

PUBLIC

THE JOINT SELECT COMMITTEE ON ENERGY MATTERS MET IN COMMITTEE ROOM 1, PARLIAMENT HOUSE, ON WEDNESDAY 12 FEBRUARY 2024.

The committee met at 9.00 a.m.

CHAIR (Ms Forrest) - Welcome, Jack, to the public hearing for the Energy Matters Committee. We appreciate your submission and taking the time to appear before the committee. For your knowledge, everything you say while you're before the committee is covered by parliamentary privilege that may not extend beyond the hearing. If there was something of confidential nature you wish to share with the committee, you could make that request, otherwise, it's all in public session. Do you have any questions before we start?

Mr REDPATH - No, that's all clear. Thanks, Ruth.

CHAIR - We are also streaming, in case you weren't aware of that.

Mr JACK REDPATH, PRINCIPAL, CARBON ZERO INITIATIVE, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED VIA WEBEX.

CHAIR - If you'd like to now introduce yourself and speak to your submission, the committee will have questions for you after that.

Mr REDPATH - Thanks, Ruth. Approximately how long do we have today?

CHAIR - We have 45 minutes all up.

Mr REDPATH - Excellent. I'll try and keep my presentation nice and short while having plenty of time for questions.

Good morning everyone. I'm Jack Redpath, the Principal, Carbon Zero Initiative.

Carbon Zero Initiative is a relatively new Tasmanian based organisation that's set up specifically to advocate for a fast, fair and sustainable transition to renewable energy. The primary reason for establishing this was a number of conflicts in Tasmania on land use and on the one hand, needing to build more renewable energy to help solve climate change, but wanting to do that in such a way that enhances nature and also creates more opportunities for Tasmanians.

A bit about me. I've been a Tasmanian all my life, born in the Royal Hobart. A bit of travelling around, primarily living in Hobart. Obviously, Tasmania and its transition away from fossil fuels is a big passion of mine and has been since I attended the University of Tasmania, even before.

Carbon Zero Initiative, specifically, we try to fill a bit of a gap in the narrative, which is, although Tasmania has a legitimate claim to be a net zero jurisdiction, that is we draw down as much carbon as we put into the atmosphere, we still use quite a lot of fossil fuels. I'll refer to my submission here and start speaking directly to that.

Around 60 per cent of the energy total primary energy that's used in Tasmania still comes from fossil fuels. The majority of that, about 40 per cent of the total primary energy use comes from petrol and diesel products that most of us would use in our cars, trucks and buses every day. The other 20 per cent of the whole is coal and gas which we also use in in our homes, but really more or less all of that is used in very heavy industry in five or six very large heavy industrial sites around Tasmania. The remaining 40 per cent is electricity and some 80 to 90, or even 100 per cent of that being from renewable sources, depending on the year and depending on how much energy flows over the interconnector.

As you're all very well aware, these are really complicated issues. We've environmental considerations in the local environment, climate considerations and cost considerations. The point of this submission was to try to draw as many of those together and produce some practical steps Tasmania can take to try and have a positive outcome across those three fronts simultaneously.

Speaking again directly to the submission, we have a big opportunity in decarbonising that really big chunk of fossil fuel use for cars and trucks. About 90 per cent of those costs are taken on by normal everyday people who are just driving their cars to work or school to pick up the kids and it's about a billion dollars every year Tasmanians spend just on that cost. It's not a discretionary cost and obviously, we all notice when the prices go up at the pump. One of the simplest things we could do, it's not easy, but it is relatively simple, would be to transition our fleet of vehicles away from petrol using vehicles to electric vehicles. We did some numbers on this and we thought that we would save about half of that cost. Currently, that would be about \$500 million every year and of course, depending on the future mix of electricity in Tasmania, a lot of that money that was then spent to power those vehicles would be potentially retained in the state and indeed for future electricity mix and who's supplying the electricity.

I also want to talk briefly to solar panels and the opportunity that exists there. In the narratives that we hear across the state, solar is really far down the list of opportunities, but Tasmania in aggregate has a let's say average solar resource, but there are particular pockets across the state which have quite a good solar resource by global standards. It's unfair to compare to places like Queensland or more desertified regions of Australia, outback New South Wales or Western Australia, South Australia. If we just look at the really promising parts of Tasmania for solar, those resources are quite good and they could save, again residential consumers hundreds of dollars every year on their power bills. For the residential consumers and commercial consumers of electricity, there's also very low land use impact to this type of energy production.

Of course, if you can combine the solar system with a battery, then this becomes hugely attractive because now you can use that electricity, say in an electric vehicle, which is essentially a battery on wheels. Or you can store the electricity until when it would otherwise be most expensive if you're exposed to the market pricing, which would be in the evening, as opposed to through the middle of the day.

In terms of what Tasmania needs is a question I asked myself a couple of years ago before starting this project. We know we have still a lot of fossil fuel use on the island. The whole world is moving towards decarbonisation. There's also good reasons to do this in terms of saving consumers money, but how much do we actually need? There're a few different ways to answer that. One where we just meet the island's needs and another where we have a more export focused model. We tried to do both of those, or to point to existing scenarios that do

both. Our interest is in providing people with information and letting the community decide what's best for them.

There's two. There's an existing model which is the Australian Energy Market Operators Integrated System Plan that's produced every two years with consultation from thousands of experts around Australia. It doesn't get everything right, but it's probably a pretty good model for everyone. I'm just going to pull up the numbers so I get these right for you. That model basically shows us growing our electricity use substantially for some of the reasons I've outlined here already and covered by the submission. Growing by about 60 per cent out to 2050, with the majority of that happening by 2040, or even 2038 or something like that.

AEMO actually has hydro as being flat. They do that because it's a least-cost model and hydro can be quite expensive to develop. That's just the model. I'm not saying it will or won't happen that way. They have onshore wind, growing quite substantially from around 560 megawatts today to 1.8 gigawatts by 2050, which would be two substantial wind farms somewhere in the state, or a few smaller ones, utility-scale solar - currently there aren't any projects in Tasmania I'm or AEMO's aware of that are considered utility-scale - basically a 1500 to 600-megawatt solar farm. There is one which is currently approved up in the north now that's not quite that big. Could be wrong there.

Rooftop solar growing from around 360 megawatts to 1.6 gigawatts, pretty substantial growth in rooftop solar as I outlined. Batteries, which could also be storage. Batteries as short-form storage, pumped hydro or hydropower as long-form storage, growing from essentially zero to 920 megawatts. Interconnectors AEMO currently models as flat. That's just what they feed into the model. Obviously, there's a lot of interest, and hopefully we'll talk about Marinus a bit later. That's how they currently model it.

We repeated that model and published results of this in November 2024, basically looking at the ISP and saying this is a really good model, but what has it missed if we want to really make the most of this opportunity that's in front of Tasmania? The thing I thought it might have missed was industrial decarbonization. I wasn't convinced a 60 per cent increase in the amount of electricity basically would get us to 100 per cent renewables, including fully decarbonising our heavy industry. That is quite important because heavy industry is backbone of many regional economies. If we want to not just retain that industry but potentially grow it, we do need to either lead the world or figure out ways to keep up with the rest of the world.

We repeated that modelling exercise, but asked how we decarbonize heavy industry. As you would expect, it's very similar outcomes, but with slightly more electricity use, or quite a bit more electricity use.

It's about a 200 per cent increase, more or less aligned with the state government's renewable energy target. We had high drivers flat. We did this based on least cost, so we're not saying that's what will happen, but that's what we did.

Onshore wind grows substantially, up to 3.2 gigawatts, utility scale solar 2.4 gigawatts, rooftop solar about the same, batteries about the same and offshore wind about the same at 420 megawatts. I might've missed that before. This is just for Tasmania. This is basically a model that shows you if you decarbonise the heavy industry on top of what AEMO says we want to do for largely road transport and residential decarboniaation, residential electrification, this is basically the extra electricity that you would need in the system, according to our model.

The way we calculated this was based on existing technologies are available and have been specified by those individual companies, those individual energy users as potentially being an option to meet their decarbonisation plans. That's quite important. Each of the large heavy industrials in Tasmania has some form of decarbonisation plan. I think the latest is Cement Australia by 2050 and some much earlier; 2035 and 2040, they want to phase out coal and gas.

This is not a controversial plan, it's just saying what would we need to do in order for those heavy industrials to meet their existing plans to switch off fossil fuels and use renewable energy. It depends, across the island, we can go into that. I've built up a decent knowledge base on each heavy industrial plant, but the technology that's used differs widely across all those different plants. The biggest kind of standout is hydrogen, and, obviously, hydrogen is a bit vexed at the moment because it's too expensive. That is just what it is. We need those hydrogen costs to come down in order for it to be a viable alternative to coal and natural gas.

If we look back, say even 10 years, the journey we were on in terms of the rest of the economy, a very similar story. Solar and wind were falling in cost but not quite there yet, and now solar and wind are by far, in a way, the cheapest way to generate electricity, even when you then back it up with batteries or hydropower and building additional transmission infrastructure.

I'll just talk quickly to transmission because that obviously will be part of the conversation today. Transmission infrastructure is necessary to do this. We do need to upgrade our transmission network. If the transmission network has been built specifically to accommodate a certain amount of load. If we want to increase the load, we need more transmission. We want to do all of this, transmission in a way that's really smart, that reduces waste and reduces the impact to people and nature. That's a really important part of the overall picture.

I would say that, obviously, Marinus has been controversial more or less since it was proposed based on cost and how that cost would be apportioned. I'll say I think interconnection helps a lot. Additional interconnection helps a lot to achieve this goal. It unlocks a lot of innovation and opportunity in Tasmania. You can either be an exporter of electricity via the cable or you could keep the cable in balance as we do now and that would reduce the need for cable or cables. That would keep the burden basically for more infrastructure down. You would need less infrastructure on the island to meet these projections, unless of course you want to do that export-focus model.

In terms of the cost though, just noting the cost and opportunity that sits on the other side of that cost, so the financing cost is still able to be met through concessional loans from the CEFC. We've seen recently there were loans to the transmission interconnector proponents in other jurisdictions for that purpose. That is a logical option for Tasmania and then, obviously, the government being a shareholder could use part of its revenue or all of its revenue to pay down that loan.

As to the ongoing costs - so two different costs, construction and then ongoing and making sure that doesn't overburden Tasmanian consumers - recently, the Australian Energy Market Commission released a new ruling stating that ministers from two or more jurisdictions could join together to create an agreement that would specifically allow them to dictate how costs are apportioned. I'm saying that in very simple language, but that's quite new, only from

October last year, but does go some way, if not all the way, to helping to resolve that justifiable concern that Tasmanians could end up paying more than they ought to for this infrastructure.

We've talked about costs and I also want to talk briefly to the opportunities. We modelled the employment that would be generated by doing all this by potentially building all this new infrastructure, we didn't model the employment that would come from the decarbonisation of those heavy industrial plants or the new jobs that might be created in new industries. We just looked at infrastructure.

Obviously, it's a very large investment about \$17 billion in total. Importantly, about 66 per cent of that would be from private enterprise, which is really important to remember, that the money that governments are putting in is unlocking a lot of investment from the private sector and that would generate quite a conservative estimate here about 9700 full-time jobs. We've basically said 9700 full-time equivalent job years.

I've probably presented enough. I'm sure you've all got questions and happy to dive into that.

CHAIR - Thanks. Can I start with when you talked about, Jack, your modelling which was focused on decarbonising major industry? We heard from one of the major industries yesterday that outlined its plan. Obviously, there's a huge body of work, but you talked about the need it would require variable renewable energy, particularly wind in Tasmania's case, probably should grow substantially. Won't that increase the price volatility a lot, leading to major economic uncertainty for the industrial sector that operates in the spot market?

Mr REDPATH - Yes, that's a good question, Ruth. Obviously, we want to make sure that volatility is controlled. As far as I'm aware, major industrials generally have long-term offtake agreements. Let's say for argument's sake they have a significant portion of the price that's unhedged. This is another reason why Tasmania is really uniquely positioned to do this, to take advantage of this opportunity that sits in front of us to develop, be a leader in this space and then export that expertise to the world. What you need in order to dampen that volatility is storage and we have more storage than any other jurisdiction by far and away and it's also long-term storage, so in terms of price volatility I would say Tasmania is one of the best-positioned jurisdictions to cope with that at our state-based node.

In terms of volatility at the national level, at the NEM level, yes, that is an issue. That is a concern as the old coal-fired power stations break down across Australia, which we see more and more of happening every year; that does create volatility in the NEM and that does have an effect on about a third of Tasmania's price that is then paid by consumers.

Have I answered the question, Ruth?

CHAIR - Yes, I think so. In many respects, we don't really know. We know there will be price volatility because of the nature of the energy source.

In your submission under the Marinus Link heading here, you talk about noting that on 1 August 2024, the Australian Energy Market Commission concluded consultation on the national draft electricity amendment; this is the one you were just mentioning. I don't have a whole degree of faith in our government sometimes signing agreements that are fully to

Tasmania's benefit, but we'll have to wait and see. I hope there'll be some discussion with the Tasmanian people before we signed anything.

Do you feel that that will actually allow Tasmania not to be at a disadvantage in those negotiations? We're a small state; we have limited capacity in some respects here.

Mr REDPATH - I think this relates back to your other question as well though, Ruth. There's give and take in every contract and we have something the rest of Australia really needs, which is volatility-dampening storage. If energy prices and controlling energy prices is a concern, we want to think about the best ways we can dampen volatility at home and also use our ability to dampen volatility across the Bass Strait with the existing interconnector and potentially other interconnectors as leverage in that negotiation. I'm sure that's what the government is doing already.

As to your point about will Tasmanians get to be involved in the negotiation? I'm not sure, but there is a provision in there that says the contract or the agreement should be disclosed, as I read it, and the AEMC -

CHAIR - Before it is signed or after?

Mr REDPATH - I think probably after but, anyway, that is what it is.

I think price dynamics in the NEM are very complicated. We didn't attempt to model that in this report or in our submission. That's a bit above my pay grade, but from the models I have seen and the people who I talk to who do that work, the primary cause of volatility is basically what should be baseload power from these coal-fired generators only operating - they should be operating 80 per cent to 90 per cent of the year, 90 per cent-plus really but some of them are only operating 60 per cent of the year and that's what's introducing the volatility and not wind and solar.

CHAIR - That's going to get worse though as they exit the scene.

Mr REDPATH - It would get a lot worse if we were to slam on the brakes and not replace them with things we can build in time. Most of the coal-fired fleet across Australia is reaching its end of life. This is a really key point from the research and modelling that's been done already and it's in the company statements so this is not a controversial opinion.

The coal-fired power stations are ageing and they are becoming more and more expensive to maintain, so putting aside all the climate concerns, we need to figure out a solution for that.

Just a pre-emptive question here: our nuclear energy would be 20 to 25 years away so I don't view that as a viable alternative, certainly not for Tasmania and not for the NEM either.

Mr BAYLEY - Good day, Jack, Vica Bayley here.

I have a question I wouldn't mind you talking us through solar a little bit more? We've heard a bit from some advocates in the context of solar and the capacity for rooftop solar and also virtual power plants such as a public housing estate, for example, to be fitted out with rooftop solar, community batteries and the like.

I invite you to talk to us about solar more - what you see as the future in that area and what you think government can and should be doing in terms of policy and or funding support to stimulate that? Because I hear you in terms of Tasmania is obviously not the most solar rich jurisdiction in the country, but it's still a huge resource we can and should be tapping into.

Mr REDPATH - Particularly in the north and north-west - that's where some of the best solar resources are in Tasmania. They're perfectly good solar resources. As I said before, it's not really fair to compare to the desert. That's just a different scale.

The reason why I focused on this is because obviously we're a small island. We do have community concerns on competing land uses or amenity from larger scale projects. We'll work through those as a state.

Rooftop solar does help to solve part of that, particularly when you pair it with batteries. It's extremely low cost and extreme. It is the lowest cost form of generating energy of any type. Then, when you pair it with batteries, you can store that energy and move it to whenever you want throughout the day.

It's a missed opportunity at the moment. We do lag. Where we do lag is in the rate of installations compared to the rest of the country. That's partly because of the tariff structure and the way in which it was incentivised at a national level about 10 years ago. Basically, our feed-in tariff has always been lower than other jurisdictions.

The government could find a way to leverage further incentives from the federal government, particularly to put solar on the roofs of houses where it's most needed. That's people on lower incomes, either through individual schemes or through some sort of community scheme that, as you said, we've got bundles. Bundle together panels, batteries and virtual power plants. You can do that at the meter. There are many commercial entities that do it at the meter. Or you could do it in a slightly more coordinated fashion and have a community battery or even a grid-scale battery that soaks up the solar through the day and then releases it.

This would be another way to dampen volatility and price.

Mr BAYLEY - Is there a jurisdiction in Australia or nationwide that's doing this well, and got viable proven projects up? Is there anywhere we should be looking to for inspiration?

Mr REDPATH - Yes. There is a very aspirational project in the Illawarra region in New South Wales, which is basically seeking to do what I've just described at the scale of an entire suburb. I forget the exact name of the suburb but if you were to Google or search for Illawarra region community solar, something like that, it would come up very quickly.

Just for a bit more national context there's a really large amount of grid-scale batteries about to enter the system. They're either under construction or going through their final stages of say, financial close. Those batteries will dampen volatility also and they will pair with the existing rooftop solar. Basically, at the market level we've seen a huge success story in Australia, in particular Queensland and New South Wales, with essentially utility-scale installations, but spread across rooftops. Australia actually leads the world in that. We have the lowest cost rooftop solar of pretty much any developed economy. By then introducing batteries to that environment at the grid scale, we should see some pretty big impacts for power price volatility in the next couple of years.

Mr BAYLEY - That's increasing the sort of firming capacity of solar and, in a sense, increasing the level of competition with the Battery of the Nation notion that we hold here and the sort of deep storage we've got in Hydro. Is that rolling out quite extensively and presenting a real competition do you think? And going to present a competition into the future?

Mr REDPATH - I think it obviously presents competition, but they're not mutually exclusive by any means. Basically the difference between the old system we had in Australia of producing power was we had very large generators scattered around the country, about two dozen of them, and then power lines to load. Now, we need to sync up regions across the country that produce renewable energy at different times.

Tasmania is a region that has unique characteristics and therefore can contribute to that larger system. In terms of storage, we have something that only really exists in the Snowy and that is long-duration storage. Yes, there is competition from the batteries, but we also have a unique value proposition that the batteries don't have and that the market will pay a premium for.

Mr BAYLEY - Thanks. We better move on for time.

Mr EDMUNDS - Hi, Jack. It's Luke Edmunds here. Thank you for your time today and your comprehensive submission. I had a really quick one based off your introduction around the EVs and the transition away from fossil fuels. What's your understanding of the network capacity in Tasmania to cope with that extra demand or do you think that solar plays a role in taking pressure off it?

Mr REDPATH - That's a really good question. To be totally honest with you, I'm not the best person to answer that. I'm not a power systems engineer. To comment on the specifics of the network and its ability to cope with EVs - I can talk in generalities. Obviously, if we have solar paired with EVs, that is a really good outcome because it's extremely cheap energy that's displacing fossil fuels and it reduces the burden on the network.

My understanding is there are upgrades required to the network at the residential scale and at the broader scale as we do this transition. That will create huge opportunities, particularly for people in trades across the state as we turn on more renewables.

Mr EDMUNDS - And then one on a bit of a bigger scale about networks and if you're not comfortable answering it, that's fine. How can we ensure the cost burden of network upgrades, including things like Marinus Link and Northwest Transmission, is equally distributed and does not proportionately impact Tasmanian customers or consumers?

Mr REDPATH - Thank you for that.

CHAIR - Disproportionately, I think you meant to say.

Mr EDMUNDS - Disproportionately.

Mr REDPATH - Disproportionately. That's a question that's been hanging around for quite a long time. I would refer you, again, to the AEMC's recent determination. It's called 'Providing flexibility in the allocation of interconnector costs'. I think that goes a long way to solving that problem. It allows two or more ministers to enter into an agreement about the

allocation of costs for interconnectors - not necessarily for the transmission upgrade in the north-west, but certainly for the interconnectors.

CHAIR - It is a fine balance in terms of the minister makes a decision from Tasmania's perspective, there's going to be winners and losers in that. There always is.

Mr REDPATH - There always is. We want to strike the balance and make sure that as many Tasmanians come out of this as winners as possible.

Mr EDMUNDS - What policies can ensure that low-income households and renters who may not have direct access to renewable energy solutions are not left behind in the transition to a low-carbon economy?

Mr REDPATH - I think that does require coordination between all levels of government - local, state and federal - and the targeted program of investment in rooftop solar for those households. That's what I would like to see.

Mr GARLAND - Jack, in my electorate of Braddon, TasNetworks will be installing a community battery in Shorewell Park. In this suburb, close to 50 per cent of the houses are social housing, yet none of them has any solar panels. In fact, very few of the houses have solar panels in that suburb. Noting the announcement of the Commonwealth government in December to make \$500 million available through their Social Housing Energy Performance Initiative grant process, which doesn't require any co-payments from the state, what do you think the state government could be doing to make the best use of this community battery?

Mr REDPATH - It's the same answer as the question before. What I'd like to see is a targeted program of investment, prioritising the people who need this most, that is, the people who would otherwise be disproportionately affected by increases in their power bills. A community battery is perfect to then utilise rooftop solar on that social housing and surrounding neighbourhoods. In order to do that, I'd like to see a targeted program of investment from local, state and federal governments.

CHAIR - Can I ask a follow-up? Again, in the north-west, where both Craig and I come from, the first proposed Renewable Energy Zones are being considered. In terms of that, but also development of renewable energy wherever in the state, in your view what guidelines should be put in place to ensure Tasmania's push for the additional five gigawatts or more of renewable energy generation does not lead to overdevelopment or conflicts between the environmental considerations and agricultural land use? We know that area is also quite agricultural until you get back or south a bit.

Mr REDPATH - Speaking to agriculture, particularly wind and solar are quite compatible with agriculture, especially the agriculture we do in Tasmania. We've seen many examples now around Australia of cattle and sheep coexisting with wind farms. They're very happy in and around wind turbines. Solar panels can be raised ever so slightly and this actually provides clearance for sheep to run under the panels. In fact there have been studies which show an increase in wool yield, particularly in hot climates, under panels, because the sheep have shade and they're respiring less. It's about the government, developers, and communities, farmers in particular, talking to make sure that what's being proposed is compatible with the existing land use.

Farmers should benefit from this a lot because they do receive compensation for hosting infrastructure. It can help to drought-proof properties. Basically, it can be a huge win for agricultural communities. The same can be said with a bit of tweaking for our natural environment. This is an opportunity basically to regenerate landscapes. We have large infrastructure going into places that might have been previously degraded - potentially degraded landscape that could be restored.

CHAIR - What you're saying about solar and wind there probably works well in the Midlands, but on the north-west coast, it's highly cropped. We do run cattle up there. We've got dairy and beef, obviously, but there's also a lot of cropping with centre pivot irrigators and the like and there's more centre pivot irrigators going in drier areas in the centre of the state. They don't work so well with wind turbines and transmission lines, so there's a balance there that needs to be found and how do you find that?

Mr REDPATH - I would say that they do. You can crop in and around wind turbines, you can crop in and around transmission and again, it's about compensating the farmer for productive land that was otherwise lost. You can't crop obviously hard against a transmission pylon. In some jurisdictions you can crop underneath, that might not be the case here, and if that was the case, it would be about planning it such that the farmer has the least impact to their property. Positioning the transmission infrastructure in such a way it has the least impact over their land and then compensating them adequately for the land that was lost.

CHAIR - Does anybody else have any questions? Otherwise, we'll wrap up here.

Mr SHELTON - How are you going, Jack? Mark Shelton here. My question is the decarbonising of our transport industry and our great aspiration. From your study of all the literature that's around, one of the downsides of that is the federal government funds our roads out of the fuel tax. In decarbonising and electrifying our transport industry, how are our roads going to be funded? Have you come across any discussions or what's your view on that?

Mr REDPATH - Yes, it's a really good point, Mark. One of the things I don't have a really good answer for, I'm afraid. More work required there from me. I'm happy to come back to you though, outside of this discussion, with a few options.

CHAIR - Do you want to put that on notice to him?

Mr SHELTON - It's a question I'll be asking as we go forward on this.

CHAIR - We might put it in writing to you then, Jack, so you can provide your considered thoughts on that matter.

Mr REDPATH - Thank you.

Mr BAYLEY - I was interested in the proposition, Jack, effectively decommissioning the notion of a fund, a bond for rehabilitation post life. Can you just tell us about that and is there nothing in place at the moment?

CHAIR - And does anywhere else have it?

Mr BAYLEY - And does anywhere else have it, yes.

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Mr REDPATH - Certainly it should be in place by, I am not 100 per cent sure if it is already in place in Tasmania. The point there was that it simply should be in place across all projects and it should either be the responsibility of individual projects.

Mr BAYLEY - Does that include on private land in your mind, because obviously some of these developments are occurring on private land.

Mr REDPATH - Especially on private land because the projects rarely own the land; they lease it. That's where the concern was raised with me by a landholder who had concerns about the commissioning and wanted to see a solution that made sure in the event the project didn't pan out, there was contingency in place that it'd be decommissioned.

In terms of other jurisdictions, this is really boilerplate standard stuff. Every other jurisdiction I have come across or work across has decommissioning in place, decommissioning funds that the developer either contributes to or, yes, is accountable for basically.

Mr BAYLEY - Is that set at a percentage of construction costs, for example, so it's sort of in scale with the size of it or how do they actually come to a figure, do you know?

Mr REDPATH - A lot of the ones I've seen at the moment are basically provisioned within the development assessment approval. That basically puts it back onto the developer. That does have a risk obviously if the developer goes belly up or whatever. In terms of how you would do it in terms of a fund, yes, percentage that's contributed.

Mr BAYLEY - Okay, thanks.

CHAIR - Thanks very much for your time, Jack. We will write to you about the transport sector that Mark was asking about. Thank you for your appearance today.

Mr REDPATH - Thank you very much for your time, everyone.

THE WITNESS WITHDREW.

The committee suspended from 9.50 a.m. to 10.00 a.m.

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CHAIR – Welcome, Steve and Peter, to the public hearing of the Energy Matters Committee. We appreciate receiving your submission and we are happy to hear what additional information you'd like to provide. As you're probably aware, this committee is covered by parliamentary privilege. I don't think this is a new procedure to you so much, Steve, but maybe to you, Peter. That privilege may not extend beyond the hearing. If you repeat anything outside after this, just be aware of that.

If there's anything of a confidential nature you wish to share with the committee, you can make that request. Otherwise, it's all in public session. It's being broadcast and transcribed and will be reported at a later time.

Do you have any questions before we start? No.

I'll ask both to take the statutory declaration. After you've done that, you might want to introduce yourself and then speak to your submission. We'll have questions to follow.

Mr STEVE OLD, CHIEF EXECUTIVE OFFICER, AND **Mr PETER SHELDON-COLLINS**, PROJECT MANAGER INDUSTRY DEVELOPMENT, TASMANIAN HOSPITALITY ASSOCIATION, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

Mr OLD - Steve Old, CEO of the Tasmanian Hospitality Association, and Peter Sheldon-Collins, who does some work for the THA as a consultant on basically a lot of these sort of government business requests. He's a bit of experience in government over a long period of time, so he's helped me with the energy one talking to the industry.

CHAIR - Do you want to make an opening statement?

Mr OLD - Yes. I was going to put it on record because some of it might answer some of your questions, and then we're happy to answer any questions.

The THA submission to the Legislative Council Inquiry into Energy Matters was prepared following consultation with businesses in Tasmania's hospitality industry. The THA submission to the inquiry was drafted soon after the latest increase in TasNetworks transmission tariffs had commenced and before the impacts were experienced by the industry.

These transmission tariff increases were the main focus of the THA submission. While the THA has not yet gone out and canvassed the hospitality industry on the impact since the new transmission tariffs were introduced, we have received concerns from some individual hospitality businesses about the impacts this has had on their electricity bills.

According to the Australian Energy Regulator, TasNetworks' combined distribution and transmission network charges constitute around 36 per cent of the small business electricity bill. So, even though TasNetworks transmission tariffs are just one of the causes of the rise, as we've seen in the energy bills in the past year or two, there is no question that the new tariffs are having a big impact.

Also, these network charges cannot be absorbed by the energy retailers and as such are being passed directly onto small business owners and operators who are wearing the brunt of increases.

The THA considers these transmission tariff increases to be excessive when you consider Tasmanian hospitality businesses are in the midst of a cost-of-business crisis, facing high inflation, high interest rates, soaring insurance costs, surging rental rates, rapidly increasing transport costs, increasing utility costs, increased council rates, high government fees and charges and much more.

It's also important to recognise that hospitality is a high-energy-use industry in the main run by mum and dad business operators and owners.

For these reasons, increases in charges - such as has occurred with TasNetworks' transmission tariffs - place a very heavy burden on those businesses already faced with a mountain of financial imposts.

In the THA submission, we identified the scale of the approved new transmission charges. This was derived from advice that one of the electricity retailers in Tasmania provided their small business customers. However, a direct comparison to TasNetworks' small business fact sheets for 2023-24 and 2024-25 suggested the increases may in fact be higher still.

While TasNetworks said in its fact sheet that it reviewed the network utilisation of small businesses to better reflect network demand, it might have been better to consult with our industry about the impacts its new time-of-use tariffs would have on our businesses. While the new weekday shoulder tariff has been introduced, this will largely be negated by the substantial increase in per kWh rate charges over the next couple of years.

Also, the entire weekend shoulder tariff has now been removed, which means that many hospitality businesses will now face peak tariff charges throughout the day and the evening during the weekend and at their busiest times.

In its fact sheet providing advice to small businesses, TasNetworks suggests that businesses can conduct energy audits or shift their time of use or install solar panels as effective ways of reducing their power bills.

However, in most cases, hospitality business owners do not own their venue in which installing solar panels may not be an option and they cannot shift their usage time as this is determined by the nature of their businesses. So while this advice may assist some small businesses, it doesn't necessarily assist the hospitality industry, which is the third largest employing industry in the state.

The THA, however, does support and advocate undertaking energy audits and itself conducted an energy order pilot trial at the beginning of 2024, with some 10 venues to demonstrate the benefits. Indeed, the audit process we developed and the outcomes that resulted from the pilot trial were of some value to the Tasmanian government when it formulated its current energy audit grant program. We recognise the Tasmanian government energy audit grant program has now been announced and will complement its business energy efficiency and energy saver loan schemes to assist businesses in upgrading their facilities to reduce their energy demand. However, as noted before, many hospitality businesses do not own their venues and may not be in a position to take advantage of these schemes. Instead of grants and loans, it will be preferable to minimise the rising cost of energy to meet the needs of our industry in the first place.

The Tasmanian Hospitality Industry suggests the Tasmania government needs to undertake a review of the new transmission time-of-use periods, new tariffs and increasing energy costs more generally to properly understand the effect this is having on our hospitality businesses with a view to ensuring that Tasmania's hospitality industry is not unduly bearing these increased costs and with a longer-term view to reducing the cost burden on our industry.

CHAIR - Thanks. We've heard from others about some of the challenges with the increasing costs. In terms of the audit you rolled out with the 10 businesses, what sort of recommendations came out of that? What was being suggested that could be done to assist those businesses?

Mr OLD - I'll hand over to Pete because this is the work that Pete did.

Mr SHELDON-COLLINS - To add to that before I give you the answer, most of the businesses we included in the pilot trial had already undertaken a lot of work to reduce their energy demand in the first place. However, it still found there was opportunity based upon the audit outcomes to be able to do more work than what they've done themselves. That came down to things like looking at things like double or triple glazing with their windows in their venues, solar panels was one that did certainly come up, but also smart energy technology, smart metering systems. Lighting was actually one that came up, but the one that actually came up most of all was the disparate nature of the tariffs they're all on.

Some of the venues have actually negotiated a very good tariff as far as the retail side of it is concerned, not the transmission necessarily because that's just passed straight through. But some of them were actually on a much higher bill, so there was a lot of savings they could have done simply by renegotiating their energy contracts basically.

CHAIR - You made the comment about the weekend shoulder tariff being removed; I assume that was a lower rate over the weekend generally. What was the rationale behind removal of that tariff?

Mr SHELDON-COLLINS - All we know was that TasNetworks said it looked at the energy usage and demand across small business and then it arranged its tariff and the time of year schedules to boot. We made the point in our submission we felt they didn't actually consider the hospitality industry because if you want to depict the worst times to hit the industry with peak tariffs, they've done it.

Mr OLD - I guess we get it from small business that probably - and I'm making an assumption - most small businesses - some would be shut on a weekend or they're open on Saturday, probably not on Sunday, but as we know hospitality businesses are pretty much open on a weekend.

CHAIR - And into the evening.

Mr OLD - If you're talking to a restaurant or a pub or especially an accommodation venue, they're open 24/7 accommodation venues, and as I said, we understand what they've probably done for general business, but I just don't think they've looked at the hospitality side of it.

CHAIR - Have you made any representation to TasNetworks on that and what sort of reception did you get?

Mr SHELDON-COLLINS - No, we've made no representation. They introduced the tariffs as of July; in a way we don't have enough ammunition to really go hard at them basically. The other thing to keep in mind, just not only the nature of the businesses, some of the hospitality businesses, they're running their fridges 24/7. If you look at a bottle shop or if you look basically even at a restaurant, so they can't actually avoid the peak tariffs at all in that regard basically. I've gone through some of the submission TasNetworks put to the energy regulator. I still don't understand how they've chosen the tariffs if you were to consider the hospitality industry. If you take a small business like a doctor surgery that opens on a weekend, maybe that works for them, but it doesn't work for the hospitality industry.

CHAIR - What would you recommend then if you were meeting with TasNetworks, what would your actual recommendation be?

Mr SHELDON-COLLINS - My thinking is they really need to look at the industry itself; so rather than just say we've looked at demand and we've worked out what the bill rates look like and how that plays out during the day, they need to look at the business and actually understand the business, how it operates and what its energy needs are. I guess I said this to Steve earlier but TasNetworks, like others, are a state-owned corporation that are providing an essential service to business; they should really understand the business they're providing that essential service to.

Mr OLD - I guess to your question, Chair, it'd be like a hospitality tariff. If you're in a perfect world, it would be great to have a hospitality industry tariff that is reflective of the nature of the hospitality industry and when they most need to be open, which is pretty much the weekend, to be honest with you. We still have - most hospitality businesses are still open seven days a week, but there still are some that close on a Monday or a Tuesday or whatever. Let's be honest, hospitality on a weekend is pretty - would be the peak for us. It would be having a hospitality rate for the industry itself.

CHAIR - Have you any interaction with the Energy minister on these matters?

Mr OLD - Specifically, not on this one, because we probably put in to your committee and just left it thinking that we may well get called in, and what would come from it. We have, over many years - it's in our 2030 vision for the industry, et cetera - talked about energy costs in general, and about how they're killing our industry in general. Not just the TasNetworks side of it, but a lot of our businesses talk about every year, when you start to get 20 to 50 per cent increases in your energy bill and your energy bill is, like insurance, one of your biggest ones, that starts to become unsustainable. It's not just a Tasmanian hospitality issue, it's an Australian nationwide one. Obviously, we're only focused on Tasmania. Our businesses can't keep copping these hits. Energy and insurance are our two biggest bills, and they keep increasing at -

CHAIR - Staff costs would be pretty big.

Mr OLD - Sorry, staff - I'm probably talking outside of staff, I'm talking more the ones on you. They're just massive, and going up 20 to 50 per cent every year. They're just making things unsustainable. Again, I've got an example here of a basic restaurant in Launceston, and

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you're talking about charges when this new tariff stuff was in and they went up 38 per cent in cost. If you start looking at inflation every year, or four or five -

CHAIR - That's their overall account?

Mr OLD - Yes, for TasNetworks. If you start taking in inflation every year and all those sorts of things, it's unreasonable to think that your other bills like energy and insurance can go up 30 to 50 per cent, and think that you can keep sustaining.

Sorry, Chair, going back to your question - we have raised it through our 2030 vision and to the government over years, saying that we have to do something about energy costs. I guess it's been raised constantly in a general form.

CHAIR - Yes. Just to put it into a statement, perhaps - TasNetworks in considering its tariffs considered business, like small business, as opposed to major industry. I mean, they've done that separately, I think. There was no nuanced look at hospitality versus a shop that trades nine to five.

Mr OLD - Not that we understand it; they've never had a chat to us about it.

CHAIR - Not that you understand, sure.

Mr OLD - No, I don't think they have.

Ms FINLAY - Could I ask a question on that? I haven't had it in writing, but I was listening to an interview the other day where there was a commitment to consider grandfathering existing tariffs in this transition. While the committee will do some work to represent what could be good considerations for specific sector tariffs, it would be worth the THA inquiring as to whether there's a possibility for your sector to be grandfathered into their existing tariffs while this transition is happening, maybe.

Mr OLD - That's a good point. I didn't hear the same radio interview. It's a good point. We've probably, to be frank with you, put into this submission and thought it was a good inquiry that was going on, so we're probably going to come to this and see what comes of it. We'll probably take as much out of this as what you guys will, with the feedback you give us.

Ms FINLAY - I haven't seen it in writing, and I didn't know it from anywhere else, but they did say it, so it's worth a crack.

CHAIR - It also won't help any business wanting to start up.

Mr OLD - No.

CHAIR - We need a policy position, don't we?

Mr OLD - Yes. Getting to your question, Chair, then if someone buys the business, they still get to grandfather it off for the previous owner, blah, blah. I guess that raises a lot of questions, but it's still a good point for us to raise.

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Mr BAYLEY - It won't necessarily be the end of it. I mean, we heard from another witness yesterday about TasNetworks' advice to them about their transmission costs going up 29 per cent or a bit more, as a result of transmission costs and so forth, transmission investments coming up. It's probably not the end of it, either.

Mr OLD - No. It's a very good point. That's probably what we think it is. This is not the end of it, to be frank with you.

CHAIR - That's right.

Ms FINLAY - I was only suggesting that as an interim measure, not as the solution.

Mr SHELDON-COLLINS - If I can add, if you look at the previous increases in TasNetworks' tariff charges, they've been 4 and 6 per cent year on year, in that sort of order. This is a tenfold increase in their tariff in one year. We look at that and think, 'Inflation's only 4 per cent.' Tenfold on top of inflation increase in the tariff - you have to wonder how they arrived at that. That's not just simply for hospitality; that's for all small business. It may well be, as was mentioned, to do with their new transmission, but to hit business this hard with such an increase is something we find difficult.

CHAIR - The other point that you raised, Steve, in your opening comments was around other improvements like solar panels and double-glazing, triple-glazing, those sorts of measures to reduce your energy consumption, or to provide some other avenue to offset your cost. What suggestions do you have for those businesses, particularly hospitality venues that may be underneath - they haven't got a roof, or they don't own the building? How can they be assisted in this, do you think?

Mr OLD - That's one of the good questions. What I know is, Chair, when you get out there and start talking to a lot of the business, you realise how many of them who are running the place don't actually own it. Then it becomes a lease operation with the owner. The owner says, 'Well, I'm not going to invest in that side of it. I can't see the benefit back over a long period.' That has been one that we did through - some of the conversations we had with the venues we chatted to, is that some of these options are not actually plausible.

Then, when you get to the really bigger operators, turning the lights off at certain times of the night, it's not going to make a big difference to them. It might to a small business. Like Pete said, things like fridges and all those sort of things, they're non-negotiables. A fridge has to stay on 24/7. You can't actually do anything about it.

Then you go to the other length, which is, we've had people, without getting into the micros, the sealer fridge type people who come in and look at the seals on all the fridges just to make sure that they're - there're little things you can do. For some businesses that haven't had that looked at for a long time, some of those changes can make an impact, but they're not going to make massive impacts, to be frank with you.

CHAIR - Not going to offset the costs.

Mr OLD - It's not going to offset the cost. I guess, as an association, we are trying to do that work to try to look at some of these things they can look at. They are fixes for some, but I don't think they're fixes for the majority.

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CHAIR - So do you think there should be a different policy approach from government on this? What would that look like?

Mr OLD - Going back to your point originally, Chair, was about going back to looking at the weekend surcharge. I think they need to understand that hospitality is a different industry in relation to how they work and that they are a 24/7 industry. I do believe that they need to look from a hospitality-specific point of view and the businesses concerned and how we could deal with it.

CHAIR - Makes you wonder if they ever eat out themselves.

Mr OLD - I'm not sure.

CHAIR - Anyway, that was an observation.

Mr EDMUNDS - Probably just to clarify and get it explicitly from you, what you're saying today, essentially, is that the lower costs - or more proportionate increases, perhaps might be a better way to put it - and a fairer tariff system is far more preferred than grants and loans and schemes, et cetera? The bill that's arriving in people's inboxes is the number one concern of your industry?

Mr OLD - Yes, 100 per cent. Not being rude, we are never going to baulk or bag anyone who wants to provide some sort of assistance for a grants program, or whatever. But to your point, a grants program is never going to - I mean, when they put out grant schemes for eligible businesses because it applied for X, if it sounds like it's \$5000 or whatever, most of the businesses, the bigger ones, will say, 'It's not worth me taking the time to write \$5000 because my bill's over \$5000 per month,' et cetera.

Again, I'm not being rude to any grant program, but it's a very fringe assistance to what is a far bigger issue. When you start talking 30 and 40 per cent increases, you're never going to be able to do a grant. If you started to talk about giving grants that were actually going to be really beneficial, you'd probably suggest that they should put that bucket of money into a greater fix to not have these such large increases, if that makes sense.

CHAIR - An industry-wide fix as opposed to -

Mr OLD - Sorry -

CHAIR - Is that what you're saying?

Mr OLD - An industry-wide fix rather than individual business grant program fix, if you know what I mean. That money should go to it.

Mr BAYLEY - Reduce the tariff, basically. Something that manages the tariff structure.

Mr OLD - One hundred per cent.

Mr EDMUNDS - It also sounds like there needs to be some - and we've heard this from other witnesses - that the consultation about this sort of stuff needs to be done better from the start in terms of engaging with - number 3, in terms of -

Mr OLD - Employment.

Mr EDMUNDS - Employment.

Mr OLD - One hundred per cent. You would just hope that they would have the ability to come and talk to industry groups and recognise that hospitality is a different need, like we've talked about, and actually come and have a conversation about it and try to get it fixed. Because again, energy is one that's now gone like this. We've also got insurance. We've also got wages, blah, blah. There are so many things that affect our hospitality business. This is just one, but it is a massive one.

If you take insurance, which is our other massive one in relation to general increases, the reality on insurance is, you go to some of the regional venues out there - and this surprised me a year or two ago when I went out and saw them - is basically, at least with insurance, the choice is they can just not insure. Now I know that's ghastly, because I couldn't believe it when I was told, but there are businesses out there that go, 'We're just not going to insure the building. If it burns down, it burns down and we'll worry about the money we save per year of paying that insurance. We might rebuild it.' You can't do that with energy. I guess the difference on the two is you can ignore the insurance bill and just not have it, even though I'd suggest you shouldn't do that, but you can't on energy. You've got to pay whatever you've got to pay. It's unavoidable.

CHAIR - You talked about the percentage increase in the networking charges, particularly. With the audits that you've done and the work that you've done with your sector, in percentage terms how much do you think members would be able to save with energy efficiency measures to reduce their consumption or whatever?

Mr SHELDON-COLLINS - It varies, obviously. We work with 10 venues that have already done lots of work as far as getting their venues to reduce energy demand. There are still small things that each venue could do. I'm not going to say I'm guessing, but I would say you could probably reduce your energy demand by 15 to 20 per cent. That's pretty much a given, depending upon what your operation is and what you do. Simple things like double glazing or triple glazing, putting insulation in some of the buildings, some of the older buildings don't have that. Smart energy, even though it won't work for a hotel, but some businesses are turning lights on or off when they're active or when there's somewhere there or not. There are a range of things they can do. I would think that you're looking at that range. You wouldn't be looking at a 50 per cent or an 80 per cent reduction.

CHAIR - It is still less than the increase in the price.

Mr OLD - Let's look at double glazing as an example. The reality is if you went around most buildings and said we're now going to double glaze it, the cost would be exorbitant, so then you have to weigh up and go, if I do that over 20 years, how am I going to recover that; how much is it going to save me energy wise? I'm no expert in energy, you can tell that right from the conversation, but I'd struggle to see how you're probably going to get it back by just doing that. Again, you hit the walls of a lot of our buildings. I'll make it a generalisation here, but you know as well as I do with a lot of our old buildings, they're not as easy just to change them blah blah. Every individual business in hospitality has to be looked at differently as to whether they could do solar panels, window change, whatever but what I'm hearing for most of our vendors is a lot of them are very expensive exercises and probably would not generate

energy savings that would be worth it, if that makes sense, to get a return on their investment. A lot of the venues would struggle with that to be frank with you.

Then it comes down to, let's be honest, a lot of mum-and-dad cafe owners, restaurant owners, et cetera, can they fork out X amount to do some of those things initially? A lot of them don't have the money off the back of COVID, et cetera, to make some of these investments. That is just the reality of what they're facing.

Mr BAYLEY - On someone else's building.

Mr OLD - On someone else's building.

Again, every business is individual, but as I said, if you look at, especially, the cafe restaurant industry, they're not a high-profit margin industry, without getting into it. They don't have \$20,000, \$30,000, \$40,000 just sitting there to put new windows in to combat 40 per cent increases in their energy bills, et cetera.

CHAIR - Do you think there should be some sort of incentive program through government for property owners to make these changes that don't necessarily directly benefit them but they will increase the value of the property to a degree that could assist the tenant? Is there a place for that?

Mr OLD - I'll answer this by saying you have to throw all these ideas into the mix to come up with a proper policy to actually address this. I think that's a really good suggestion.

If you're going to come up with - how are we going to look at fixing this as a government, you have to look at all angles and one would be how do you get the owners to put solar panels, whatever, on and invest back in their property, et cetera. It's not just the lessee that's involved in this, it's going to have to be how do we also bring in the property owners. It's a good point, and has to be part of any policy going forward or any solution. I should say.

Mr EDMUNDS - It might be too early with the audits you did, but what are some of the other outcomes or findings from doing that audit that fed into both what might have been taken up in the next round and also something we might consider?

Mr OLD - We wrote a report for our board. I'm looking at Mr Sheldon-Collins to make sure I have remembered this. Coming back off six weeks leave, my mind's a bit dodgy. I'm just trying to think whether there's anything confidential I couldn't bring back to you, Chair. That's probably what I was asking you.

Mr SHELDON-COLLINS - We had a meeting with the people when they were putting together their energy audit program that's now been announced. I'm not sure that the grants are still available yet, but that's not the point. They learnt off the model we put together and one of the things they recognise that we were quite keen to point out is that an energy audit by a fully qualified engineering firm, for example, can cost you \$5000, \$10,000 in its own right. The grants they were talking about were \$1500.

Because I used to work for an engineering consulting firm in one of my previous lives, I sat down with them and actually said, well, if we're going to do an energy audit that the venues

can afford - because they won't do it if they can't afford it - how do we line that up? How long is a piece of string? You can pay \$15,000, \$20,000 for a full engineering audit if you want.

Between myself and old colleagues, we designed an energy audit for a small business that will cost around \$1500; for a mid-size premises about \$2500; and for the large ones about \$3000, \$3500.

We felt that was a reachable figure for most of the venues that would want to participate. Really what it came down to is just really understanding how you've got effectively four hours in that \$1500 range to really audit the venue so what do you do in that process? What are the things you do to actually arrive at something sensible, not just wander around and have a bit of a look-see, but how do you get something really concrete? Which is really funny because the government's grant program picked up on the model we put together, because it's all about cost.

Again, if you're going to ask a venue to spend \$5000 on an energy audit and all they do is make coffee in the morning, then they're not going to do it. It just doesn't add up for them. I hope that answers your question. That's what we got out of it as well that how do you actually do them for small business that they can afford.

Mr OLD - Can we table later some of the information you did in those audits is probably what I was thinking about, given your questions to whether there's something we could give them that we've given our board.

Mr SHELDON-COLLINS - We can, but it will have to be under confidentiality because all the venues have a confidentiality agreement because it's providing actual information about their business operations. We have a summary report which doesn't mention them by venue.

CHAIR - The committee understands the importance of keeping confidential matters confidential and the summary report, if that can be made public, we would be happy to also take that as a public document. I will leave that with you to consider and just get your advice on, but we'll write to you about providing those documents. If there is a report that does contain confidential information we're happy to respect that.

Mr SHELDON-COLLINS - The summary report we did which we stripped out the actual names of the venues and any identifiers still covers the same information about what the outcomes were. I think that summary report would actually be quite useful.

CHAIR - I'll leave it with you to determine what's best from your perspective there.

Mr SHELTON - A quick question and apologies for not being here right through your presentation, Steve. I take it they are energy audits and not electricity audits and the percentage of use of gas for instance and in particular when you've got a cafe or a restaurant, how much gas is used in the cooking. We all understand in a bottle shop or a venue, it's got a cool room, it's got fridges and they go 24/7, seven days a week can't get out of that cost, but we are talking energy and therefore a mix. What percentage of restaurants and your members actually use gas in the major cooking and whether that's also an issue for them?

Mr SHELDON-COLLINS - The answer is yes, certainly gas prices are an increase as much as any other energy cost. One thing to answer your question too is part of the audit process we designed was to actually go through their energy bills to really understand the profile of

their energy. We did that for electricity, we also did that for gas. To answer your question, gas is just as an important part of the equation for these venues. The options they've got is to buy new energy efficient hobs, for example, but that's, you know, that's big licks of money to do that.

CHAIR - More capital outlay. Yes.

Mr SHELDON-COLLINS - In terms of hot water services, some still run on gas hot water services. It varies between the businesses, what their mix is, but the energy audits, we've said in our submission, we actually support them, but still want to find a way of overcoming this hurdle that a lot don't own their venue.

Mr SHELTON - From your membership base is as wide as a length of string from a cafe serving a hot cup of coffee to the biggest venues around, so it's hard to talk specifics on one when you're dealing with a wide berth.

Mr OLD - That's why we've been fairly general. We look after sports clubs too and a local netball club's the same if they've got a fridge that's got some cool drinks in it and whatever the reality is they're open two nights a week and maybe on the Saturday, but the fridge has to stay on all week. Their increase might be \$500 a year, but that's \$500 to a local netball side that's trying to get by. You're right and that's why we are being a bit general; they are all different but the one equation - if it goes up 40 per cent for a small restaurant compared to a big accommodation event, 40 per cent increase is still a massive burden on the business. When you add insurance and all those other things we talked about earlier that you might have missed - it's very hard off the back of COVID.

Some of these businesses, restaurants and cafes especially, which are so important to so many communities out there, don't have a high profit margin. Let's just be clear on that. Their profit margin is very small. Off the back of COVID, when you start getting an energy increase of X or an insurance increase of this or TasWater asking for this or someone else asking for this, whatever is partly why you see so many little cafes, let's say in Hobart, closing down all the time. The reality is the margins are very small. It doesn't take a hell of a lot to rock the boat of a small business in hospitality. Unfortunately, that's just the reality of it.

Mr BAYLEY - The pressures are obviously not unique to Tassie and the network charges are kind of nation-wide. You tapped in with Australian Hoteliers Association and colleague associations. Is there a jurisdiction that sort of got their head around this challenge specific to your industry and have got a tariff structure or support structures in place that really accommodate the hospitality sector's needs?

Mr OLD - I'm not 100 per cent aware of a tariff structure. I do know in New South Wales they looked from an energy point of view about a great buying scheme, let's call it, where a big group of hotels and accommodation venues could go into a buying group to do it. As you're probably telling on this, I'm not an expert on the energy bit, but it was a massive buy-in to get a cheaper price. They did it a few years ago and it worked for a little while. I haven't updated myself on how it's gone lately. To be honest we've been a bit focused on Tassie.

CHAIR - They have a more contestable market there too.

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Mr OLD - In a more contestable market and there's a lot more businesses. If you're going to get in that sort of space, you're going to have to buy a or guarantee a fair chunk of energy. We've been concentrating on what we've been trying to control here. We're probably more than happy to look at what other states have done, but to be honest we've been more focused on here. To answer that properly, I don't know that anyone's nailed it, is probably the answer. I know when we talk at accommodation national meetings and hotel national meetings, they all keep talking about energy increases and insurance.

Mr BAYLEY - They've got the same problem.

Mr OLD - Yes.

Mr BAYLEY - Peter, are you aware of any policy structures interstate that kind of work well?

Mr SHELDON-COLLINS - I must have been preparing for the submission. I didn't go through what the tariff structures would look like in other states.

CHAIR - Would you be able to ask the AHA whether they have, because this is a question I had too, is there another jurisdiction that is perhaps a step ahead in this?

Mr BAYLEY - No point reinventing the wheel. Also, I suppose the other issue is, network tariffs aside, we're now getting a bit more competitive tension in the retailer sector here. Is there anything in the retail space that is worth noting for us? I know your submission didn't really go to that, but is there anything that's popped up for you?

Mr SHELDON-COLLINS - We didn't actually, as you should point out, mention that in our submission. I guess to some extent it's just ubiquitous the energy increases, not just across the state, but nationally basically. We haven't actually looked at the energy bills other than in the pilot, where we found that some venues were on different tariffs and they could reduce their costs accordingly. To answer your question, the actual retail energy cost is obviously an issue in itself. We do know business, or some of the retailers here, whose business is based upon getting a large customer base and then basically bulk-buying energy to get a reduced rate for them for their customers. It sort of mirrors what is on the mainland in that regard. There's definitely benefit in that. We know of one particular retailer who has much lower rates for their customers.

CHAIR - So they have stores around a whole range of places, for example? Around a number of locations, is that what you're talking about, like one retailer with a number of venues, like a Coles or a Woolies or somewhere like that.

Mr SHELDON-COLLINS - They just have a collective, whether it's 30 or 50 hospitality businesses -

CHAIR - Right, they're hospitality ones.

Mr SHELDON-COLLINS - Yes, hospitality businesses that sign on. That's a collective buying thing.

Mr OLD - New South Wales do that one. Power purchasing agreement.

CHAIR - They're not owned all by the same people, they're not a various chain of restaurants.

Mr SHELDON-COLLINS - No, this is a retailer, a licensed energy retailer here in Tasmania, that engages for the hospitality industry, and gathers up - I don't know what the numbers are, but a large number of venues. They can then work on their rates by buying in bulk.

Mr BAYLEY - Effectively a buying group kind of thing.

Mr OLD - No one is saying to me at the moment they're getting a lot of relief in the space, if that answers the question. I don't think it's amazingly going great. As you can tell from the start, I'm not an energy expert. The thing I keep getting from my members continually is you hear of investment in the energy market, all those sort of things, but the one thing my members keep saying in the industry in general is that their energy prices aren't going down.

CHAIR - I don't think they are going to either.

Mr OLD - No, and it is very tough. You just add that to the other things, insurance, all those other things, it's just when does that one bit too much, topple that business over and not blame it all on energy. But it is one of these ones that if you keep getting increases like we say of you know, 20 to 50 per cent every year, there becomes a time in sort of enough is enough for a business.

And again, I think this is one space going back to what you said, Chair, earlier, if there was a hospitality tariff package, whatever, that understood hospitality does need to be open 24/7 or on a weekend, whatever, that would be a really good outcome if that could be looked at.

Mr BAYLEY - Would it be just one, do you think, for the hospitality sector or would there be a way of structuring tariffs for the different businesses within the house of hospitality sector, one of the hotels, one for -

Mr OLD - I probably just go off what the Chair said earlier, as a good idea. Whether it is a small cafe one, or whatever, 100 per cent, that could be looked at. The idea of looking at the industry in its own way would be a great start, how that then plays out would be good.

Ms FINLAY - Acknowledging that the most important part of this conversation in exchange today is on price and pressure on the costs of doing business. As a committee we've got a broad ranging scope. Mark asked the question on the mix of electricity versus gas, but I'm also interested in remote venues or members, and say that food truck style delivery, whether there's much diesel in the mix. Are other energy sources in the mix and whether that's significant?

Mr OLD - I'll be frank. I can't answer that, Janie. I'd have to do some research.

Ms FINLAY - Front of mind at the moment, say Corinna, with the fires, whether some of those remote venues and remote locations, whether they might have other challenges with other energy access to energy.

CHAIR - They're off the grid up there, aren't they?

Mr SHELTON - BLP rather than natural gas.

Mr OLD - I'd be assuming they'd face, yes, their own their own unique challenges like a lot of regional venues do. I know it's a general answer, but I'm sure there are unique challenges as they always are for regional venues.

Ms FINLAY - Yes. I just wasn't sure whether that was a material number in terms of your membership on how many were sort of regional or remote that might have energy challenges that would be good for us to know of in addition to pricing challenges.

Mr OLD - Yes, well, we could do more research. And again, when it comes to things like this too, we don't just do it to our members. One of the things we're trying to do is just go to the whole industry and get the feedback because the reality is it doesn't matter if our members are facing it all or non-members to be honest with you, we're trying to get feedback from all venues to provide.

Doesn't matter what the venue is, if the venue's saying this is an issue, then I guess it's if one venues faced it, then another venue will be faced with trying to advocate and get changed.

In all those spaces, we generally go to the whole industry where we can. It will generally be members engaged with you because they're connected to you. But we do try to go out to, to all of them. And I guess if the committee goes, look, we'd love to get some specific feedback on Corina or King Island on whatever, we're more than happy to go to the venues on that island or that area and find out more information. By all means, we're happy to be asked by the committee to do more research in this space.

Mr SHELDON-COLLINS - I can add to that. You raise a point where we know not quite anecdotally, but we have a reasonable understanding of what the impacts are, but we don't have a number crunching position about what those real impacts are. And not just in the city, but looking at the regional areas. One recommendation we made at the end of the statement was we would look to government to actually probably assist the THA in actually getting down to that more detailed understanding of what's actually happening out there because we haven't actually gone out and canvassed the members since this latest rise in transmission. But we know from the few that come back to us, it's actually hitting pretty hard.

From a gas point of view, anecdotal, intuitively, I would say the gas prices on the west coast are going to be more than what we pay here because they're delivered by truck rather than by pipeline. But we don't have that level of knowledge.

If we would make a recommendation to the committee to the government is support the industry or support our industry and finding out a bit more at that level of detail.

Ms FINLAY - Great. Thank you.

Mr EDMUNDS - To get your feedback in terms of evidence gathering, participating in the audit process for those 10 businesses was it pretty clear feedback from them that was a worthwhile thing to do?

Mr SHELDON-COLLINS - Mostly.

Mr EDMUNDS - Or was there feedback it was a waste of time?

Mr SHELDON-COLLINS - I guess one of the failings we had, we actually chose venues that had already done a lot of work.

Mr EDMUNDS - Yes, okay.

Mr SHELDON-COLLINS - But they generally surprised themselves, there were some extra things they didn't really contemplate themselves they could do. We would think the energy audits are of value. They actually do point to venues about things they can do to reduce their demand. With one exception, they all thought this was actually quite worthwhile. One of them just simply said, well, that was fine, but it didn't do anything for me.

But I would like to repeat that the biggest item was the actual disparate contracts they're on as far as their energy bills are concerned. That was one of the easiest low hanging fruit to, say, renegotiate your energy contract from a retail side, not from transmission because you can save a bucket load just from that.

CHAIR - Transmission is over 30 per cent of your bill. That's, again, only a portion of it you're having an impact on. It's still not nothing. You've both got your own residential power bills. It's been suggested by the witnesses these sorts of audits should be made available to residential customers too. Do you have a thought on that?

Mr OLD - Mine would be there would be value in that, I would've thought, for households, things like basic things around fridges, light globes you use, checking out your windows, etcetera, in a basic way. I would have thought for especially low income, it would have been a great thing to do because some of those things in a household are probably things you can actually control better, more so than probably what a business can.

CHAIR - We know there're a lot of people live in public and social housing. Do you think the government has an obligation there to actually order those properties to try and see what can be done for the tenants?

Mr OLD - I'm coming from a low base here, Chair, of knowledge of energy, but think 100 per cent it would be a good idea.

Mr SHELDON-COLLINS - There are opportunities in some regards, because I do know some of the old stock of housing basically have some of those electric heaters which are brick heating type style. They just burn up the electricity. To even just identify something of that level can reduce your electricity bill. Knowing that the retail rates of energy are just going to continue to go up, then it is worthwhile to reduce your demand as much as you can.

Insulation is actually probably one of the easiest and not so expensive things you can do to reduce your energy bills. My house is insulation in the walls, in the roof, everywhere you can find it, and, really, we don't struggle with our energy bill, but we do know of other people who have houses where they've had single pane glass and not double glazing.

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Mr OLD - I guess if the household's say \$50 a month, it's \$50 a month in a low-income earners pocket, which is better. I don't think we could argue that they'd be a good thing.

Mr BAYLEY - Coming back to your members, do you know what percentage some of those that have done audits what reduction has that delivered for them?

Mr SHELDON-COLLINS - I can't say that because they've obviously then going to invest in the things that they need to reduce the cost. What we gave them was a cost benefit analysis as well at the time that says, Okay, if you're in business, some of these things, this is what your payback period would look like. I can say that certainly the payback period would be within three years, some of the things they were contemplating or what was recommended.

Mr BAYLEY - That's pretty good.

Mr SHELDON-COLLINS - I can't give you an actual percentage, unfortunately, because we turned it into a payback period.

Mr BAYLEY - Is there much behavioural change? I'm assuming and I think I'm hearing you say, there's probably limited behavioural change that can deliver benefits.

Mr SHELDON-COLLINS - There are some.

Mr BAYLEY - There are? Like what sort of things?

Mr SHELDON-COLLINS - One of the interesting thing for me was how they stock their fridges. It's not just simply they open the door too often, it's that they'll not have their fridges stocked completely. They might have half of the fridge used up. They're using, effectively, double the amount of energy they really need to. Just to change the way they stock the fridges, it reduces how much they open and close the doors.

CHAIR - Get a smaller fridge.

Mr SHELDON-COLLINS - Smaller fridges as well. Energy efficient fridges. I know in my previous life I actually designed the ugly yellow label that you can see -

CHAIR - Yes, it is ugly.

Mr SHELDON-COLLINS - Hopefully, it peels off better these days. Buying appliances that effectively have a higher energy rating, there are some of these things they can do, and sometimes they don't. Sometimes they'll buy the cheap as chips thing they can get off the Harvey Norman floor, which is not good for them in the long term. When it comes to households, they're the sort of valuable things where it cost you more, but it saves you more in the long run so maybe there's an education piece that goes with that.

Ms FINLAY - Whenever I talk about small business and this is true for hospitality, that question on the value of audits for households, that hospitality businesses, small businesses always get that double whammy with energy increases because you got it at work and at home. The value of having those audits at home as well, particularly for small business operators, is that any money saved anywhere in the system helps the business stay viable.

Mr SHELDON-COLLINS - I would agree and the real trick then is to make those audits affordable. That's what we found just with the venues was anything over \$1500 they weren't going to come at it if they were a small business. I would think from a household point of view, if you had to spend perhaps I'm guessing - but more than \$1000 on doing an audit you're going to question about whether that's of value to do. You need to design the audit process as well so they can actually get something quite concrete out of it for what is not a lot of money at the end of the day.

CHAIR - A question from Luke then we will wrap up.

Mr EDMUNDS - Yes. At the other end of this sort of conversation we're having is about some of the major projects potentially coming online in Tasmania with the investment in transmission and wind farms and things like that. From almost the very start of the conversations when a customer walks in the door and makes a booking, does the THA or your representatives have feedback in term of the opportunities that come with those big projects?

Mr OLD - Some would have views. Do you mean will the big projects that are slated on the table bring benefit? Do they believe it will bring benefit?

Mr EDMUNDS - Yes, in terms of customers and bookings?

Mr OLD - I think they hope they will, that's a generalisation, but I definitely think they hope they will. I think going back to what someone just said the minute, one of the other key components in all this is probably the education pieces.

Probably like me a lot of people are not experts in energy, so they get their bill. They probably don't understand some of the basic things they could look at, whether it is just the seals on the fridge or whatever and maybe that education piece is an important one, especially for households.

Again, I think even the audits that we did with the 10 businesses we deal with, we'd gone to them because they had an interest in the area and done it, but even talking to them individually, they all got something out of it of things they had looked at previously. That just shows you even if you are a bit more of an expert or something, there's always something you can learn about where you can make changes and, and hopefully, savings. Again, it just comes back to the cost benefit of what you're going to spend. Does it actually give you real value back?

CHAIR - Thanks for your time today and submission and we did take it to places that weren't perhaps entirely within your remit, but it is helpful to hear when somebody someone who's actually been involved in audits to hear your thoughts on that too. Thank you.

Mr OLD - We will supply anything we can.

CHAIR - Yes, we'll write to you. Thanks.

THE WITNESSES WITHDREW.

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CHAIR - Welcome Jack, to the public hearing for the Energy Matters Committee. We know you've attended some committees part of this process before. I appreciate your further submission and the information you provided previously as well to this particular inquiry. As you know, everything you say is covered by parliamentary privilege that does not apply necessarily when you leave the hearing, so be aware of that.

If anything is of a confidential nature you wish to share with the committee, you could make that request, otherwise all is in public. We are being streamed and obviously transcribed and information will inform the committee's processes and reporting.

Mr GILDING - It's all public.

CHAIR - Do you have any questions before we start?

Mr GILDING - No. Do you want me to make some introductory comments?

CHAIR - Yes. I'll just ask you to do the statutory declaration and then perhaps introduce yourself and speak further to your submissions and then we'll have some questions for you.

Mr GILDING - Okay, and how long do you do you want me to -

CHAIR - We started a little bit late, so we have till about 11.30 a.m. to 11.45 a.m., probably. That's a good time.

Mr GILDING - How much of that you want to-and-fro versus intro?

CHAIR - Well, you tell us what you think you should add, and do allow time for questions. That would be great.

Mr JACK ERWIN GILDING WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

Mr GILDING - Thanks everyone, and thanks for the opportunity to present. These are very complex matters. I was very pleased to hear the previous people talking about energy efficiency. I have focused a lot of my attention on the Marinus project because that is a big investment for Tasmania and there are a lot of complexities to it.

Firstly, I guess the role of the committee - and these are rapidly changing matters. As of yesterday there's more information from the Australian Energy Regulator (AER) on the Basslink determination, which was -

CHAIR - What did they come out with there?

Mr GILDING - In December, they published a draft decision not to make Basslink a regulated asset. Yesterday they published all the submissions that people put in in response to that draft submission. That was a very interesting reading, because Lily D'Ambrosio and Nick Duigan and Hydro Tasmania all submitted various perspectives on it.

CHAIR - Not all in agreeance.

Mr GILDING - No, and I'll come back to that. These are complex matters and they change rapidly. Fortunately, in some ways, neither myself and probably none of you actually get to decide whether big projects go ahead or not.

What is the role of the committee? I think it's really important to identify the uncertainties. A lot of people proposing projects like to pretend that it's all rigorous and scientific and a proven benefit, so the role of the committee can certainly be to identify the uncertainties and to put the facts in the public domain, and also to point out issues that aren't being addressed, and I'll come to that later.

I have focused mainly on Marinus because it's a \$4 billion plus investment and the question of who pays for it is quite controversial, and the benefit of it is quite controversial, and the recent decision by the AER last December. Then the responses that came out yesterday are specifically about Basslink, but they go to the issue of a regulated interconnector. An interconnector can either be a market network service provider - in other words, you invest the money and you take the risk on whether you make money out of it - or it can be a regulated interconnector, in which case the AER has to decide that it's got overall benefit to all of the electricity system, the consumers and the generators. If there is overall benefit, then they decide that the users will pay for it at a set rate and irrespective of the profit or loss made on it.

There are two important things that came out of that Basslink determination. The first was that the AER decided, which was quite a surprise to me, that they didn't have the power to say how you would allocate the cost. An interconnector between New South Wales and Victoria is fairly straightforward, they're both two big markets. An interconnector between Tasmania and Victoria is a very different proposition. The question of who pays and how the cost is allocated between the two parties is very significant.

What the AER decided - firstly, Marinus Link had decided or had proposed a process where that decision - how much the Victorians pay and how much the Tasmanians pay - would be put off until after the link was built. They're saying: 'Yes, it's of overall benefit, we'll go ahead and build it, but we'll decide later who pays for it,' which seemed to me to be not a good proposition. As of December, the AER has decided it can't make that decision - how the cost is allocated - and therefore it's up to the proponent to decide. What that means is that now Marinus Link really has to put its cards on the table and say, 'What would you decide? How would you apportion the cost between Tasmania and Victoria?'

CHAIR - Sorry to interrupt your flow a bit. We heard from a previous witness earlier in the day that the AMEC has put in the new rule that two or more ministers - which I assume is the current owners of the company Marinus Link Proprietary Limited - can make the determination, if they agree.

Mr GILDING - Which ministers? Victorian and Tasmanian?

CHAIR - Two or three ministers. I haven't had a chance to look at the actual rule, but that's what the suggestion was. One would assume maybe it's a minister in Tasmania, and a minister in Victoria. I don't know whether it's the federal minister, whether they've got a bit of a divvy in because they own more of it than anybody - the company, that is.

Mr GILDING - This is the ministers of Marinus Link Proprietary Limited?

CHAIR - One would assume so. Anyway, that was put out late last year.

Mr GILDING - Right, okay. Is it up to Marinus Link to make that decision now? The AER said it's not their decision, it's the proponents' decision and, therefore, I think that should be on the table before the final investment decision is made. There is no excuse to put it off any longer. The other really interesting outcome -

Mr BAYLEY - Just to clarify, Jack, that's the ongoing costs of running it, as opposed to construction costs?

CHAIR - Networking charges.

Mr GILDING - Yes. Well, it's paying off the capital. Marinus Link, about 20 per cent of the capital comes from the governments, but 80 per cent is borrowed and it's who pays the repayment and the interest on that borrowed money. If it's a regulated asset, that's added to what's called a regulated asset base and there's a standard return formula.

There are two issues. One is, is it worth doing? And secondly, who's actually going to pay for it? In relation to 'Is it worth doing?' the other fascinating thing that came out of the AER determination on Basslink was that APA had said, 'We want it to be a regulated asset. We think it's worth \$831 million, and we want a regulated asset.' The AER commissioned modelling and said, 'We don't know. We can't prove that there's a benefit. There might be a benefit, there might not. It all depends on your assumptions.' Therefore they said that their draft decision, which is not finalised, was that it shouldn't be - they would not make a decision to make it a regulated asset.

If a \$831 million investment in an existing link that you already know is built and you know what it can do, and you can't prove that paying \$831 million, or assuming \$831 million for a 500 megawatt link is definitely in the consumers' interest - where does that leave Marinus, at \$38 billion for a link that's only 50 per cent bigger?

There are two very important implications of that Basslink determination. These are very complex issues and I don't understand all of the details of how an interconnector gets paid for. There are some fascinating insights into that in the submissions that came out yesterday.

Stepping back, I think it is important to look at the overall political interests of the different parties. Obviously, there is a conflict between the Victorian government and the Tasmanian government - not a conflict, but there are different interests. In particular, it comes to who pays for it. What's the cost allocation, and also where is the investment made? Is Victoria in favour of jobs and growth, to use the phrase, in Tasmania, to supply electricity to Victoria on the basis that it's cheaper, or is it better to have that investment in Victoria? What's less obvious, I guess, is the divergent interests of the different parties in Tasmania. Previous witnesses were talking about the small businesses. The small businesses and households, I think, are one constituency, and I think they're very well-served at the moment.

It's also important to understand the different interests of generators. If Marinus Link is built, the generators then have access to the Victorian market at the cost borne by the electricity consumers, not by themselves. If somebody builds something in Tasmania that uses a lot of electricity, they will pay transmission charges, so they will pay some of the cost of the new

infrastructure. A generator has a different vested interest than a potential new load in Tasmania. That's Marinus. I'm happy to go into any of that in more detail.

The second major point is about the assumptions. We keep getting told that Marinus is a good investment, that it brings benefits to consumers. They keep saying that, even though the price is doubled and even though there are different assumptions in the different modelling. One of the interesting things they say is that when the price went up, when the price doubled, they didn't say the price doubled. They said, 'We'll do one link for about the same price, and we'll get two thirds of the benefit'. If you get two thirds of the benefit from the first half of the investment, what does that mean for the value of the second investment of the same amount of money or a roughly equivalent amount of money, to double the capacity?

The other important thing about assumptions is understanding the role of the Tasmanian renewable energy target that was legislated four and a half years ago. Nothing new has been built to meet that 200 per cent target. Nothing in the legislation says how that increased generation will be met. All the legislation does is say, 'People can talk to each other without that being anti-competitive behaviour, and we will report on progress'. If you look at the very brief report from the energy - sorry, I've forgotten Sean Terry's exact title, but the reports in the Department of State Growth -

CHAIR - From ReCFIT, you mean those reports?

Mr GILDING - Yes. The Department of State Growth's annual report has one page which is the formal report of the, whatever he's called, the regulator, who's supposed to report on progress towards the renewable energy target. They keep saying we're on target because we've got lots of expressions of interest. But actually in four and a half years nothing new has been built.

The beauty of passing that legislation was that AEMO makes the assumption that if something's legislated, it will happen and you don't need to worry about the cost, because it's already going to happen. AEMO's Integrated System Plan assumes that Tasmania will have all this extra generation because the legislation has been passed, irrespective of whether it's actually built and how it will be paid for.

Then there are a bunch of assumptions in the modelling by FTI, which is in the most recent Marinus claims about the benefit. Firstly, they assume new generation will occur without additional cost to the consumers. They assume there will be additional generation and the investors will invest in that because they'll get their returns on the wholesale market, and therefore there doesn't need to be any subsidy. That contrasts a fair bit with what has happened in all of the projects that have gone ahead in the past, where government business enterprises have made various agreements with proponents in order for the project to go ahead. That's the case with the Cattle Hill Wind Farm, with the Granville Harbour Wind Farm, and now with the Midlands Solar Farm.

CHAIR - On that, Jack, isn't it a fact that particularly when some of the old coal-fired power stations are retired, as you put more variable energy - wind, solar - into the system, price volatility increases?

Mr GILDING - It does, yes.

CHAIR - How does that make sense, what you just said? You were saying other people were saying - that's not your words, but if it increases price volatility -

Mr GILDING - Increasing price volatility doesn't encourage projects to get built, it scares off developers.

CHAIR - That's right, that's what I mean. This assumption that all these new shiny things will be built is not supported by the fact they will increase price volatility, is it?

Mr GILDING - No. Price volatility is another reason why proponents of projects will be reluctant to go ahead, unless they get guaranteed - unless somebody else is paying. In the case of Marinus, if the consumers are paying, but the generators can feed into Victoria, and not - I mean, they have to pay some connection costs, but they don't have to pay for the link.

CHAIR - Do you think the new generator should pay for the additional transmission lines that are required to connect their project to wherever?

Mr GILDING - They have to pay for the first bit already, yes. For example, Robbins Island has to build a transmission line down to Sheffield at their own expense.

CHAIR - Only to Hampshire now.

Mr GILDING - Hampshire, is it, sorry? Yes.

CHAIR - It was further, but yes. As I understand it.

Mr GILDING - Once it's there, it's part of the shared network, and the consumers pay for the shared network.

CHAIR - Part of the argument for Marinus Link is that it will unlock all this new renewable energy in Tasmania, Part of that requires the significant upgrade to north-west transmission, that development that's occurring. Who should fund that, then? Should the developers be chipping in for that, to the generator?

Mr GILDING - The question is should it go ahead and who would pay for it? The FTL, in their assumption that Marinus Link would be good for consumers in both Victoria and Tasmania, assumes that all of the North West Transmission Developments will happen anyway, and therefore we don't have to worry about the cost.

CHAIR - That's not a fact though.

Mr GILDING - No.

CHAIR - The northern corridor will happen anyway, because it needs to be upgraded, as I understand it. But not the southern link.

Mr GILDING - No. The triggers in the TasNetworks planning report vary for each different project. As a generalisation, to say all of that will happen anyway and therefore we don't need to account for it when we work out the benefit of Marinus Link is disingenious.

CHAIR - Disingenuous.

Mr GILDING - Disingenuous, sorry. I guess a couple of final points about the assumptions under which they say that Marinus Link is good. Firstly, they say it's cheaper than not building Marinus. They don't say prices in Tasmania will come down, they say it will save you money. What they're comparing it with is - and it's not made very clear - but what they're comparing it with is prices going up in Tasmania. They're saying prices will go up more if we don't build Marinus Link and therefore building Marinus Link is good. The assumptions behind the fact that prices will go up in Tasmania - if we don't build Marinus Link, we won't build anything to meet increased demand in Tasmania and therefore we will burn more gas and we will import more on Basslink.

Mr BAYLEY - Do you think that assumption is wrong?

Mr GILDING - Yes, yes.

Mr BAYLEY - Why's that?

Mr GILDING - Because if there is a shortfall of energy, if Marinus doesn't go ahead and there is a shortfall of energy in Tasmania, everybody is motivated to encourage some generation. I'll come to whether that generation is distributed or centralised as the final point. That leads on nicely to that point that governments and proponents of big projects are used to doing things their way. I quote in my submission the quote from the chair of Marinus Link, provided him saying, 'It's not our job to look at whether the money could be better spent.' It seems to me it's nobody's job to look at whether the money can be better spent, or what the alternative is.

CHAIR - The committee's trying to work that out, but I'm not sure we're going to have any success in that.

Mr GILDING - It's tricky, because my answer to that is, firstly, I've set out in my one of my submissions how difficult it is to estimate how much future demand for electricity there will be. That's because half the generation goes to three or four customers. A couple of those have changed hands recently and the new owners are talking a good talk about renewables, so hopefully that will happen. You have uncertainty about the demand. There will certainly be increased general demand from businesses, small businesses. Even if we don't have massive hydrogen projects, for example, there will be an increased demand. The question then is where does that generation come from? It will either come from new wind farms in Tasmania, or it'll come from distributed generation.

My fear, and why I'm not - I don't think the economics of Marinus stack up. My fear is if that doesn't go ahead and you don't actively pursue the alternative, which is a more decentralised system - you end up with the worst of both worlds. You could end up - I don't think it will happen, I think the moderate increased demand over time from electrification, from electric vehicles, from population growth, I think all of that will be met by new renewables.

CHAIR - What about decarbonisation of the major industries?

Mr GILDING - That certainly could - and you don't know which way that's going to go.

CHAIR - They've all got plans to do so over varying periods of time.

Mr GILDING - Yes. The manganese smelter, and what was the one that just changed hands?

A member - Norske.

Mr GILDING - Norske Skog, yes. The new owners in both of those have said they're going to do stuff. I don't know what Cement Australia's policy is.

CHAIR - They've got a plan, but it's not due until 2050 to be completed.

Mr GILDING - Yes, right. I think that the economics of distributed generation - and there's good information on that in the Climate Tasmania submission. There's good information on it in Bruce Mountain's submission. I've argued some of it previously, but it requires a different mindset. It requires active support. Some of that will happen anyway, people will invest in solar panels and electric vehicles to a certain extent, but whether you get the maximum benefit from that depends very much on initiatives from state government and Aurora and TasNetworks.

That's the end of my overview, but there's a lot of meat in any of those issues that the committee wants to take up.

CHAIR - I might lead off, then, Jack. No one else is jumping out of their chair. Just sticking with Marinus Link for a minute, it's claimed that state governments rather than market forces are driving the major energy infrastructure decisions, which is a bit what you were saying about whose decision is it. In your opinion, what's the main reason why Marinus Link is being built?

Mr GILDING - The Tasmanian government believes that it will kickstart Hydro industrialization mark two, that it will lead to both new generation and new loads, and that that's good for Tasmania.

CHAIR - Do you believe that to be the case from what you know about the industry?

Mr GILDING - No, I think it's a bit lopsided. I think the generators who would get access to the Victorian market but don't pay as much towards the cost of it would benefit most. I think the new loads, whether that's hydrogen projects or electrification of major industrials, I think they're all trickier and longer term. Building a wind farm, it's complicated. Putting up a solar farm is relatively straightforward. Building a wind farm has more lead time, but they are well-proven technologies and I think that will happen rapidly if Marinus Link was built. The question is who's paying and who's benefiting?

CHAIR - Just on that then, what do you think is a fair allocation of the cost of Marinus Link between Tasmania and Victoria? Is it necessary to implement safeguards to prevent undue financial burden on Tasmanian consumers? This is one of the big things that people worry about.

Mr GILDING - Absolutely. The Basslink reference group looked at various different models. APA Group proposed 90 per cent to Victoria and 10 per cent to Tasmania. That,

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I presume, is roughly population. In answer to your question, I think it should be based on either population or amount of residential or small business energy, not on the other alternatives, which is 50/50, which would be very onerous for the population of Tasmania, which is very much smaller. The other alternative is on flows, so if the electricity goes north then the people in the north pay for it, if the electricity comes south. The problem with that allocation is, A, it's uncertain, and B, it depends - Hydro want to trade, they want to arbitrage, they want the electricity going backwards and forwards a lot. If you did it on that basis, that would end up being close to the 50/50 again, which I think would be unfair. A split based on population would be the most equitable.

CHAIR - Should it be the population of Tasmania versus Victoria or Tasmania versus the rest of the NEM (National Electricity Market)?

Mr GILDING - I'd settle for Victoria.

CHAIR - Well, they all benefit up the other way, if we're the battery of the nation - except for Western Australia, which, you know, it's always a bit different, separate, and Northern Territory.

Mr GILDING - But 90/10 would be about as good as you could hope for, I would think.

CHAIR - The AER (Australian Energy Regulator) didn't see favour of that request from APA?

Mr GILDING - They said they didn't have the power to make the decision, which is curious.

CHAIR - Which begs the question why it went there in the first place.

Mr GILDING - They were deciding two things. Is it a regulated asset, and what's the cost allocation?

CHAIR - They can make the first decision, but not the second.

Mr GILDING - Yeah.

Mr BAYLEY - They leave the second decision up to the asset, the owner.

CHAIR - The owner of the asset, yes.

Mr GILDING - Yes. Which brings me back to the point that the Marinus Link really has no excuse now to -

CHAIR - Not to tell us what they're planning before they build it.

Mr GILDING - Yes, absolutely. If it's 90/10, does Lily D'Ambrosio agree for the Victorians to pay 90 per cent of it?

CHAIR - We'll have to ask the Victorians that.

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Mr SHELTON - Just to clarify that - you're not against Marinus Link if there was something like those figures come out?

Mr GILDING - I don't think Marinus Link stacks up for the reasons that people are proposing it. They say it will reduce costs. I don't think that's proven. I'm not 100 per cent against it because plausibly, it is part of decarbonisation. If that's the case for it, then say so. Say, 'Everybody needs to pay a bit more because we're moving to a more sustainable low-carbon economy.' Not, 'This is going to save you money', because it's not going to save you money.

CHAIR - It's not a very politically favourable comment to make, though, to the people of Australia.

Mr GILDING - No. But it's the honest - there might be an honest case for Marinus. It's not an economic case. It's a decarbonisation and we've left it too late to do anything more economically sensible, we need to decarbonise very quickly, and we can build this quickly, relatively quickly. Also, the alternative, which I think is more viable, that is the decentralised governments aren't used to supporting it. It would take a lot of effort to move to a much more sustainable decentralised energy system.

CHAIR - We might be able to build Marinus relatively quickly. If we don't build additional renewable energy relatively quickly also, then we're going to run into the wall of those coal-fired power stations dying - reaching the end of their life before we've done that. There's a real risk there, isn't there? Even if we build it, there's still a real risk.

Mr GILDING - Sorry, a risk for Tasmania?

CHAIR - Not enough energy in the system.

Mr GILDING - There's a risk for Tasmania of not enough energy in the system if you don't build Marinus and you don't have additional generation, whether that's centralised or decentralised.

CHAIR - Yes. Do you think there needs to be greater focus from governments in getting renewable projects up and away because we haven't had any new ones built recently?

Mr GILDING - Yes, they put all their eggs in the Marinus basket.

CHAIR - That's not a generator though. I'm talking about new generation.

Mr GILDING - They're saying that if we build Marinus, the new generation will happen. They're not doing anything - well, that's not quite true, they've signed an agreement with the Midlands Solar Farm. They're not doing very much.

CHAIR - 'They' being?

Mr GILDING - The state government.

CHAIR - The state government aren't buying the power?

Mr GILDING - Hydro has. You know who owns Hydro Tasmania?

CHAIR - Oh, well, yes.

Ms FINLAY - Thanks for your submission and for that summary. I'm interested, while I've been here I just had a quick look at the submissions to the draft decision with APA. I was interested to go and do that because you mentioned how there were differing positions. I can see - I was thinking that you indicated that the minister, and Hydro had competing positions, but Victoria versus Tasmania. Do you have any comments on your quick review of the minister and Hydro's position on that draft decision?

Mr GILDING - No. Only that it highlights that these are political decisions. Hydro Tasmania and the Tasmanian minister are in favour of it being a regulated asset, i.e. the consumers pay, whereas the Victorian minister is against it being a regulated asset. There are two questions there. One is that decision for Basslink, and the other is the implications of that for Marinus. It basically highlights that you have different political interests.

Ms FINLAY - Okay, thank you. I was just wondering if there's anything deeper than that, that you're implying, but I appreciate that. Thank you.

Mr GILDING - Lily D'Ambrosio's two submissions - the submission and the previous appendix, her previous submission on the consultation paper - do have some interesting insights into the challenges of what happens with Basslink if it's not a regulated asset. Hydro Tasmania and the Victorian government have different views on what will happen if Basslink is not a regulated asset. Those implications do flow through to whether Marinus is a good idea or not.

CHAIR - Are you alright, Janie?

Ms FINLAY - Yes, thank you.

CHAIR - There are some comments that had been made to the committee, but also you'll hear this around the community at times, that we should just disconnect from the NEM altogether, which means Basslink is cut or disconnected, shall we say. Do you think Tasmania should remain in the NEM or are there benefits from exiting the NEM? If that was even a consideration.

Mr GILDING - You need to define what you mean by exiting the NEM.

CHAIR - Disconnecting from Basslink and not building Marinus.

Mr GILDING - Disconnecting from Basslink? Right.

CHAIR - Yeah, well that's what it would be, wouldn't it?

Mr GILDING - You could not be in the NEM, but you could still have Basslink, in which case Basslink is just like another generator. We can buy electricity in Tasmania and sell it in Victoria into the National Electricity Market, but Tasmania is not part of that National Electricity Market. The problem with that is that you would have to replicate all of those supervisory structures. The AER does - the amount of effort that TasNetworks puts into complying with AER regulations, and Aurora puts into complying with regulations, you would

have to reproduce all that, particularly in Tasmania where it's not a terribly competitive market. If you exited the NEM, with or without keeping Basslink operating, then you -

CHAIR - You'd have to set up your whole regulatory framework.

Mr GILDING - Yes, and that would be very expensive. I'm not in favour of that. I think it's - the Basslink cable is there. APA may or may not make money out of it. If they can't make money out of it, they'll sell it at a loss and somebody else will make money out of it. It's not really plausible that it would not be used at all.

Mr BAYLEY - What about in terms of its finite lifespan and what to do then, if we didn't do an alternative? Where does that leave us?

Mr GILDING - If Basslink hadn't been built, we would've put more effort into generation and storage in Tasmania. I think that probably would be a better solution.

Mr BAYLEY - That's what I was going to go to next, if I may, Chair. In terms of a distributed network and solar, obviously, as a massive component of that, can you talk us through the incentives and what would it take to get a comprehensive decentralised network up and running in Tasmania?

Mr GILDING - That is the challenge. What TasNetworks needs to do is to be more accommodating of connections, particularly being proactive about encouraging what's called vehicle to grid. Once people start buying electric - you need to encourage, make it easier for people to buy electric vehicles. There are a number of ways of doing that. Some of them are not terribly cost-effective and it will probably happen anyway.

The consumer needs to get a message that it's worth that big battery that you've got sitting in your garage being available to the network. They're not going to do that unless TasNetworks makes it possible and retailers, Aurora or somebody else, or a virtual power plant operator, makes it economically viable, solves the problem for them. You don't want to get up in the middle of the night and charge your battery at 4 a.m. because that's the cheapest. You want all that automated. You want somebody else managing that.

Mr BAYLEY - Is that all - do you mean, in terms of them making it easier, is it through smart meters and the technology or is it sort of policy and tariff changes around feed-ins and how that's regulated and calculated? What is it that they would need to do to make it easy?

Mr GILDING - You would need to encourage people to get into that market, so TasNetworks would have to make it possible. It will allow people to export power from electric vehicles and from household batteries. You would need to train the people to install it, so probably the installation capacity. You don't want another fly-in fly-out kind of big solar farms. We already have a problem in Tasmania with fly-by-night fly-in solar installers. There's a lot of training that's necessary. But a lot of it is about the policy, the government talking it up, saying this is the direction we're heading in. We want to encourage this decentralised generation and the use of batteries in households and electric vehicles as part of our increased generation capacity.

It's a different mindset. It's not saying we'll solve all our problems with big billion-dollar investments. We'll solve our problems by decentralised, by encouraging people to invest in their own homes and businesses, but giving them the incentives to do it.

Mr BAYLEY - And the benefits of that at the individual level? Putting aside the sort of statewide and these big massive investment decisions that are required, presumably that comes with benefits for the investor?

Mr GILDING - Yes. The beauty of these decentralised models is that the people buy the electric vehicles anyway or that they install the solar because it has benefit to them. You've got to balance those benefits, you've got to get the benefits for the grid. Just people using less electricity is a benefit to the grid in one sense, that we don't need to build new wind farms or new transmission because it all happens at the local level. But there are a lot more benefits to be if it's a two-way flow. If you're encouraging people, giving them incentives to provide those services to the grid.

Mr BAYLEY - To confirm your view, we heard it from a previous witness, but the solar resource in Tasmania is sufficient to justify that level of investment?

Mr GILDING - Absolutely, yes. Bruce Mountain has figures on that. Basically, Tasmania is a bit more variable. You get more in summer and less in winter than you would in Victoria. The amount of solar, all of this took off in Germany where there's far less solar than there is in Tasmania. There is a difference. It's not quite as economic, not quite as favourable in Tasmania as it is in Victoria, but it's still very favourable.

It's a matter of getting those benefits and sharing them, encouraging the householders and the small and medium-sized businesses to invest in that technology. I think actually the medium-sized business in some ways is the market to go for. The household stuff is happening, but there are additional problems with particularly split incentives, particularly where you know you're renting a factory and the factory owner is different from the people operating the factory, so who pays for the solar and who gets the benefit and who owns it. All those kinds of things are harder at the business level. On the other hand, you've got huge amounts of roof space that's underutilised.

Mr BAYLEY - You said before that TasNetworks would have to help make this possible. Do you feel as if they're not engaged in this or they're all eggs the Maribus basket and therefore let's not bother with this? What are the blockages at the TasNetworks psychological and business level?

Mr GILDING - I think it's mainly at the psychological level of: 'This is the way we're used to doing stuff. We supply the electricity. You use it.' So getting their head around a different model where the network is the facilitator of the exchange is different.

TasNetworks actually did have a future distribution network strategy and it was quite good, but it never saw the light of day. That kind of reflects the fact of where the focus is. A lot of work was put into looking at what the distribution network could do at the local level and as I say -

Mr BAYLEY - It was never published?

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Mr GILDING - Never published.

CHAIR - Do you know why that was?

Mr GILDING - No. It was written. It was developed.

CHAIR - How do you know it was written and developed?

Mr GILDING - Because I spoke to the guy who wrote it and he gave me a draft. He no longer works for TasNetworks.

CHAIR - I'm just wondering whether there might have been a government policy change.

Mr BAYLEY - What was that exactly?

Mr GILDING - I think it's called the 'Future Distribution Network Strategy'.

CHAIR - How long ago was that?

Mr GILDING - About two or three years.

CHAIR - Oh, only fairly recently then.

Mr GILDING - Yes.

Mr BAYLEY - Thanks, Jack.

Mr GILDING - There were a lot of staff changes in that. They did have the Future Networks team and a lot of those people left, went to other places.

CHAIR - They did have a fairly large clean-out of staff recently to curb costs.

Mr GILDING - I think disproportionately that fell on the people doing the alternative stuff.

CHAIR - That sort of work.

That was after the AER said, 'No, you can't charge that much.'

Mr SHELTON - Chair, I asked this question earlier today. Decarbonising our transport industry is a great aspiration and so forth, but it comes with other costs, therefore, as we know our road network is basically paid for through the fuel tax that's paid now. So we decarbonise, we don't use diesel - the road users, therefore, don't contribute to that. If we decarbonise, go electric, how do we fund our roads in the future?

Mr GILDING - I don't know what the revenue split is. It's certainly not hypothecated. It's certainly not: this is what we collect in fuel tax, we'll spend it on roads, but I don't know what the relative size of those things is. It's a real issue. People and businesses pay GST on their electricity, so it's not as if it's free.

Mr SHELTON - No. I came out of local government originally and of course a significant amount of local government road funding comes from the federal government through the road tax and, of course, the feds also supply 80 per cent of most national highways - an 80/20 split.

There's a real issue in decarbonising when it comes around to the road. I am interested in your view on that.

Mr GILDING - You certainly have to solve that problem in the longer term but bear in mind that Tasmania spends a billion dollars a year on liquid fuel. If that was replaced with Tasmanian-generated electricity, that's an extra billion dollars in the Tasmanian economy.

There is an issue of roads. I came here on an electric bicycle. I'm not a huge fan of just converting all the petrol cars to electric cars. I think there are other solutions, but you do need to solve that problem and you also need to look at the benefits, both in terms of the money that doesn't leave Tasmania and Australia to buy imported fuel and the health benefits.

But you're right, roads have to be paid for.

CHAIR - You talked about the projected use of gas in the expectation we'll move away from gas. There are a lot of consumers, residential consumers as well as business consumers, who use gas. What strategies do you think Tasmania should adopt to ensure an affordable and sustainable transitional way from natural gas?

Mr GILDING - It depends on the consumers. For the residences and a lot of businesses, electrification is the answer.

CHAIR - It can be quite costly if you're going to have to replace all your appliances and your heating and all that.

Mr GILDING - Yes.

CHAIR - What should we do to support that?

Mr GILDING - Loan schemes, like there already are, are quite a good way of doing that, but you also get innovative financial models where, for example, I don't recommend this particularly, but there are people who will install solar panels on your roof for free and take the savings, so there are innovative financial models for doing the electrification, and you do have to deal with the death spiral issue.

Already Tasmania doesn't use a lot of gas and certainly compared with Victoria, therefore, it's expensive. The more people make decisions to use less of it, the more that becomes an issue.

CHAIR - The more expensive it gets.

Mr GILDING - Yes.

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You probably need to look at the individual large consumers and say for this particular application is the solution biogas or hydrogen or is it some form of fancy electrification that's more sophisticated than just a heat pump?

CHAIR - The big customers are probably a different kettle of fish than dealing with, the low-income earner, who's got gas appliances and maybe gas heating. For them to go out, even with a loan, like a loan program, to borrow the money, even a no-interest loan to go and borrow the money, to buy new heating right through the house, new cooktop, new oven, new whatever - that's a pretty massive expense. How do you think we should support those people? As it goes higher and higher, it's going to be harder for them to pay their bill, for a start. At some point they're going to have to, need to, change over. How do we support that?

Mr GILDING - By saying that's what's going to happen. By saying this is the long-term plan. Certainly, if your appliance dies, if your heating or your stove dies, you should really be replacing it with an electric alternative.

CHAIR - Do you think there should be some sort of support from government to do this? There are a lot policy decisions being made here around investment in renewables for all the reasons we understand. Some people live where they live because they can't afford to live anywhere else. You can tell them, suck it up, you've got to change. This is the world we're in now. But do you think there is a role to play here at all for governments in supporting some of those customers?

Mr GILDING - Yes, but the government first has to admit that's what's happening.

CHAIR - Right.

Mr GILDING - They used to be gung-ho about gas. The latest Tasmanian government's gas strategy is much more balanced, but it still says we can't afford to go completely off gas. The solution is biogas or hydrogen. They don't cost that. The first thing is to say this was a dead end, because we probably should never have done it in the first place. In any case, with decarbonisation, we need to do it. There isn't a long-term role for natural gas in Tasmania. Then those decisions, the sort of assistance that you're talking about, then becomes possible, because you know that that's the strategy. The government's not going to invest in that while they pretend that there'll always be a market for gas.

CHAIR - We're nearly out of time, Jack. Is there anything you wanted to raise that perhaps has come to you during the hearing, to give you the opportunity to say those things you perhaps wish you had have said and haven't, or there is that you want to cover?

Mr GILDING - No. I think it's pretty well covered. There's a lot of detail there. It does keep changing. I think that it would be really valuable for the committee to focus in on the process about the Marinus decision, both that cost allocation and the assumptions that it's a good thing, and that there is an alternative. But that alternative requires work, requires a policy decision – “that's the way we're headed.” It's a very different proposition. On the one hand, you're borrowing a couple million dollars and working out who pays for it, and signing one big contract.

The other alternative - which I think is actually better for people for a whole bunch of reasons, economically and environmentally and socially - requires a very different mindset and

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it requires doing a lot of different things, which are training the people to install it, getting the message out to people, saying this is where we're headed, giving people financial incentives to do what they need to do. Some people invest in solar because it's a nice thing to do, but most people invest in an electric vehicle or solar panels because there's an economic benefit. You need to make sure that economic benefit doesn't just go to the customer, it goes to the network as well. Big challenges either way.

CHAIR - Thanks for your time today, Jack, and for the information you provided, the focus you have on this, because it's not an easy topic. Thank you very much for that; we appreciate your time.

Mr GILDING - The complexity is mind-boggling. Thanks.

THE WITNESS WITHDREW.

The committee suspended from 11.39 a.m. to 1.30 p.m.

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CHAIR - Welcome, Rochelle, to the public hearing for the Energy Matters Committee. We appreciate the submission that you put in on behalf of CHAC and appearing before the committee today. This is a public hearing. Everything you say is covered by parliamentary privilege while you're before the committee, but that may not extend beyond the hearing, so just keep that in mind. If there was anything of a confidential nature you wish to share with the committee, you could make that request and the committee would consider it. Otherwise it's all public information and it's being broadcast at the moment and will be transcribed and form part of our records and our reporting at a later time. Do you have any questions before we start?

Ms GODWIN - No, I don't think so.

CHAIR - Okay. I need to read to you the statutory declaration, if you wouldn't mind responding.

Ms ROCHELLE GODWIN, COMMUNICATIONS AND ENGAGEMENT MANAGER, CIRCULAR HEAD ABORIGINAL CORPORATION, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED VIA WEBEX.

CHAIR - Thank you, and thank you for your appearance.

I invite you to introduce yourself and if you want to tell us a bit about CHAC and speak further to the submission. The committee will have questions for you after that.

Ms GODWIN - Yes, of course. Rochelle Godwin, I work in communications and engagement for the Circular Head Aboriginal Corporation (CHAC). For the Circular Head Aboriginal Corporation it is always our aim to represent the north-west Aboriginal community and how their interests pertain to whatever matter it is - of course, in this instance it's energy matters - for the Aboriginal community as it exists today, as well as the histories of the 12 north-west tribes of Tasmania.

In relation to our submission, basically it was a simple one in that we asked that the Aboriginal community is always considered in the thoughts in energy matters and how that is going to impact the Aboriginal community and any future developments, how the Aboriginal community can be included, how we can work together, how we can benefit mutually and all of those things, and basically that that is at the forefront of government's mind, of developers' minds, anything moving forward in relation to energy matters, quite simply.

CHAIR - Are you right for questions?

Ms GODWIN - Yes.

CHAIR - What would you recommend or how do you see who and how that engagement should be done with Aboriginal communities - not just with CHAC, obviously, but other Aboriginal communities as well - in the areas of development of new energy supply and the workforce to do that?

Ms GODWIN - I believe that consultation engagement should be done locally, how it affects the community in which that development is occurring, with Aboriginal organisations and community members alike. That can be going through an organisation like ourselves, but where those organisations don't exist, say it's on the west coast, for example, then a whole

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Tasmania-broad approach is applied and everyone has an equal say in those spaces. As far as in a broader Tasmanian context and how Energy Matters consider the entire state, I do believe getting a perspective from the broad Aboriginal community across Tasmania is important there as well.

Again, going through organisations is a key way, because it's a much easier way to grab perspectives from a cohort of people from certain areas around Tasmania as well. Not necessarily - and they can speak on behalf of community in those spaces too.

CHAIR - In 'our area', I'll call it, you know that there's a private proponent looking to construct a wind farm on private land - not their land, private land. Obviously, we understand there's some Aboriginal significance to that island and the land. Can you tell us how you feel that consultation has gone for you, both by the landowner and the proponent, and what could be done better, or is that a 'model to follow' type of thing?

Ms GODWIN - I certainly wouldn't say it's a model to follow, Ruth. We have had very limited consultation in regards to that. In the early stages, there certainly were conversations. I know that - and this is before I worked at the organisation, but there were some representatives from the organisation who went to the island with the proponents at the time. Initial plans were showing conversations, but it was very vague and there were no agreements or anything like that. It was really kind of a first-step consultation. Beyond that, there have been minimal conversations since then, and certainly nothing since probably early 2022 or 2021, somewhere there, has been any conversations.

Ultimately, CHAC has said, 'We do not agree with this particular development due to the intangible or tangible heritage.' Moving on from that, essentially we didn't hear anything else from that. We've continued to display our objections alongside many other Aboriginal communities as well. Since then, we've heard crickets, essentially. Ideally, we'd love to have conversations, not necessarily to create any agreements or anything like that, but just to give them an opportunity to really understand where we're coming from, and therefore think about a way forward and how we can develop, how people can be considered, listened to and respected.

CHAIR - Is there any significance in the Jims Plain area, where that one was approved, Aboriginal significance?

Ms GODWIN - No, I believe that passed through with CHAC. No, not a worry at all.

CHAIR - Okay. Let's just move aside from the wind farm proposal we've talked about. Obviously, there's a need for new renewable energy in terms of the energy transition that's going on. Some of that, or most of that, will be built on land. Some of it may be out in the water. There's always going to be that connection with land, Aboriginal people have that strong connection with land, too. What is the ideal process there to ensure that the Aboriginal heritage and culture is respected while we make decisions about how to move into the future here?

Ms GODWIN - I can understand that completely. There have been wind farm developments, and ones coming ahead that we've been in agreement to talk to the proponents at the time, and come to an agreement. I think the most important thing is that that has happened from the very early stages. Initial conversations and understanding are reached, and where there are concerns, they're listened to. Not just, 'Oh, that's going to be a step we have to go through,

maybe or maybe not, we can bypass that,' kind of thing, 'The legislation doesn't protect it, so that'll be fine, we can get past that through an appeals process,' or whatever it may be. It seems that those concerns - there was not the space for them to be heard or worried about or anything along those lines.

Moving forward, if development is happening on land, that of course heritage assessments are part of that, but we already know that the heritage act doesn't necessarily protect that heritage. How can we ensure that proponents are considerate of other considerations, such as intangible heritage, which we know is the biggest concern with the island? Is there an opportunity to build that within our frameworks, that consultation in initial stages, that we grasp an understanding of what that space was to Aboriginal community, whether it's tangible heritage, or the meaning of the space, intangible?

CHAIR - In order to achieve that more respectful and considered engagement piece - you mentioned the *Aboriginal Heritage Act* - what changes do you think need to be made, whether it's in legislation or policy or other, that should form part of the way forward in this particular - we do need to build new shiny things.

Ms GODWIN - Do you mean specifically with the *Aboriginal Heritage Act*?

CHAIR - Yes, or whatever, whether it is that act or other mechanisms that would ensure that the voices of the Aboriginal people were heard, particularly where the land involved has significant Aboriginal heritage?

Ms GODWIN - I believe that a certain set of strategies or guidelines should be put in place for proponents to go through and to achieve with Aboriginal community in order to move forward. That first step of this consultation - what tangible heritage is there? How can it be avoided? Then what intangible heritage is there? Okay, this is probably not the right space. What space is? How can we work together to find that space? More of a relationship rather than, 'Okay this is what we're suggesting. Do you agree?' 'No.' 'Okay, no, whatever.' 'Yes.' 'Okay, cool.' That seems where our consultation is, where it lacks at the moment. It's like, 'This is what we've got. Yes or no?' not, 'Let's build, let's think about this together. Here's some spaces that we can work towards.'

I would suggest even the consultation process with the Renewable Energy Zones, the way in which they approach that initially in identifying, giving an opportunity to identify key areas that are in no-go zones, those kinds of things. That, I thought was done very well in those initial stages and it's not something that we've experienced with some of the private proponents. Does that make sense?

In the *Aboriginal Heritage Act* - sorry, I will continue - the consideration of adding things like intangible heritage in there should definitely be taken into account, because it's not something that we protect at the moment. Of course, it's something that's difficult to legislate, but we are seeing examples coming through nationally, and internationally as well.

CHAIR - Is there somewhere we could look as an example of a of legislative change that does respond to that?

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Ms GODWIN - The intangible - UNESCO is coming up with strategies to protect cultural heritage. There are some guidelines and principles through UNESCO. I'm not sure of the details of those guidelines, but I do know that they've worked on those.

CHAIR - When we talk about some of the intangible heritage - I assume that can include the visual impact of a landscape. If we're building either a solar farm or a wind farm, it's impossible to avoid a visual impact. Is there any way you see that you can come together and find a way to respect the heritage there and respect the connection to the land, but still build something that's very visible?

Ms GODWIN - I would say honestly that is really subject to the proposal itself. It's going to be based on area to area and what that intangible heritage really is. If it's a sacred site, I don't foresee a way around how you're going to protect that, especially visually. If that was a site that was walked through as a path, those kinds of things, you can certainly look through ways around that as well. I think it's about the specificity of that site and what the true meaning of that site is. That's down to those principles or guidelines that you could potentially implement to fully understand where that Aboriginal community is coming from and what it means to them, and why they're fighting to protect the intangible. It's the meaning behind it. I hope that makes sense.

Mr BAYLEY - Thank you, Rochelle, Vica Bayley here. I've got a few other questions on this line of inquiry, I guess. You told us that the *Aboriginal Heritage Act* doesn't work and doesn't protect heritage, but for the record, we should also note that the government has been reviewing the act for many years and tabled a report in parliament in July 2021 that said that it doesn't provide effective mechanisms of protection. So it doesn't work, and that's the government's view.

My question is that was 2021, that was almost four years ago and between then and now we've had this development approved. As an Aboriginal person, local in the area, how does that make you feel? How does it make you feel with a government that acknowledges that the act doesn't work and yet has taken no action to update the act and we're having these problematic developments approved against it irrespective?

Ms GODWIN - Very good question, Vica - ultimately let down, powerless. We can advocate as hard as we can, but if there are no proper mechanisms through legislation to fully fight these concerns, then we're effectively powerless, and just trying to wield a strong voice with no action able to follow it.

Mr BAYLEY - You talked about consultation and the proponent having some consultation. It's a requirement of the government's guidelines when you compile an Aboriginal Heritage Assessment that there's consultation. Are you saying that there wasn't consultation when the Aboriginal Heritage Assessment for the Robbins Island wind farm was done, with you either?

Ms GODWIN - No, that's not what I'm saying. There were those initial conversations, but I think the definition of consultation probably needs to be looked at because simply having a conversation doesn't really get passed - 'We ticked the box, we consulted because we took CHAC on country' or something like that. That's not going into how the conversation may have gone, how that might affect the project or anything along those lines. It lacks depth or meaning. It has no repercussions of follow-up or anything like that. We consulted, but you know that

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consultation didn't go the way, that kind of thing. I'm not really sure how that could look. It's not my area of expertise. Yes, we did have a conversation, but I wouldn't go as far as to define that as consultation.

Mr BAYLEY - Right. Because you didn't feel like you had agency to make a difference, for your voice to be heard and for changes to be made accordingly.

Ms GODWIN - Yes. Well put.

Mr SHELTON - As you know, or as you may not know, we visited the site and had conversations. In one conversation I had - I don't know whether everybody else had it - but that person indicated that they had tried to make contact with the Aboriginal community on several occasions and hadn't had much of a response. So, there seems to be a conflict there between what they said and what you indicated.

Ms GODWIN - I'd like to know what that contact is because I've worked as the engagement officer for two to three years and that hasn't come through me.

Mr SHELTON - So you would welcome the contact?

Ms GODWIN - Contact, yes. We are always open to discussions and how that discussion goes is another thing entirely. We can't progress if we don't have the chance to have those conversations. We just want to have an opportunity to make our voice heard. We feel like it's too far gone now in those instances, but to have the opportunity to be listened to effectively.

CHAIR - In your view then, while we're on this particular site, do you think there's a way that the project could be altered and still built that would meet the expectations of the Aboriginal community in Circular Head or not?

Ms GODWIN - Honestly, Ruth, that's a tricky one and I can't really speak to that. As a whole that's a very complex matter, I think, and would probably need more consultation with our community and organisation more broadly.

CHAIR - In order for anything like that to be possible, to have the tick off of the local Aboriginal community - I'm not saying it's possible, I'm just saying how it might be achieved - it's not just obviously calling you as the engagement officer, it's actually engaging with the community at large. There is a high Aboriginal population in Circular Head, we know. It means actually engaging more broadly and deeply with the community there.

Ms GODWIN - Yes, certainly you can engage via us as well. We are parts of the community, we have those contacts. So, hey, let's work together. Let's create a community meeting where people can come and bring their questions and have those answered, come up with strategies together, if those strategies are even possible. If it's not, then there needs to be an opportunity for them to accept that and consider alternatives where possible.

Mr GARLAND - Hey, Rochelle.

Ms GODWIN - Hey, how are you?

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Mr GARLAND - When we interviewed the ACEN representative, social licence came up. If I remember rightly, he asked how do you measure social licence? As far as CHAC is concerned, does ACEN have social licence for that project to go ahead on Robbins Island?

Ms GODWIN - No, Craig, they don't, as far as we're concerned.

Mr GARLAND - I suggest that's why they probably haven't continued conversations with you.

Ms GODWIN - Yes.

CHAIR - We're getting bogged down in a particular project.

Ms GODWIN - We thought it would go that way.

Mr BAYLEY - Can I take it higher again then?

CHAIR - Yes.

Mr BAYLEY - Rochelle, in terms of the *Aboriginal Heritage Act*, that's obviously the critical piece that you've mentioned in your last line here. We have a new Aboriginal heritage minister. What's your latest update? Have you had any conversations or communication from government about the time lines in relation to the review of the *Aboriginal Heritage Act* and when you could expect a new one to be at least released and consulted over, or something like that? Have you had any communication from government?

Ms GODWIN - We've had conversations, correct, but not about a timeline. We do know it's still on their agenda, but when and how that looks, I'm not sure.

Mr BAYLEY - How long ago would that have been, the last communication about that, do you reckon?

Ms GODWIN - When the new Aboriginal Affairs minister, Jacqui Petrusma, came on. Just more as an update, these are the concerns of us alongside other acts and developments from Aboriginal politics.

Mr BAYLEY - Thank you.

CHAIR - I'll just go down another path, if you like? One of the things you've talked about in the submission is about the 'capacity to upskill and create education or career pathways in the industry'. I know CHAC and Brumby Hill down there both work in this space of employment and educational opportunities for young people - well, not just young people, people generally, but mostly the young people looking for jobs. How do you see that play out in terms of this energy transition piece? What do you think the government or other organisations could do?

Ms GODWIN - Ultimately for CHAC, as you know, we're rural, regional-based, and opportunities are far and few between, particularly for higher education and things like that. We often find particularly our youth are leaving the area for further opportunity and specifically for higher education, and that means leaving their country. That's not what we want. We want

them here to stay on country, to raise their families on country. That means creating vaster opportunities for them here while still obviously paying respect to our heritage and country as well, and caring for it. Inevitably, that is looking like it is renewable energy and we're certainly not against renewable energy. As I mentioned earlier, we do approve of other wind farms and things. It's just very subjective-based on those wind farms or whatever other renewable energy thing is being discussed.

Essentially, perhaps it could be part of the guidelines that there is an incentive for the proponent to include in their proposals for further education fostering for an Aboriginal community member or members, to gain the skillsets in certain areas, or what have you, so that they can continue to work on these projects throughout their lifespan to create local jobs. You often see when big project scale developments that come through that you get people that fly-in or fly-out or those kinds of things. We want to make sure if we're going to be having all those developments in our space that our local people are going to benefit from it socially and economically in some regard.

CHAIR - Do you think there should be some other type of employment opportunity and training opportunities that can fit into that? If a new resource with a wind or solar whatever was built on country that was particularly significant - but all lands are significant, I guess - do you think there should be some sort of financial benefit to the community from that, or is it more the social benefit that we're talking about?

Ms GODWIN - I think both, Ruth. I would like to see a proponent come to an option within this region that works with us, not just a consultation, but we work alongside as partners. In that way we can work not only to gain economic benefits, but we can continue to ensure that country is cared for, that we're giving back to country.

You know, a lot of this, we're taking from our country and we want to make sure that that's cared for. If we're part of that process in partnership with renewable energies proponents that that is an opportunity. I know even ACEN has partnerships with other Aboriginal communities nationally. I'm not saying that that should be the case here, but it could be the case for further developments in the future. We want to benefit too, for our community, basically.

CHAIR - If you had to write a policy or an approach for around the engagement piece to secure a social licence, because that's really what we're talking about here with the community, what are critical factors in that? What has to happen, in your view, acknowledging that there's going to be some impact. There always is impact with anything that's built that's new, whether it's a road or a house or a wind farm, for example. What are the critical points there that would be necessary to enable a social licence to be achieved?

Ms GODWIN - I guess it does come down to that consultation, but the consultation needs to be taken in various different steps. Of course, those initial conversations, what steps should we be taking and perhaps those steps look like, 'Let's have a community meeting. What kind of information can we provide for community to be more informed on this project?' A lot of the time Aboriginal community receives these thick documents that mean nothing to us. We don't necessarily understand what they mean. How we can take away from those the impact that we need to consider. They're comprehensive and, often, we're not in the skillset to analyse these. There needs to be somebody on the ground that is there to say, 'Hey, these are the things that you need to be considerate of. This is what it really looks like.' Basically, to simplify that

process, so that we can understand it and respond to it in an informed way. A lot of the time you're responding in a generic way because you don't necessarily fully understand the depth of the impact and, therefore, could likely be the detriment of the heritage or the land, simply due to misinformation. So, it needs to be part of that.

CHAIR - Or misunderstanding perhaps is it? What I'm hearing you say, Rochelle, is some people might like to read the big full dense document. Most people don't have the technical skills to understand it.

Ms GODWIN - It still would be available.

CHAIR - Yes, that's right. If there was a plain language version that's provided with it, the explainer if you like, that enabled more meaningful engagement back to the proponent, would that be helpful?

Ms GODWIN - Yes, in text, but also in person, too. For Aboriginal people trust is a big thing, and so, having that one-on-one conversation should be a big part of it and the proponents should value that as equally. So, coming to our area, coming on country with us, so they can fully understand the space in which we are of concern for and we can listen to one another in that space and, therefore, fully understand it. So, that one-on-one thing. Not one-on-one necessarily, but that face-to-face contact is important and should be done more than one time. You know, as projects change, they emerge as concerns are highlighted. That conversation needs to continue and there needs to be, 'Okay, this was brought up, then that's what happens next.' You know, 'Okay, community are coming through with these concerns. How are we going to address that to our community?'

CHAIR - I know that Granville Harbour Wind Farm is probably outside of CHAC's area, probably it's a bit far south, isn't it? But, was there any engagement? Because you're probably the closest formed Aboriginal organisation. Was there any engagement with the Granville Harbour one?

Ms GODWIN - Not that I'm aware of, I'm afraid. There could have been, but I don't know about that, sorry.

CHAIR - That's fine. Any other questions from members?

Mr BAYLEY - A question about the North West Transmission Developments, and your experience in relation to engagement and issues there. Have you got a different experience with that, or are you not engaged with that at all? What's your experience there?

Ms GODWIN - Vica, as far as I know, we haven't been engaged in regards to that. It's something we're open to as well. They all work together, essentially. I know that there's been comprehensive engagement with Victorian Aboriginal communities. It's not something that we've seen here in Tasmania. Open for a consultation, open for it.

CHAIR - It wouldn't be far down the coast where it really kicks in, probably, it's outside of Circular Head.

Ms GODWIN - At Circular Head, we - I know there's a municipality that dictates to us, but as far as the tribes of the north-west, we did go as far as through to Burnie as well. So, we

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do have concerns about heritage and things there as well, and down through to Granville Harbour, too. But, as we're expanding those things become more known publicly, too.

CHAIR - Okay. Is there anything else you wanted to say that you feel like you haven't? Anything you've missed.

Ms GODWIN - No, I don't think so. Ultimately, we simply ask for inclusion and a voice and opportunity.

CHAIR - Thanks for your time today; it's really good to hear from the far north-west. We don't get that many.

Ms GODWIN - Someone's got to represent.

CHAIR - To bring the beautiful part to the parliament. Thank you for your submission and also for your time today, Rochelle. We appreciate it.

Ms GODWIN - Thank you for having me.

THE WITNESSES WITHDREW.

The committee suspended from 2.01 p.m. to 2.12 p.m.

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CHAIR - Thank you, Jennifer, for appearing before the Energy Matters Committee. As you know, this is a public hearing. It's being broadcast and transcribed and will form part of our public record and inform the committee's reporting at a later time. Thank you for your submission and for appearing before the committee. It's really helpful to have so many interested parties in this. As you're probably aware, everything you say is covered by parliamentary privilege while you're before the committee, but that may not extend to any comment you repeat or say outside. If there was anything of a confidential nature you wish to share with the committee, you can make that request and we would consider it. Otherwise, it is all public. Do you have any questions before we start?

Dr SANGER - No, that sounds all clear.

CHAIR - I will ask you to take the statutory declaration there in front of you, and then, if you'd like, introduce yourself and the organisation you represent, and speak further to your submission. We'll have questions following that.

Dr JENNIFER SANGER, LEAD RESEARCHER, THE TREE PROJECTS, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

Dr SANGER - Great. As I said, my name's Dr Jen Sanger. I'm here representing two organisations. The first one is an organisation I run with my husband called The Tree Projects. We do a lot of education and public outreach around forests and big trees and why it's important to protect them. I'm also representing the Tasmanian Climate Collective, of whom I'm a co-founder. The Climate Collective has been going for about three years now and it's a group of concerned citizens and environmental groups that are advocating for climate action here in Tasmania.

My report on hydrogen came about in kind of a weird way. My background is I'm a forest ecologist, and I have a PhD in that. I got alerted to this issue by a colleague who was primarily concerned about the fact that there were two e-fuel plants that were proposed for the north of the state and both of them were claiming to use plantation residues. This person was concerned that there may not be enough to go around to fuel both of these plants. That's what I started writing this report on. When I looked into it more and more, it made me realise how much hydrogen and e-fuels may not be the right solution for here in Tasmania, just because of the huge amount of energy that it uses.

I'll speak about the forest biomass first. So, I did the calculations to actually look at how much biomass both of these plants would need and this was a fairly easy thing to do. The ABEL Energy, sorry, is everyone aware of the two proposals that I'm talking about?

CHAIR - We heard from ABEL Energy yesterday. We haven't actually heard from HIF yet, but I think most members are aware of the project in its broad sense.

Dr SANGER - Yes. So, we have the two proposals, the HIF and the ABEL Energy one. ABEL had produced publicly available documentation that showed the statistics of how much biomass they would need and all of this other information. So, the information that I got was directly from them on their biomass needs. I extrapolated that out to see how much biomass would be needed to cover the expected output of both of these facilities. I calculated that there was about 675,000 tonnes that were needed to fuel both plants at the amount that they were suggesting that they needed.

The problem is, though, when you look at the biomass that's available - so, when we're talking about plantation biomass, what they're actually talking about is all the leftover stuff that they leave after harvesting: that's the smaller branches, the stumps, some of the outer bark, and things like that. These residues - luckily there's actually, I got this information from the Australian Renewable Energy Mapping Infrastructure Project where it estimates the amount of biomass that's available from these different sources so I was able to get that information directly from the Australian government - but there's only about 40 per cent of biomass that's actually available in the north from plantations. It can only meet 40 per cent of the needs of these two facilities. So, if both of them are up and operational, there's a huge gap, there's a 60 per cent gap in biomass that needs to be fulfilled to be able to keep these plants operational. The big question is, where is this biomass is going to come from?

In my mind, what I'm concerned about, is the pressure that this is going to actually put on native forests because they need this biomass that has a source of carbon to create the e-fuels. But the thing is, that's unlikely to come from the woodchips that are provided for by plantations because that's a really high-quality woodchip and it gets a good export price. So, what they probably will use to fill that gap is the low-quality woodchips that are coming from the logging of native forests; these are usually the bigger, older trees and when they're chipped, they're just not as good a quality as the stuff that's coming from plantations. That's what we're really concerned about, as the organisation of The Tree Projects, that these two facilities will put more pressure on native-forest logging in our forests around the state because it would be a cheap source of biomass for them.

The thing is, they have looked at using - I'm expecting that they will probably try to use woodchips that have come from whole logs. They have looked in at using the actual residues, so what they call stem wood in native forestry, so that's all the leftover stumps and the branches, and things like that, but it's absolutely not cost-effective. It costs way too much for them to collect that additional material once the forest has been logged and it usually needs a whole range of different machinery to do that as well. It's very different machinery to collect that material than it is to cut whole logs and remove them from the forest.

CHAIR - Wouldn't they be using the same equipment in the plantations?

Dr SANGER - Well, that's what I was wondering about too, and I think the reason why HIF has already got a partnership with Forico is because they're planning to be right there onsite and they must be willing to actually invest in that additional machinery. I don't know the ins and outs of that, to be honest.

CHAIR - Forico only has plantation timber; they don't have any native timber.

Dr SANGER - Yes, exactly. So, yes, that's one thing. My main concern is the pressure that it's going to put on native forests and it's something that needs to be really finely scrutinised.

The other thing is when I looked into this, because these are e-fuel plants so they're getting hydrogen and they're turning it into e-fuel, there's quite a lot of energy that's lost in that process.

There are some proponents who say that with things like aviation and international shipping where battery technology is not there yet; and that's correct, and there might be a role

for e-fuels at this stage. But the thing is, it loses so much energy in creating them and to be able to use e-fuels for all of the world's shipping and aviation, you'd need something like five times the energy output for the whole of what the U.S.A. produces every year, so it's a huge amount of energy.

If we just look at Tasmania, just to provide enough electricity for these two plants to do the hydrogen, you would need to double Tasmania's current electricity output. So, that's a huge additional number of wind turbines. I've estimated that about 260 new turbines would need to be put in.

I'm not opposed to renewable energy at all. I'm all for it. I think we need to be getting as much wind and solar as we can in this state within reason, as long as it's not impacting too much on biodiversity and natural values. But at the moment, as I understand, we're not even meeting all of our energy needs through renewable yet in Tassie. There's still some gas being burned at times, so there's not really that surplus of electricity to go towards these plants as yet and I don't really see us getting that capacity to do so in the next couple of years.

There's also that question of where this additional electricity is going to come from for these plants as well if they are operational in 2027 and 2028, like they state.

They are just the main concerns I have about it.

Does anyone have any questions?

CHAIR - Across the whole lot or mainly on the tree situation?

Dr SANGER - Yes, the whole lot.

CHAIR - We did talk to ABEL Energy yesterday and this question was asked about the availability of biomass, acknowledging that HIF are in a different part of the state and in the middle of a plantation. But ABEL was quite clear about its modelling to say that there was plenty but, perhaps, using some of the absolute waste, not the trunks obviously, from the native forest, but they did make the point that there is no market for e-fuels that are not from certified biomass like FFC and PEFC, et cetera, which would exclude most native forest here. Wouldn't it?

Dr SANGER - It depends on what certification you're using. Most of the native forest logging doesn't have FFC certification, but it has the PEFC. Is that the correct term?

All - Yes.

Dr SANGER - PEFC. All of native forest logging across Australia has that certification and in my opinion it's an industry-led certification and it's pretty much meaningless because most places have got it. So, it depends on which certification they're using.

Also, I know that ABEL Energy has made a statement saying that it wouldn't take anything from native forest logging, but it has also said that it would look into salvage logging as well. That's going into areas that have been burnt by fire and logging them, which is quite environmentally damaging because a lot of these trees that have been burnt - it depends on the species and the severity of fire - a lot of them actually can regrow after there's been a fire going

through and they're not necessarily dead waste trees. Often what we see has happened a lot in Victoria, where they have done undertaking this salvage logging, is that it has really badly trashed the environment and the regrowth coming back from that has been really poor because they haven't put the efforts into restoring it properly and also the damage done is too much.

I don't know where they're getting their figures from. It would be interesting to see.

CHAIR - It would be on the record when we publish the *Hansard*, so it might be worth having a look at it and providing any feedback if you felt. They also talked about using biomass waste from the agriculture sector, like dead vines and other waste from cropping and all that sort of stuff as well, and waste, like in the waste chain.

Dr SANGER - Yes.

CHAIR - But that's not a thing yet.

Dr SANGER - No, it's not, from what I understand, yeah.

CHAIR - It will be interesting to see, if you have a look at the claim they made around having more than they needed to meet their needs. That's also considering HIF. I absolutely hear your concern. It would be interesting to hear what you thought of that.

Dr SANGER - Yes, I'd be really interested to see where they get their numbers from too. I know that the HIF have talked about getting carbon from an organisation that was a by-product of some recycling scheme or something like that. There was a news article a couple of years ago about it. They do talk about carbon capture technology, that they could be using the carbon for this, in these purposes. But the thing is that the technology is not there yet. There are also a whole bunch of issues with carbon capture technology as well, in the fact that it's actually using a lot of energy to draw the carbon down from the atmosphere. Then you're also putting it into an e-fuel product that is going to release that carbon again once it's burnt, as well.

That's one of the things that's also - I'm very wary about the label of 'biomass' as being a renewable energy. There are instances, when it's coming from crops and stuff like that where that's the case. If this biomass is coming from forests that have been growing for hundreds of years, I don't see that as a renewable source. It's going to take hundreds of years for that forest to regrow, if it ever does, to recapture that carbon back from the atmosphere.

Mr BAYLEY - Putting aside the native forest element and assuming that's dealt with, if it was purely plantation-based and it was harvesting the branches and the leaves and the fronds and the bark and that sort of stuff, from a forest ecology and a carbon perspective, what's your view around that and utilising that as an input into this process?

Dr SANGER - If it all comes from plantation, it's not really that much of a problem. There is a bit of concern that taking too much of this biomass from the site will mean you'll have to use a lot more fertilisers and stuff like that. There's a whole bunch of nutrients that are in that wood that when it decomposes, it goes back into the ground. There would be an instance where you'd have to use more fertilisers, which is not necessarily great. But if it was plantation-based, it would be - I want to choose my words carefully here - it would be a better solution, a far better solution than using native forests for sure.

The whole e-fuel thing is really interesting, because there's not actually much of it being made in the world at the moment at all. There's only a very small amount coming from a plant in Chile. The thing is, they don't reckon that it's actually going to be cost-competitive until about 2035. It all depends on the market of this e-fuel. If it's going to something like shipping where it's really difficult to replace it with any other alternative - but I know that Porsche is the main backers for the HIF facility. The thing is that by 2035, the vast majority of cars on the road are going to be electric because it is a much cheaper, much more energy-efficient way of using energy. I just wonder with e-fuels, where's the market going to be? Is it going to be what they say it is?

Also, too, I put on my sceptical hat and I look at the whole push behind hydrogen and e-fuels and the big glaring problem with this is that we're just not going to get enough renewable energy up and happening to get a mass export market of hydrogen and e-fuels. To be able to do that Australia-wide, we're going to have to increase our renewable energy output by 28 times. That's a huge amount. There's probably not enough viable space for that to happen. We're struggling to meet our own renewable energy targets. When I wrote this report - and I don't know how much it's changed in the years since - we'd have to double our renewable energy by three or so times to be able to meet our goals by 2030. We're not even really meeting our own domestic goals for renewable energy. I fear that this has been pushed heavily by fossil fuel companies because if they can push for a whole bunch of industries to invest in infrastructure for hydrogen and eFuels, and it's obvious we're not going to get that amount of renewable energies in the short term - it just locks in gas usage, essentially, and more petrol.

The good thing about e-fuels is that they can directly go into a combustion engine, so they can go into a diesel or petrol car. But if we're hanging out for these e-fuels to become available, it just means more fossil fuel usage in the meantime until we can get our act together. The thing is hydrogen and e-fuels on a mass scale is not going to happen anytime soon. It's going to be in the midterm for sure, which will mean a lot more fossil fuels usage.

CHAIR - Acknowledging that some of the major coal-fired power stations are going to be coming offline in the next 10 years. So, we need to do something else?

Dr SANGER - Yes, or turn all the lights off. One or the other.

CHAIR - Yes. Would the absence of hydrogen and e-fuels to storage solutions, necessitate even greater expansion of renewable energy capacity to maintain grid stability and ensure energy security, which means we are building many more wind farms and solar farms, whatever?

Dr SANGER - I think the solution for Australia lies in electrification. Where we can, we need to electrify what we can. So, we need to be investing in electric transport but also electrifying our homes. I know that hydrogen has been talked about using as a replacement for gas, but there are real big issues around that. So, gas is not directly comparable to natural gas. You can only really feasibly add about 10 per cent of hydrogen with natural gas before you have to completely redo all the infrastructure. The thing is with hydrogen, when it leaks it can catalyse with elements already in the atmosphere to create a lot of methane. And so, if there is hydrogen spills, it can actually be really bad for creating vast amounts of methane.

I think the solution of what we need to look at both in Tasmania and more broadly as well is electrifying where we can. I don't have an easy answer about whether we should be

'strictly no hydrogen at all' or 'strictly no e-fuels at all', because there will be some high intensity industries that can't directly use electricity for their needs.

CHAIR - Major shippers and that sort of thing because batteries aren't a thing for them yet.

Dr SANGER - Yes, exactly. It's this problem of 'what do we do?'. There's no perfect solution here, but I think we just need to be cautious in Tasmania. Think about what this actually means and whether it's something that's viable because we might have these two facilities that are not producing huge amounts of e-fuels really in the scheme of things, but it's going to have a big impact on Tasmanians in terms of there's going to be a lot more renewable. A lot more windfarms expanding, which is something that's needed. But let's meet our own domestic needs first and use that to actually electrify our homes and get electric vehicles on the road first.

CHAIR - Just on that, might we need more wind farms on island to meet our own needs?

Dr SANGER - On island? What do you specifically mean?

CHAIR - In Tasmania.

Dr SANGER - Yes, I guess so. We do need more of renewable energy because we're not meeting 100 per cent. From what I understand of late, there's been gas that's had to be used to meet our energy needs. We do absolutely need more renewable energy.

CHAIR - That's before we start the major transition in the major industries and in the transport sector.

Dr SANGER - Yes, absolutely.

CHAIR - Is there not then a place for all of these things in a considered way? You talked about the concern about having hydrogen as part of the mix, but for all the reasons and e-fuels as an almost approximate for continuing gas for longer, but don't we need to look at all of these things?

Dr SANGER - Absolutely. I do believe we need to look at all these things, but we also need to kind of really consider where these resources are going to come from, where these extra wind turbines are going to go and whether the energy created to fuel these industries, whether that can be better used to help Tasmanians electrify their homes and get in electric vehicles and things like that.

I think that there is a role to play for sure, and it is something that we need to be considering, but I think it needs to be really heavily scrutinised to make sure that it is the best option.

CHAIR - It doesn't really cover this in your paper strictly, but have you done any comparative economic, environmental and efficiency-based benefits and drawbacks of hydrogen and e-fuel related to natural gas?

Dr SANGER - No, I haven't, sorry. No.

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CHAIR - Do you have a view on it? I mean, I don't expect you to say things that you're not comfortable saying.

Dr SANGER - Yes, absolutely. I do know that it is being marketed as this thing that can just take the place of natural gas.

CHAIR - They call it drop in fuels.

Dr SANGER - Yes, but from what I understand, it's not that easy. What I was saying before about - you can only really feasibly put about 10 per cent of hydrogen into natural gas as a mix that the existing infrastructure - I don't think we have much domestic gas in here in Tasmania as in networks like they do in Melbourne, do we? I'm not sure.

CHAIR - There's a bit, not a huge amount.

Dr SANGER - Yes, so it can't necessarily replace that 100 per cent. There's only a small amount that can go in there.

CHAIR - What about e-fuels for our transport sector? Particularly, like trucks and heavy vehicles.

Dr SANGER - Yes, so that's something that could be replaced, but the thing is, you're using something like 2.5 times more electricity by using e-fuels than whether you were to use batteries directly. I know that truck batteries are not 100 per cent there yet, but they're really close to being there. We will be seeing electric trucks on the roads within the next couple of years.

CHAIR - What about the environmental and efficiency related matters?

Dr SANGER - I haven't really looked into that, I'm sorry.

Mr BAYLEY - Have you done any thinking around the sort of regulatory framework that could satisfy some of your concerns in relation to e-fuels and are there any sort of guardrails that could be put in that sort of start to deal with some of your concerns, do you think?

Dr SANGER - I'm sure there are, but it's not something that I've looked at. Policy is a bit beyond my scope, to be honest. I just stick to the research.

CHAIR - Just to pick up on your point, Vica. If there was a regulatory framework that ensured that the biomass that was used wasn't going to cause some of the challenges you're concerned about. Whether the relevant industries would see that as a guardrail that was just too tight - I don't know - but do you think that there needs to be a look at that sort of thing?

Dr SANGER - Yes, I think that would be a really great place to start. If you could get some commitment that the biomass was only going to come from plantations or from agriculture and if there was a hard line on ruling out native forest logging or any biomass from native forest -

CHAIR - What about sawdust in the sawmill from native forest?

Dr SANGER - Yes. I mean, that's something that could potentially be used. I know that a lot of the mills currently are burning that anyway to generate electricity for the mills, so it could potentially be a source for sure. I think that would be a really great place to start, ruling out native forest logging.

Mr SHELTON - Well, native forest logging, and of course, I understand the position around native forest logging, but as we in Tasmania are still in native forest logging and you've indicated that if it all come from plantations, it'd be fine, and ABEL has said all theirs are coming from plantations. But from a native logging sense, I believe you may have made some statements about the percentage of native logging that you get out of a log is - I can't remember the figures - but 50 per cent or whatever.

If that biomass, that other 50 per cent was used in one of these systems, then that's actually getting more value considering that we're still in native forest logging. I can understand your point of view saying you've got to be out of it. But if we're still in and the machinery similar to plantations is right there beside the operation to put that biomass to better use rather than leave it on the forest floor and maybe have to burn it or whatever, then surely that's a better outcome?

Dr SANGER - Well, I disagree, sorry. Thank you for reading my report because - yes, there's about 60 per cent of biomass that's left on the ground afterwards, so you're close, yes. The thing is when that's left behind, the vast majority of that's getting burnt, which is causing pollution, but the problem with this is that native forests, when they regenerate, as I said before, when you're taking away this excess biomass, you're taking away a whole bunch of nutrients as well, right, and so if that 60 per cent of that biomass that was left behind was taken away, you'll end up with some really depleted soils and there's no way that there's going to be fertiliser spread around a native forest to help it regrow. That would be an absolutely terrible idea. Not only is it expensive, it has its own emissions around fertiliser usage as well. There's that - from an ecological process - that biomass that's left behind is quite important for enriching the soil.

Mr SHELTON - But the criticism has been around burning it. So, rather than burn it, surely it's a better outcome to use it in e-fuels.

Dr SANGER - I don't know, I don't agree, to be honest. I think burning is a bad idea. I think logging it to begin with is a bad idea, so that's the problem.

Mr SHELTON - I think we can agree to disagree on that.

Dr SANGER - Yes, absolutely. Forico has a very concentrated area of where their plantations are, so if they were to invest in this additional infrastructure to collect the residues from there, it makes economic sense. But, if you look at the map where a lot of the native forests are getting logged, a lot of that are happening spread out. I mean, there is some native-forest logging that is in the vicinity of Forico, but the vast majority of native-forest logging is down south.

There was a Tasmanian government report that was done, probably about eight years ago now - off the top of my head, I could be wrong about that - that looked at the feasibility of going in and actually collecting some of these residues as biomass and it was just way, way too expensive for it to be feasible. Then you have additional issues with a whole bunch of extra

machinery coming in, which is impacting the soil, and things like that. So, I personally wouldn't be in favour of it, but there are some people who probably would be, yes.

CHAIR - Any other questions?

Mr BAYLEY - I don't think there is actually.

Mr EDMUNDS - I'm just wrestling with the question that the Chair put to you before about if biofuels is a no-go for Tasmania, we're still going to have to upscale our renewable energy, particularly with scepticism around interconnectors. So, with that electrification of trucks, et cetera, into the future the answer for Tasmania then has to be more renewable energy, I'm assuming. We're just trying to figure out what's the answer. If we can't develop the biofuels, we're going to need more electricity because that's the answer. Where's that electricity come from if we potentially don't have interconnectors to operate the ever-expanding fleet that we're going to have in Tasmania that will rely on that electricity?

Dr SANGER - Yes, I definitely believe there's still scope to expand renewable energy in Tasmania for sure. I think that that's something that we should aim for. We have a very good head start in the fact that Hydro produces a lot of power for us and it's very feasible for us to easily put in more renewables.

CHAIR - Easily?

Dr SANGER - Well, easily. Well, I mean, I don't know, sorry, that's probably not the right word to use, but I feel like there's more scope for more renewables. I do. I'm not an expert on this, you remember I am a forest ecologist and I have only looked into it for this report. So, please ask a renewable energy expert this question. I don't want to be one of these people who just says no to everything. I know that there has to be industry here in Tasmania, but I feel like we need to be picking the right industries, that's all.

CHAIR - Most proponents of wind farms at the moment will tell you it's not easy.

Dr SANGER - Yes, okay.

CHAIR - We haven't had a new one built since Granville - oh, Cattle Hill was the last one, which is not a very big one. There was still a lot of opposition to that, too. Not to Granville. There's a lot of catch-up to play. How do you see -

Mr EDMUNDS - One follow-up. Obviously then, in Tasmania, if we haven't got enough electrification we will just be still importing the fossil fuels, which would be another compound thing on the disadvantage in this state. That's the puzzle and the wrestling that we're trying to do. If we don't - and we're aware of the challenges around cost with all this sort of stuff, but if we miss the boat, we'll pay a lot more environmentally and also economically, and across the whole social fabric of the state.

Dr SANGER - Yes, I totally understand all of that. I don't know what the right answer is in this case, to be honest. So, yes.

Mr EDMUNDS - It's a big, broader thing for the entire committee's deliberations.

Dr SANGER - It's a big thing, yes.

Mr BAYLEY - And it's consistent with evidence from the witness earlier in the day who said, in the context of Marinus, without Marinus, we'd still need to expand renewable energy in Tasmania. He was talking about distributed networks and that was his thing. Yes, there was an acknowledgement from that witness as well that we needed to - even without Marinus, we would need to expand energy production.

Dr SANGER - Yes, absolutely. Then you just look at all the demands that are facing us in the future, even in the aspects of AI and cryptocurrency, they estimate that we're going to have to double the world's energy output within the next couple of years to meet those demands, which is just mind-boggling.

Mr BAYLEY - With data centres and that sort of stuff.

Dr SANGER - Yes, that's it. I mean, this is something that governments never want to hear, but it is a usage thing. It's just this exponential growth that our societies are dependent on. It's something that just, it's - this is the problem. The way that we're using resources, this consistent growth mentality that our societies are built on. It's something that no politician in their right mind wants to tackle, and I totally understand, because it's a really big issue. It's something that must be acknowledged as well, because this is what's driving this, this constant usage of resources, this perpetual growth mindset.

CHAIR - Surely there must be a balance here somewhere, when Luke was asking his question about the challenges that proponents of wind farms, for example, face. Some of that's around site selection, but it doesn't seem to matter where a proponent will suggest or propose a site, there will be people who still oppose it, some very vigorously. Ultimately, for whatever reason, whether it's - visual impacts are not going to change much with the impacts of climate change, except you might have more scorched earth, but in terms of birds, for example, climate change imposes a risk to the birdlife. Somehow we have to find this balance. I don't know if you have any ideas about that.

Dr SANGER - It's a really tough one. As I said, there's no perfect answer to these. I remember looking at a study, and I can't remember it off the top of my head, but the impacts to birds from climate change is going to be magnitudes times greater than the impact of wind farms.

In saying that, it's still something that we have to consider. There are proposals that are going to be a lot better than others. That's what we need to focus on, the stuff that does the least amount of harm. Things like Robbins Island, for instance, from what I understand is going to have a terrible impact on birds and that's something that really needs to be considered. Is there a better location for that and, if so, where? These are all very big problems, and I acknowledge that.

I think that there could be things that governments are doing better for wind farms. I know in some instances in Europe, there is a community payment that's made not just to the landowners where the turbines will be housed, but it goes to the whole community that's visually impacted by that. And what we're seeing in places like that, is there's a much greater take-up in the community of renewable infrastructure when it is a shared thing like that. I don't

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know whether that's anything that Tasmania would ever consider, but it might be something to address that.

CHAIR - Who should pay that? Should that be the proponent?

Dr SANGER - Yes. That's where it's coming from in Europe. Instead of the rent for the land just going entirely to the landholder, as I understand it, that's the way in Australia, it gets spread across the community.

CHAIR - That has been raised here at the communities.

Mr BAYLEY - Noting that's a concept in the Cellars Hill wind farm that was discussed last week. You know, there's notionally, theoretically a \$1000 payment to residents within 12 kilometres or something like that. So, perhaps that's the genesis of that.

CHAIR - It has been put forward in the Western Plains one in Stanley, at one point, but didn't go anywhere. Again, another probably problematic site selection to start with.

Dr SANGER - I imagine so, yeah.

Mr BAYLEY - Noting, Jen, that you're a forest ecologist, but you've included water in your analysis here and the number of million litres - 9000 million litres for the two projects, equivalent of 11,500 homes. As an ecologist, do you have concerns around that water use?

Dr SANGER - It's something to note, for sure. In Tasmania, we're lucky that we're not short of fresh water, but I know it is a bit of an issue for sites that have been selected on the mainland. So, where there are drought conditions, any hydrogen plant will have a significant impact. It would need quite a lot of water to go ahead.

In Tasmania, not so much an issue, but then other places in Australia - I think they estimated it would use - to have an export industry in hydrogen that was feasible for Australia, it was estimated it would use something like 10 per cent of regional water, or something like that. That would be like - I think it was 10 per cent. It was a significant proportion of fresh water that would be taken away from farmers.

CHAIR - Getting back to the balance of what do we need for what?

Dr SANGER - Yes, exactly.

Mr BAYLEY - And I guess where it's being drawn from, whether it's underground or -

Dr SANGER - Yes, exactly.

CHAIR - Is there anything you want to close with that you haven't said, Jennifer, you think it would be helpful for the committee to have your thoughts on?

Dr SANGER - I'm all good, actually. I think I've covered a lot.

CHAIR - We appreciate your skill set, and we have strayed a little bit outside of that and asked your questions. It's always good to test the average Tasmanian's thoughts as well on some

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of those things because it will impact us all. I appreciate your time and thank you for your submission.

Dr SANGER - Yes. Good luck

THE WITNESS WITHDREW.

The committee adjourned at 2.53 p.m.