing.

Herein is perhaps Finkel's greatest contribution to the energy debate, that is, the not-before-time acknowledgement that wind and solar energy are not dispatchable electricity.

What does dispatchable energy mean? It means energy that can be requested by the NEM operator to kick in to the network when called upon.

As we are seeing in SA, and now Victoria, the NEM is being jeopardised by the uncoordinated introduction of intermittent sources of energy. These are not synchronous forms of energy and as such, they undermine the stability of the entire electricity grid.

The issue is that wind and solar rely heavily on synchronous forms of electricity such as coal and gas backing them up so they can come and go as they are available. This is the very definition of "all care and no responsibility".

Until now, the notion of them paying their share for that stability has not been publicly addressed. The Finkel Review has now recognised this issue although they have not modelled it into the report for some unknown reason.

A CASE IN POINT

Permit me to dwell on this for a moment.

It is absolutely equitable that the providers of intermittent energy contribute to the system they rely on for their back up.

Viewed from the perspective of a household with solar panels on the roof, it is similarly reasonable that the household pays for the right and service of being able to draw on the network with a moment's notice when the sun is not shining.

A 24/7 right, that is very valuable, and up until now has not been paid for.

But there might be a good reason why Finkel has not modelled the impact of the requirement that wind and solar come to the network with back up from fossil fuels or batteries.

Think about the economics of solar.

This sheet of paper is my solar panel. Assuming the sun is shining I can currently sell all my energy generated by it into the grid, and while the sun is shining I can push out other forms of energy.

But as we know, the sun doesn't always shine and Finkel knows that too. That's why he recommends they come to market with their own back up or be required to pay for it from someone who does, gas, coal or to some degree, hydro.

So Finkel now says I have to buy a battery. I now have to be able to store electricity to back myself up when the sun isn't shining. That's a very significant new cost.

Now I need to charge that battery so I have some back up later for when the sun isn't shining or obviously, at night.

So during the day, the amount of electricity I can now sell into the grid during the peak price period is reduced because I need to charge the battery during these same sunlight hours (fold the sheet of paper in half)…….. I have just lost a big chunk of my generation capacity at exactly the time I want to sell the most.

Now focus on the evening. My solar panel is dormant but I have a commitment to selling electricity at times when it's either shoulder or off peak pricing; the time I want to sell the least electricity. And it just gets worse if the following day is cloudy….

The economics of solar have just changed dramatically for the worse with a new battery to buy, the average sales price of my electricity just took a big hit, and that is assuming the sun was shining brightly on that day.

Wind is no different in this way but at least it doesn't have to deal with the dynamics of night and day, just whether there's wind or no wind. But it will still have to charge the battery so there is less output to sell while generating. That means building more panels or wind generators to provide the capacity you were delivering before. That means more money.

In contemplating what all these means for fossil fuel versus renewable energy generation, the reality is that a new clean-coal plant (high-efficiency, low-emissions) can easily compete with renewables if those renewables have to pay for the cost of the back-up needed to convert them into reliable energy.

WHY NOT A ROLE FOR HELE?

And yet, under the parameters recommended by Finkel, HELE (without CCS) cannot be part of the future mix.

Look at what's happening in our region, and to huge investment being made by our near neighbours in HELE technology, while also maintaining an eye on meeting their Paris commitments. What do they see that we don't see, or that we refuse to see?

The Review implies that High Efficiency Low Emissions (HELE) coal generation is not low emissions or clean energy.

This conclusion is contradicted by the fact that countries around the world including Germany, Japan, China, India and dozens more in East Asia are relying on HELE coal generation to meet their Paris targets while ensuring low cost, reliable energy.

It is why there are more than 1,100 HELE plants under construction or planned in East Asia alone.

Moving the current average global efficiency rate of coal fired power plants from 33 per cent to 40 per cent by deploying more advanced off-the-shelf technology could cut two gigatonnes of C02 emissions now, while allowing affordable energy for economic and social development.

Two gigatonnes is equivalent to:

- India's total C02 emissions
- Running the EU's ETS for 53 years at its current rate
- Running the Kyoto Protocol three times over

Which raises the question: if countries around the world are investing so heavily in new coal technology to provide reliable and affordable electricity while making material carbon emissions reductions, why should Australia discourage this investment, or indeed rule it out?

I think this exposes a principle weakness of the Report, which is that there is too much faith and too much reliance being placed on the pace of the development of renewables, its ability to lower the installed cost, and a level of reliability that depends entirely on technological advances in battery storage that are yet to be made.

I am not saying that significant advances in battery technology are a pipe dream, but it is a very big gamble on a grand scale if we are to adopt the parameters in the Finkel Report now.

WHERE TO NOW?

Plainly, we face an energy supply crisis that's placing a significant immediate and projected cost impost on businesses and households.

To address this issue we need to increase supply, including by providing investment signals to the private sector through certainty of policy over the medium to long term.

I have mentioned the role coal is playing in helping our near neighbours deliver affordable energy to their citizens while meeting their Paris carbon abatement obligations.

I have mentioned what I see as one of the fundamental weaknesses of the Finkel report in terms of its conviction that technology can quickly overcome the risk of intermittent renewable energy supply.

And I haven't even spoken about some of the assumptions underpinning Professor Finkel's modelling, such as weighted cost of capital for the development of HELE versus renewable generation and the rate of decrease of the installed costs of renewable, given that others better qualified than me have already made comments on these issues in recent days.

So in closing let me return to the notion of binary propositions that have characterised the contemporary energy crisis debate, this idea that we must live in either a green world, or one that is not green.

I am not anti-renewables. Nor am I a climate change denier. But I do believe in preserving our energy competitive advantage and therefore keeping energy costs down.

Now is probably an appropriate time then to introduce an imperative of my own: we should not allow ourselves to be constrained by entirely invented parameters around how we ought to address the challenges of energy supply and security we face in this country.

Technology agnosticism should mean just that.

We ought to be indifferent about how we achieve carbon emissions reductions, without being indifferent about the costs, and the risks of achieving this through a premature or excessive reliance on renewables.

On one level it was heartening to listen to the Prime Minister and his Energy Minister and Resources Minister announce the Government would take action to address supply shortages, including through controls of gas supply to the domestic market and the prospect of reverse auction for coal fired generation.

But again, we need to see this for what it is: Government intervention in a market that has been distorted by green ideology.

It is green ideology that has locked up our plentiful domestic gas reserves.

It is green ideology that demonised coal and forced up prices.

It is green ideology that had led to the notion we must choose between coal and renewables.

It is green ideology that sees some energy companies' virtue signal with one hand, and pocket the coal dollar with the other.

What the Prime Minister was trying to say is that we need to recognise the limitations of our short to medium term aspirations for renewable energy generation, and not sacrifice our domestic and global competitiveness on the altar of climate change politics.

Noting that the Coalition Party Room has accepted 49 of 50 of Finkel's recommendations (excepting the CET, which it rightly says requires further industry consultation) let us reject the approach where we try to resolve our energy issues with one hand tied behind our backs.