Speaker 1:

So to close out on our afternoon, we have a segment hosted by Baden Moore, who is NAB's head of commodities research. Baden will lead a panel discussion with leading industry figures on the role of carbon and commodities as part of the transition to net zero. This panel will be followed by our last session of the day, which will be some closing remarks and a recap of some of the key insights from our very special guest speakers through the day. Over to you, Baden.

Baden Moore:

Thank you and good afternoon, everyone. For this panel, we're discussing the role of carbon and commodities and achieving net zero emissions in Australia. And I've invited to join us for the panel, John Connor, the CEO of Carbon Markets Institute. He has 30 years experience in public and private policy. And I've also joined by Paul Simshauser, who is the CEO of Powerlink in Queensland, which is a leading Australian transmission network service provider. Thank you to both of you for joining.

Baden Moore:

Our discussion today comes at a time with a new federal government, with policy announcement to date signaling the potential for federal policy support for an acceleration of Australia's transition to renewables and a commodity market, which is pricing extreme volatility at this point. With traditional fossil fuels ultimately pricing, in my view, demand destruction.

Baden Moore:

If we go to slide one, I put a couple of slides together for the audience. You can see the transition of commodity prices as we've rolled out of the pandemic effects from the beginning of 2021. You can see initially we saw some price impacts from some supply chain disruptions. And then by the second half of 2021, we started to see prices being impacted by the emerging European energy crisis, which only were exacerbated from the first quarter of this year as the Ukraine conflict kicked off. And while most of the world's been focused on the more traditional commodities, I think one thing that's worth pointing out is that carbon prices, as we can see in this second slide, have also been experiencing some material volatility.

Baden Moore:

I think, as we look at the prices there, the chart on the left highlights ultimately European prices as well ACCU prices in Australia and New Zealand, carbon prices, trading nearly two to three times where we've seen them versus historical prices. And I think from my perspective, I think that increases the value of those carbon for those that are looking to participate in these markets, whether it be from a strategic perspective, as they think about how to manage their sustainability strategies, or if you're an agribusiness looking to add new revenue streams to your business. So in that context, John, maybe to begin with, you could tell us a little bit about the Carbon Market Institute and its role, but also I'm really interested to know what you think carbon offsets and carbon tokens might have as a role in playing a role in Australia's transition.

John Connor:

Yeah, thanks, Baden. And good day, everyone. Yeah, the Carbon Market Institute, we're a kind of unique organization. So we're a member- based organization. We've got over 130 companies across the carbon supply chain from primary producers to carbon service providers, to banks, law firms, investors, and the emission intensive companies. And so we work as kind of an industry association, but also a Center of Excellence. And so we're not a classic peak group in that sense.

John Connor:

And so engaging in just some of the confronting discussions around what's best practice, but also what's actually required out of these carbon markets, which are policy driven, but it must be means to an end. And that's actually about impacting and preventing the worst of climate change. And so how do we make carbon markets work here in Australia, here in the region and internationally?

John Connor:

And so we're engaging with the steady growth of those markets, the steady growth of commitments to net zero emissions by companies and countries with a bigger focus on the interim targets as well. And so carbon's going to have a key role in all of that, as well as you mentioned for agriculture, for access to markets as well because products and markets like the EU are demanding carbon neutral products as well.

Baden Moore:

So in that context, as we see carbon offsets particularly being an important role for our transition, but also an emerging market I think is still fair to say. Are there any particular policy points that you're looking for from this government and future governments that will support the evolution of carbon markets in Australia?

John Connor:

Yeah. So we're coming up to the 10th anniversary of national carbon markets here in Australia. And we had for two years, the more classical sort of cap and trade scheme, that got replaced actually by two carbon markets. So the government said, "Well, look..." They became the primary buyer through the Emissions Reduction Fund. And then they put in place what's called the Safeguard Mechanism. And that was actually to safeguard the funds, not necessarily environment, because it did actually allow an increase of 7%, but it put in place something which can be amended. And that's what this government is intending to do.

John Connor:

And that basically is dropping the baselines over time. And so that we deal with those covered sectors, mostly at the moment in the industrial sector, the electricity sector's got a very high coverage. So how we reform that and how we deal with the issues. We've got to deal with electricity and rolling out the clean electricity. But in this term of government, basically industrial sector will overtake electricity as a source of emissions. So how that Safeguard Mechanism reform takes place is going to be really important.

John Connor:

They're looking at potentially Safeguard Credits as a particular unit underneath that. So how does that affect the ACCUs, the Australian Carbon Credit Units? Which has been developed through that ERF phase and delivering very important outcomes in the land sector, but also in other areas like landfill and other sectors.

John Connor:

So how we manage all of those in this transition's important. So we're looking for... It's important that we have clarity and driving down the baselines there. We shouldn't overplay too much. We've got to be really serious about carbon leakage because if you do some of the traditional trade exposure treatments, then you could actually hollow out the safeguards. Got to remember this particular approach has 100% free allocation and then we're dealing around the margins in terms of this particular market design.

John Connor:

But we've also got to manage the transition from the ERF to make sure we're supporting those ongoing sectors. So we've got a sector that can contribute the units, but also can contribute to the global effort. And ultimately we've got to get it down to net zero, but then negative emissions as well. So we're talking about a serious industry need to be establishing over time.

Baden Moore:

So as I look through some of the projects that have already contributed through that ERF program, it's very heavily weighted to agricultural projects. Do you get a sense that as we do lower that safeguard that you'll see other sectors becoming more important, or is there not necessarily a shift in that mix that you're thinking about?

John Connor:

Well, we're starting to see some shift as we saw that price curve going up there, up to almost $60. And then through a bit of a political intervention, that crashed and they were seeing some recovery out of that. And so the lower prices though, which predominated up until early last year, it did mean lower integrity, but they were actually land-based. And so areas which you stopped logging or where you actually took livestock off and you managed them. And so there's lower cost with that. As you move up, you actually expand that into broader plantations and then into industrial processes and the like, and so I think we'll see that.

John Connor:

The EU price there for example, because it doesn't have so much land-based, that's a proxy for the sort of industrial emissions. And as we see the price go up, we'll start to trigger more of those. And, of course, if the Safeguard Mechanism does its work, then that'll actually be impacting capital expenditure cycles in the industrials.

Baden Moore:

Now, apologies if this is sort of simplifying what you've just said, but if we look at that dip that we've seen in the ACCU price, which is the red line on that chart, which comes with a bit of regulatory intervention. My understanding was there's not a lot of volume essentially in those legacy contracts anyway. So is there an idea that you'd see that continuing to roll up? Is that what you're expecting?

John Connor:

Well, the dip came because... and it was coming off because of Ukraine and other issues and as well mirroring some of the other drops you see there. But then it was massively accelerated by freeing up what were called the fixed carbon abatement contracts that were done in the earlier parts of the Emission Reduction Fund. And so where that was, I have to sell it to you as the government. Decision was made that I could then sell it to Paul out in the open market. And so that means a whole bunch of extra volume.

John Connor:

So we're generating ACCUs at about 17 million tons a year. There's a potential 100 million tons in those fixed CACs. There's a process to regulate that so it'll be about 10 million a year, but you get a sense that that extra supply really is why you got the price shock and so-

Baden Moore:

[inaudible] material.

John Connor:

Yeah. But how we see the compliance market and it should not be forgotten that we've got a voluntary market here, and I've put inverted commas on that because it's investors, consumers, stakeholders, pushing companies to be carbon neutral. And so we've got these two drivers, which we really got to drive. We've got a turbo boost both of them in the voluntary sector, but also the compliance sector as well.

Baden Moore:

And one of the most common questions I get around carbon offsets, particularly in Australia, is how do we give those businesses looking to buy credits, as part of their sustainability strategies, how do they get the confidence that what they're buying from your perspective, it is what they think it is? And particularly when they show it to their customers, that they've got confidence in that outcome. And does that play at all to the potential digitization of carbon?

John Connor:

Look, it is and has been rightly just of late, there's been some focus on that, but we've got a lot of... Australia's system is one which is unusual. It's actually sovereign-backed. There's a framework with integrities and legislated offset integrity standards, checks and balances built into the system, which also try to be conservative and a process of method approval, which has been...

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John Connor:

... and a process of method approval, which has been pretty clunky, but is one which is the methods themselves are actually legislative instruments, which actually can be disallowed. So, there's quite a few windows in on this, and there's been some challenges of that. And actually today, the Emissions Reduction Assurance Committee came out with a response to some recent criticisms.

John Connor:

The ideal is that investors don't have to do as much due diligence to back them up, but you always should do. And what we are seeing is actually a stratification in the market for these different methods. And that sometimes is reflecting the confidence in the particular methods that are there.

Baden Moore:

Okay. I might just pivot a little bit towards the power sector for a minute. We've got Paul here, who's the CEO of Powerlink. Paul, maybe you could just give us a quick overview of Powerlink's role in the energy market for those that aren't familiar with the business.

Baden Moore:

And then I think one of the questions I sort of wonder about is, we had Tony Wood on earlier today, and his view around the criticality of the Rewiring Australia capital investment program that's underway, if you just talk to how you ... Wouldn't you agree with the importance of that program, and how you think Powerlink sits in that, and what it is that ultimately you think the problem is that we're trying to solve for?

Paul Simshauser:

Yeah. Thanks, Patton. Good afternoon, everybody. Just a bit about Powerlink. We're a transmission network utility, Queensland based. So, our network runs from pretty much sort of around Cairns down to the New South Wales border, and we move all the bulk power around, so those great big transmission towers you see. About $8 billion worth of kit on the ground. And our job is to connect up all those generators and connect up the loads. Whether it's the large industrials or into the lower voltage distribution networks and customers such as yourselves online there.

Paul Simshauser:

Look, in terms of the Rewiring ... Look, there's a saying, which I've heard many times over the last handful of years. "There's no transition without transmission." And I think there's some merit in that. The only caveat or caution I'd placed around it is too much of a good thing is not good for you. So, we need to make sure we're shooting with rifles, not with machine guns when it comes to investing in infrastructure. Because ultimately, someone has got to pay it from. There's no such thing as a free ride.

Paul Simshauser:

Nonetheless, though, I think having a rewiring fund is an unambiguously good thing, as long as it's managed wisely and put to good use. I know with very large transmission augmentation projects, there is a degree of difficulty around financing the final 10 or 15 percent's worth has been the experience of some of my peers in Southern states, in New South, in Victoria, and SA who were looking at really large projects.

Paul Simshauser:

So, having a bit of patient subordinated debt will never be a bad thing, but ultimately that rewiring fund, it needs to be repaid. So, it's not free money. It's there to be repaid at some point. At the end of the day, it's not government's money, it's taxpayer's money. So, we need to make sure we look after it carefully.

Paul Simshauser:

From Powerlink's perspective, I think we've got the luxury in so many ways of a very long grid that runs from pretty much along the coastline and an inland route as well. And fortunately, at any point in turn, if you make a left-hand turn heading outwards, you'll find lots of good renewable resources, whether it's solar or wind on the ridge lines.

Paul Simshauser:

So, we can see the investments that will be required to connect up all those resources over time, including not just those intermittent, renewable resources, but also to the storage that will be required, whether it's pumped hydro or batteries, and note out the occasional gas turbine. It will not be required as we transition over time. I guess we've got our pretty clear playbook on where we're going over the next 10 full years, but we're always mindful. Markets move quickly and we need to make sure we move with them.

Baden Moore:

I mean, you mentioned that you're going to shoot with a rifle and not with a machine gun. These investment cycles that we're looking at are quite substantial. And forgive me if there's something I'm missing in the thinking around this, but when I've talked to industry before, they've always talked about investment in grid essentially almost immediately additive to consumer prices.

Baden Moore:

Should we think about Powerlink being more of a benevolent investor from that perspective? Or are there particular things that you're seeing that are coming through? Are you able to invest in storage yourself from here? Or are you actually an enabler for the industry from that perspective?

Paul Simshauser:

Yes. Good question. Look, I guess in the case of Powerlink, we are actually owned by the people of Queensland and served the people of Queensland. I don't need to walk around and ask our customers whether they prefer a higher dividend check to Queensland treasury or a lower electricity price. I'm going to take it as given they'd prefer the cash in their pocket, so that makes it easy for us to think about what our objective is in terms of shareholder risk appetite.

Paul Simshauser:

Just thinking through that idea of the benevolent monopoly, I suppose, context and history is really important. There have been periods on the East Coast of Australia across the grid. Maybe not so much at the transmission network level, certainly at the distribution level where large capital programs have been rolled out. The market has changed, demand has flatlined or contracted. And what has transpired as a result has been higher consumer prices, and it hasn't been good for anyone.

Paul Simshauser:

So, when I say shoot with rifles rather than machine guns, that is the context, is making sure every dollar we spend is going to come back to consumers. If we don't do that wisely, it will come back in terms of a higher price. There is a balance though. If we're late to market, it will also result in higher prices just in terms of higher wholesale generation prices. So, we need to be mindful of trying to navigate that path.

Paul Simshauser:

Just in terms of our interests, in terms of are we interested in storage, we are, but we're not interested in owning it. As a transmission network utility, we want to stay in our swim lane and stick to our core business, which is building and operating the transmission network. We know we're going to need a lot of storage, we'll need batteries. We'll also need some big pumped hydro schemes with sort of longer duration storage to be able to manage the average battery that we see rolling out across the East Coast of Australia at the moment. It has got about two hours of storage. I'm sure we will appreciate you need a bit more than that to run from dusk to dawn. So, we'll need much longer duration storage.

Paul Simshauser:

Fortunately, in the State of Queensland and, of course, since now with hydro, you'd all be aware there are some good opportunities for long duration, pumped hydro storage, so we can mop up that really good solar resource that we have on the East Coast and store it at night, or utilize it at night through those pumped hydro schemes. So for us, stick to our knitting, and try and help generate, and investors to where those good spots are for storage and what type of storage, where, when, and how.

Baden Moore:

Very good. I guess from your position in the market, you mentioned you're going to stick to your lane, but can you see any ramp up in investment, I guess, from that storage side? Are there new themes coming in how people are investing capital to the extent you're facilitating that?

Paul Simshauser:

Yeah, absolutely. In fact, I can almost pinpoint the waves. I mean, look in the late '90s, early 2000s, we saw a bit of a wave of investment in coal-fired generation. In the mid-noughties through to the early teens, we saw a really big wave of gas-fired generation.

Paul Simshauser:

When we got to 2016, a starter gun went off and it was the renewables wave, and it was unbelievable. From 2016 to 2021 on the East Coast grid, there was $26.5 billion worth of investment into solar, wind, and a couple of batteries, but mostly solar and wind across 135 individual projects. That was the fastest run rate in the world on a per capita basis.

Paul Simshauser:

Simultaneously, you had an absolute revolution going on around kitchen tables with households making a whole bunch of investment commitment decisions on rooftop solar PV. So, three million households over between 2016 to 2021. Three million households on the East Coast committed to 8,000 megawatts of solar PV on rooftops. So, when you add the two together, you had 16,000 megawatts of utility scale, 8,000 megawatts of rooftop solar, 24,000 in total. The whole grid is only 35,000 megawatt demand. So, it was a super cycle in every guys.

Paul Simshauser:

And if you look at places like the State of Queensland or the State of South Australia, the household take up rate of rooftop solar PV at the moment is ... In Queensland, the number is 41.8% of all roofs have a solar PV. That's the highest in the world. So, there's an awful lot going on in terms of investment in ...

Paul Simshauser:

Now, the waves that we've sort of seen within renewables has been ... So, 2016 to 2021, the initial wave we saw in Queensland was very much a utility scale solar. Then it sort of started to move into wind by the time it got to 2020, 2021. So, it was almost like a lot of solar, '16, '17, '18, '19, maybe '20. Then wind started to ramp up '20, '21, '22, and we're seeing a lot hit this year. So, just this year alone, we've seen two and a half, maybe $3 billion worth of wind commitments made in Queensland.

Paul Simshauser:

And the next wave, we can see coming is actually batteries. At the moment, I think at last count, when we were looking at our inquiry book, we've got something like 5,000 megawatts of battery inquiries in Queensland. The peak demand is only 10,000, so all of those can't proceed. It sort of feels in a way like the Wild West. Maybe a thousand of them will ...

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Paul Simshauser:

Sort of feels in a way like the wild west, maybe 1000 of them will proceed. It'll be more than nothing. That's for sure. The caveat I'd say around when it actually hits the ground, is there are some pretty acute supply chain issues at the moment. So I probably shouldn't name the OEM or equipment manufacturer, but I am aware one, for example, you put an order in today, the earliest they can deliver the battery packs here to Australia is early 2024, and then you've got to build it. So if you place an order today you might have that bit of equipment up and running by sort of mid to late 2024. So these are long lead times, and lead times that we haven't seen before.

Baden Moore:

It adds to just a little bit of mark context, just to right now, in terms of what's happening in our market. You've seen huge investments into renewables and there's some storage coming, but do you ... You're a long term industry veteran in the energy industry. Do you have a view on what's creating the issues that we're seeing coming through the market at the moment? Do you think there's potentially more of it to come? Just how we're managing an orderly transition? Do you have a view around market features now and how that's evolving, particularly as we're starting to talk about, and whether I'm interested to know whether you think moving the safeguard mechanism will have any impact to how we think about the transition of the market?

Paul Simshauser:

Yeah, so it's a good question. So where are we at the moment? Well, as we sit here right now, the forward price of electricity is at numbers I haven't seen before in my sort of 20, 30 year career in our industry. And they're so high that I think, I've been running power system models forever and a day, I don't think I could have replicated them and I think about the style of starcastic simulations that we do. We run models that try to physically replicate the system. I just don't think we could have dreamt up this scenario. So how did we sort of ... And then in the gas market, I'm sure you're all aware that numbers are effectively a cap of 40 dollars a gigajoule, and we'd grizzle about them being nine dollars a gigajoule.

Paul Simshauser:

So these are really, very high unprecedented numbers. And it's going to have an adverse impact for customers who are coming off contracts. Like most people, for residential households, small, medium, and of course, large industrials, people are generally on fixed price contracts, almost like taking out fixed rate mortgages. But when those fixed terms come to an end, you've got to then step back into the market and for those that are going to be doing that anytime in the next six to 12 months, it'll be a bit of a shock with the numbers that come out. I'm sure.

Paul Simshauser:

So how do we get here? One of those scenarios of a lot of things happening and culminating. So the markets for coal and gas both started to harden at the tail end of last year. What was underpinning that of course was a pretty dark still winter in the Northern hemisphere. And so all of a sudden there was this requirement to just start topping up power systems around in the Northern hemisphere with a little bit more coal and a little more gas. So that stiffened the market, then came Ukraine. And then that sort of really sort of shook things up. Russia has been a historically important source of coal, natural gas, and oil, to a number of players.

Paul Simshauser:

I'm sure you're all aware of the tendency of European nations to move, or least dilute what their purchases are so that's sent our local markets export prices at the gates to very high levels. Thermal coal right now, 550 dollars a ton, I think was what I saw last night for a July 22 delivery. I'm used to seeing numbers around the 80 to a hundred dollars a ton. Now, just to convert that into dollars per megawatt hour, ordinarily our coal generators, their incremental costs are probably marginal running costs as we'd call, it would be somewhere between 10 to 15 dollars for the mine mouth power stations, all up to about say 40 to 50 dollars for the coal generators who had to compete with export markets for their coal. Well those export ... Those coal generators who are competing with export markets are now sort of staring down the gun barrel of 200 dollar a megawatt hour marginal running costs.

Paul Simshauser:

That's just their fuel costs let alone their labor materials and so on. And of course those marginal generators are the ones that are setting the prices. Simultaneously the gas generators who have historically been burning gas at about 9 dollars a gigajoule to convert that into megawatt hours, it's about a hundred bucks a megawatt hour when the market gas prices for natural gas jump to 40, all of a sudden those gas generators have got marginal running costs of 400 odd dollars a megawatt hour, and they're setting the price at nighttime. So all of a sudden we've had this market, that's used to sit between 40 to a hundred on a day to day basis, probably averaging 60, as all of a sudden jumped to a sort of a 200 to 400 dollar market. We're seeing forward prices in the year ahead, they're couple hundred bucks a megawatt hour at the moment which is too high to not have an impact.

Baden Moore:

So the obvious takeaway would be, if it's sustained for another 12 months would tend to accelerate our transition. You think that's a.

Paul Simshauser:

Absolutely. I mean the cure for high prices is high prices, and what it does is it stokes investment. I was sitting inside in an industrial company or a consumer discretionary company right now, I've got two reasons to try and bring renewables into the marketplace. One is, I've probably made a commitment to my shareholders or my supply chain that I will sort of decarbonize my footprint. And when you make those commitments to ... When you're a listed company, you make those commitments, you've got to deliver on them right? Otherwise you've got this funny habit of losing your job if you don't sort deliver on what you promise to shareholders, that's the first thing. But secondly, all of a sudden it becomes incredibly economic to do so, because even with supply chain problems, the cost of doing a solar or a wind project is nothing like what we're seeing in the marketplace right now. It's looking very economic in its own, right. And has been for some time. I mean, mention that before the 26 billion dollars worth of investment in solar and wind projects over the last five years, look, to be honest, from 2016 to 2018, that was really being driven by the government's 20% renewable policy. But by late 2018, it was done, that 20% renewable target was full. Yet we saw another, I don't know, 10 billion dollars worth of investment after 2018, that was just pure economics, that was firms responding to their commitments to decarbonize their footprint there and whatever that looks like. And one of the easiest things a company can do of course is to change to renewable energy, right? There's a pretty straightforward process from procurement perspective, but also too, it was economics were driving it because renewables got into a bit of a sweet spot.

Paul Simshauser:

The trick for us though is going forward to make sure that we don't let perfect be the enemy of the good here. We do need to make sure we keep the lights on. We are going to need really big bits of storage. But we are going to need machines in between that have got an accelerator and a break.

Paul Simshauser:

At the moment solar and wind, they've got breaks, but they don't have accelerators. They are an intermittent resources and there are points in time where we do see as the Germans would say, Dunklen Flauton, still in dark, and you need something else to pick up the slack. And if we don't have enough storage and currently we don't, we're going to need some other form of very fast, flexible generation capacity to fill in the gaps. Now batteries are very good for short bursts, beyond that, we're probably still going to need a fleet of gas turbines that will be able to help us see through those periods where wind resources or solar resources are down. So just being pragmatic about that, and by the way, what would you expect a gas turbine to produce in a year? Look, probably not much more than 5%, it's an insurance policy, right. But it keeps the lights on and it keeps energy affordable.

Baden Moore:

Sure. So just one more question for me, for both of you, before we have a look online, I guess there's a few known unknowns as as we look forward to the carbon markets over the medium term, particularly in Australia. We've seen different proposals around different structures for carbon pricing as well before. Do you think we've seen some additions looking at trying to make carbon pricing essentially neutral to the cost of the economy rather than being additive. Do you think there are any mechanisms that you see that might be coming through that might make that possible or are there any other parts of a features of a carbon pricing scheme in Australia that you'd really like to make sure are a feature in the future?

John Connor:

Well, I'll first go at that, but I mean, as I said, these are markets for a purpose and as an environmental market, it should be getting to zero at the end of the day. But I think we're going to see [inaudible] onward and deep trend upwards. And even when we get to net zero, zero emissions, where we've still got to be stripping the dangerous stuff out the atmosphere. So we've got to value carbon in a way to make sure that we drive negative emissions. So I think what we're getting looking at the interim is a whole host of the mechanisms that we've seen just to manage the volatility somewhat. So do we need to make sure there's floors on prices there? Should there be a [inaudible] so there's some sort of ceiling, or we have a strategic reserve. So we have a carbon central bank in a way. These are some of the things that are going to be negotiated out.

John Connor:

I mean, we don't want to limit the upside for investors again. And so we want people to be coming in and investing in the solutions. This is not just in the land sec, but in the industrial decarbonization as well. There's a lot to play over the next 12 months, actually here in Australia. Globally, people may remember Glasgow, the Cop 26, did give the green light to global carbon markets and that's really important because that actually can lower the cost of the transition that we need to make globally as well. But there's still very important rules to be nutted out. They're actually in bond right now, as we speak beginning some of those discussions around how those global carbon markets will work and what some of the integrity initiatives, and overnight we saw a voluntary carbon market integrity initiative.

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John Connor:

And overnight, we saw Voluntary Carbon Market Integrity Initiative launch its Claims Codes of Practice, and so there's a lot of pitfalls for some investors and for companies, if they're just to rush in and green wish. I mean, you were talking about people want 100% renewables, but it's a harder thing to actually implement. I think that we've got to make sure we have our eyes open, make sure there's integrity in these systems, but at the end of the day, make sure we're driving down emissions because that's what's going to give community as well as investor confidence.

Paul Simshauser:

Yeah, Baden, look, I'd say probably three points. One if I can just reiterate my earlier comment about perfect and the enemy of the good. I think, I mean, I'd love to see 100% renewable grid, but I think we should start by targeting 95% because that final 5% is tough going. Right? If we target the 95% renewable grid, that'll be a first and neat stop to not have a runaway price, as I guess you're implying.

Paul Simshauser:

With electricity, there have been carbon market designs that were intended to try and stop the national adder that you would otherwise see. A Colleague of mine, Danny price from Frontier Economics had done quite a lot of work on it, so it's effectively a baseline and credit scheme that did that in some respects, the old National Energy Guarantee was it had some pretty desirable features of that.

Paul Simshauser:

It was intended to not just lead to a step change in commodity price. It had a funny way of almost I don't mean to sound it as brutal as this, but it was a bit pecuniary on the higher emissions plants and it was rewarding the lower emission plants, and it's probably not a bad thing. It's not a bad thing from a third point is there's a cost of doing nothing. We should always remember that there might be a bit of a cost in pricing carbon, either explicitly or implicitly, but there's a much bigger cost in doing nothing.

Paul Simshauser:

That cost comes in a couple of different forms. There's obviously the cost to the environment. Emissions have never been free. There's always been a societal cost, but more to the point, too, is even just cost of finance eventually starts to impinge. If you are an organization and you've got a pathway to decarbonize your industry, your organization, and whatever's in line with net zero ambitions, you don't necessarily need to go and shoot the lights out in the first couple of years, but for your institutional investors and for bank debt and so on, or bond investors, you do need to show a pathway to make sure you don't end up being penalized with a otherwise higher cost to capital. And conversely, I think if you don't have a playbook, good luck with raising new capital for what you want to do.

Paul Simshauser:

I've seen that in one of my prior lives in a listed entity, we'd go to market, I don't know, three or four times a year with our half-year, full-year results, the AGM and usually some transaction, whether that was a capital or acquisition related, there was a distinct change in the tone of the markets. My feeling was it really hardened up a little bit after bush fires here in New South Wales in 2019. I remember going back to the market with what was then probably our half-year results in early 2020, just before COVID lockdown. Actually, I still remember probably last couple of meetings getting canceled because we were about to go into this funny period, and I just remember the institutional investors, they didn't want to see the puff about what was going on in Canberra with policy and regulation.

Paul Simshauser:

It was more on the lines of, "Just tell us what you're doing, tell us what you're doing. And by the way if you start getting outside of these parameters, we're going to put a sell on your stock." I remember being pretty spooked when I saw how that change in time. Fortunately for us, we had a good playbook and in the end, the organization got taken out by one of the big internationals. But at the time, I could see the look in the eyes of those institutional investors, the world had changed and I realized we needed to change very quick quickly with it.

Baden Moore:

Sure. The shift was very quick. Question from the line, I guess, for you, John, I think. Do you think we're going to see a future of merging some of the renewable certificates that we've already got in place into a single product?

John Connor:

Well, we thought that was going to be how it was going to go as the renewable energy target tailed away. But we are seeing this still the bigger stratification in the prices for the renewable certificates and the like. I think we're not going to ever see a global convergence of prices, there's integrity issues. Of course, we haven't talked about a number of the carbon credits have a lot of co-benefits of environmental and social and other aspects, so that's why you're going to have that stratification. But if we see the compliance markets pick up and we will see here, then of course, the focus for people in that market will be the lowest-cost abatement. How those, the renewable energy and other markets converge will be one thing. I also wanted to say just, I mean, the safeguard mechanism, which is on the industrial sector is on scope one, basically it's the operational emissions. It's not their electricity and other things. People should be seeing that as a driver of their electrification and hydrogen and other issues as well.

Baden Moore:

Sure. And then just as a follow-on there, and I guess on merging a couple of questions here into a single one, but how important do you think it is to scale our voluntary carbon mechanisms in Australia? Do you see a potential that we might at some point be exporting carbon offsets?

John Connor:

Well, I think we should be, I mean, we've got a rich endowment of not only natural, but industrial and geological ways in which we can be storing carbon, and a lot of innovation and expertise in that. I think we definitely should be working towards that. Sorry. The first part of that was the?

Baden Moore:

Essentially, how important is it getting scale? So [inaudible]-

John Connor:

Voluntary as well.

Baden Moore:

Yeah.

John Connor:

Voluntary as well. Well, look, I think, as I said, the outset. I mean, what I've said about people saying, "Oh, ALP must increase their 43% target and all these things." I said, "Well, it's a big get, still for that." We want at least 50% by 2030, but let's boost both. Right? I think the last government actually was focused much more on the voluntary and trying to let that happen and call anything which was a mandated a tax or even a guard rail as a tax. I think we need to look at both. Making sure we've got good integrity in that voluntary market, good transparency. There are a few initiatives the last government did, which were positive in that regard. We've got to make sure investors there and consumers are well, and investors are well-informed about those aspects, so that's still a very important part of things, but let's get the compliance stuff humming as well.

Baden Moore:

Very good. With that, I think just about ends the questions we've got online. Thanks very much for joining us today and thanks for everyone for joining in.

John Connor:

Thank you.

PART 4 OF 4 ENDS [00:40:21]