REPORT ON PROCEEDINGS BEFORE

PORTFOLIO COMMITTEE NO. 4 - REGIONAL NSW

IMPACT OF RENEWABLE ENERGY ZONES (REZ) ON RURAL AND REGIONAL COMMUNITIES AND INDUSTRIES IN NEW SOUTH WALES

CORRECTED

At Victory Room, WIN Sports and Entertainment Centre, Wollongong, on Wednesday 29 October 2025

The Committee met at 10:30.

PRESENT

The Hon. Mark Banasiak (Chair)

The Hon. Greg Donnelly
The Hon. Aileen MacDonald
The Hon. Sarah Mitchell
The Hon. Peter Primrose

PRESENT VIA VIDEOCONFERENCE

The Hon. Emma Hurst (Deputy Chair)
The Hon. Cameron Murphy

The CHAIR: Welcome to the fifth hearing of the Committee's inquiry into the impact of renewable energy zones in rural and regional communities and industries in New South Wales. I acknowledge the Dharawal people, the traditional custodians of the lands on which we are meeting today. I pay respects to Elders past and present, and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of New South Wales. I also acknowledge and pay my respects to any Aboriginal and Torres Strait Islander people joining us today. My name is Mark Banasiak, and I am the Chair of the Committee.

I ask everyone in the room to please turn their mobile phones to silent. Parliamentary privilege applies to witnesses in relation to the evidence they give today. However, it does not apply to what witnesses say outside of the hearing. I urge witnesses to be careful about making comments to the media or to others after completing their evidence. In addition, the Legislative Council has adopted rules to provide procedural fairness for inquiry participants. I encourage Committee members and witnesses to be mindful of these procedures.

Ms LEANNE PICKERING, Chief Customer and Strategic Officer, Endeavour Energy, affirmed and examined

Mr GUY CHALKLEY, Chief Executive Officer, Endeavour Energy, affirmed and examined

The CHAIR: I welcome our first witnesses and thank them for taking the time to give evidence. Would either of you like to make a short opening statement before we proceed?

GUY CHALKLEY: Yes, happy to do a short statement. I'd like to thank the Committee for having us here. It's good to be at the Illawarra, which we've obviously been around, from an Endeavour Energy perspective, for over 100 years. I'll probably start by saying what we're not as much as what we are, because the energy chain is generally quite complicated. Endeavour Energy is basically a distribution company. Why is that important? We're a company that's been around for over a hundred years in the Illawarra but one that's really changed in the last five years. As renewable energy, particularly rooftop solar, starts to penetrate our customers, obviously we've changed from somebody being a provider of energy to somebody that's a taker of energy. That two-way flow is something that's been really pertinent for the last five years, and the whole way that we've therefore had to engineer our network has started to change.

Really, that probably comes about for some of the reasons that we're actually here. As we move from fossil fuel to renewable energy at the top end, we find ourselves in the unique position that, even at the bottom end of the energy chain, there's a lot of energy now being generated by customers on their rooftops, both residential and industrial. From our perspective, our investments have started to change. From what were traditional substations, poles and wires, and undergrounding, we're obviously now looking at other ways to invest to ensure that we can actually harness some of the rooftop solar that's being generated and some of the storage that will be coming in from batteries. It actually puts us in a unique position within the community and the customers to make this network more reliable than it can be.

We're making investments in technology and innovation to keep the downward pressure on pricing, and there are many more solutions that are now being provided that probably weren't around five years ago. This includes empowering customers to become active participants in the energy chain. A customer, to us, is a partner now, because it enables some stabilisation of the grid if we can utilise it in a way that actually benefits customers as a whole. We've therefore focused on community batteries recently, we've focused on embedded grids and we've focused on microgrids—so different solutions for different areas, rather than just a traditional solution.

We've obviously been working, particularly around the Illawarra area, with postcode 2515 in terms of working with Rewiring Australia to find a different solution and see how we can roll that out to a more scalable option as we move that forward. Safety has always been key, and that will continue to be key. We are also involved in CWO, Central-West Orana Renewable Energy Zone, as one of the partners that actually won the contract for that project, and so we do have some knowledge in terms of the transmission solution that was provided in there. But this one is much more interesting in the sense that the solution that it looks like we'll be putting forward is much more of an urban REZ—so not large-scale transmission, but more in terms of utilising rooftop solar, batteries et cetera to provide a different type of solution to the REZ that was actually provided for Central-West Orana.

The proposed solution will therefore focus on integrating consumer energy resources, such as rooftop solar, home batteries and community-scale batteries, and the utilisation of spare government land and commercial roof space. I point out that it's very early days at the moment and that's the solution that people are looking at. That's very different to competitively bidding for something, like the Central-West Orana in terms of what played out there. For us, from the position that we've been around, we're learning that community involvement is key, stakeholder involvement is key and early involvement is key. I think we've learnt and hopefully started to improve in terms of the way we've done that just in our day-to-day business. It's one that we think we can take forward to the Illawarra REZ. With that I pause and look forward to the questions.

The CHAIR: The Committee has resolved to have free-flow questions. The questions could come from anywhere, including from Mr Murphy who is appearing online. We are aware of some IT issues at Parliament so if he drops out, we'll go to the next question until we can get him back.

The Hon. SARAH MITCHELL: Thank you both for being here today. I have a couple of questions. One is a technical one. Can you explain the difference between the embedded grids and microgrids that you just spoke about? I haven't heard that one before.

GUY CHALKLEY: An embedded grid could be something that is a small area. A good example of what I would say is an embedded grid is something like the airside of an airport, where they can have their own grid. A microgrid is similar. We use that at Bawley Point. In terms of that area, we're utilising a whole community.

We're utilising the rooftop solar that the community can provide. We've put in a battery and utilising it in that way. They're very similar but different, probably, in the areas where you might use them.

The Hon. SARAH MITCHELL: Do you see opportunities for expanding those sorts of grids? Is that on the agenda?

GUY CHALKLEY: I think what you've been seeing in the last five years in the distribution space—as I say, the big change in the distribution space is there was no generation downstream; there was no generation from a customer perspective. We've had to adapt to think how can we now utilise energy that's effectively coming back and how can we move that around to make that beneficial for the whole community. The actual shift from what was developed 100 years ago has changed fundamentally in the last few years. Australia is unique in the sense that it probably has the largest take-up of rooftop solar in the world. How do we better use that as we start to move away from fossil fuels and move into renewables? We've got to be in a position to use the gift that we've been given, which is the downstream generation.

The Hon. SARAH MITCHELL: In terms of the concept of the urban REZ, we've had evidence from either the Hunter or Ausgrid—one of the other companies—talking about they are looking at things in that space too. I think that is interesting. I live in a regional area. Sometimes it feels like it all happens in the regions rather than in metro. What sort of capacity generation could an urban REZ in this area—in terms of scale, what supply could you get from those sorts of projects? I'm happy for either of you to answer.

GUY CHALKLEY: I can start, and I'm sure Leanne can add to it. I think that's not the only solution, which is the important thing. As we move away from fossil fuels to top-end wind and solar, you've got to use as many solutions as you can. Endeavour's grid in total at the moment is probably around about 4½ gigawatts. I think there's easily capacity that you can start utilising a gigawatt, in terms of extra options that are out there. If you think about what's happening with rooftop solar at the moment, it's not really being captured in the way that it's being utilised. That's the benefit that's starting to happen in the distribution space. At the moment, it's being used solely for an individual. We haven't really got the accurate data of how much is being used and how much is being pushed back. All of that starts to be beneficial if you can start capturing the data that actually sees what you're getting. So it's not the only solution, but there's a lot out there. It's one of the solutions that will help.

The Hon. SARAH MITCHELL: How could you capture that data? Who would be best placed to do that?

GUY CHALKLEY: We're already starting to do that in smaller pilots. We're utilising more modern tech companies. Gridsight is an example. It's where you can see the data of what's being produced on rooftops, with obviously the customer accepting that and then being able to see how much is being used and at what times it's being used. In some respects it's not just the technology that's improved. It's actually also how much the visibility of the data has improved and being able to see it in real time. When you think about how previously everybody had a meter that was read twice a year or four times a year or whenever, you've now got access to data on a real-time basis with smart meters. All of that starts to play out.

LEANNE PICKERING: In regard to the urban REZ, it is more of a grassroots option. It is to avoid some of the bigger generation and transmission spend that we'll need because we are aware, even with getting some of the lines into areas, of the social licence aspect of communities. But it is more about how we can store more energy, share it locally and avoid rebuilding the grid where we don't need to. That is the aim, and it is early days. We had engagement with a whole group of community industry stakeholders back in May this year. We had between six councils and government departments and a number of industry, as well as us, Transgrid and EnergyAustralia coming down to listen to the community about what they wanted to do. That's part of trying to work out what the solution could be, as we work with commercial and industrials in regard to using their roof space to make sure that there is some incentive for them to sometimes maybe oversize their solar so that we can take some extra solar into that to store.

The Hon. PETER PRIMROSE: Following on from those excellent questions, in terms of community and home battery storage, where do you see that going in the next 10 years? I know that's a long time, but it's clearly something that is occurring now. It's a technology that people are thinking about, and it will affect transmission issues generally. What directions do you see that taking?

GUY CHALKLEY: I think solar will continue. Even though we've got quite high penetration, it will continue. For a lot of people, that's a cost-benefit that they can save, and we have to make sure that it's available for everybody. There's something from a community perspective. That will continue to grow. Industrial solar will grow. That hasn't really taken off yet. If you think of the roof spaces that are on large industrial units, there's an opportunity there. Behind-the-meter batteries have really started to move. Even seeing the 1 July incentives from the Federal Government, they've started to pick up to a level people didn't read, so I think that hockey curve will

continue. I think you've got another one coming even after that, which is a vehicle battery. If you think of the size of a vehicle battery and the technology that's working to do grid to home and home to grid from the car, that has really started to move as well. All those start to play out, and that adds to the opportunity you've got when you transfer from fossil fuel.

LEANNE PICKERING: On the community battery side, at Endeavour Energy we've got the largest fleet rolling out in New South Wales in the community battery program. There are 86, but 30 of them are in the Illawarra between about 18 suburbs. There is a big effort, and that means a lot of people can share in the benefits of that. The benefit of the community battery program is you don't have to have solar on your roof. It can help renters; it can help the more vulnerable in our community. You can still be part of the program and share in that solar energy.

The Hon. GREG DONNELLY: Thank you both for coming along today. I'll give some context. Part of what we'll be doing is putting together a report, which will hopefully work out how we can explain some pretty complicated ideas and technology associated with what we're dealing with here. We'll do our best to explain it in plain English. The general statement in your opening about Endeavour not being a provider of energy any longer but a taker of energy—would you elucidate on that and expand a bit on what it clearly means so that people who read the report can have a clear understanding about precisely what Endeavour is as a company today and what its projection is as a company into the future?

GUY CHALKLEY: If you just go back, from a distribution company, what would have happened in the past was energy would have been generated by a coal-fired power station, it would've moved into a transmission line, it would have been stepped down into a distribution company, an Endeavour, and it effectively would have gone to an industrial or a house, and it's a one-way flow. Obviously what has happened with rooftop solar is generation has actually come back the other way. Effectively, in the past it was how much generation you needed to actually ensure that the customer and the industrial had enough power. Now you have power coming back the other way. That's the fundamental change that has really happened.

What did it mean for our network? Work had to be done on our substations et cetera that were built to have a one-way flow. They now have to have a two-way flow. There are challenges with rooftop solar that certain areas are so heavily built with rooftop solar. A new suburb could be 90 per cent rooftop solar, and so from that point of view we have to make sure our network can cope with the fact that generation is coming back the other way. We're effectively a giver and a taker by default now and have had to rebuild the network in some respects or adapt the network to compensate for the fact it probably wasn't built for that purpose originally. The network has survived very well and has been very resilient as that has played out.

The Hon. GREG DONNELLY: Forgive me for not appreciating the technical detail here about the networks across the State and across Australia, but with respect to the energy coming back—and let's take an example like a new suburb or even an existing suburb with a high uptake of solar—are there circumstances of—and forgive me for the lay language—wastage of it where it comes back and isn't capable of being diverted or stored so it's able to be actually used? Or the way it's set up is that that is always enabled that there isn't any wastage.

GUY CHALKLEY: There is the opportunity, and that probably goes back to the earlier question that was asked. The ability of data to now capture that and data to actually understand what's happening, you couldn't have done in the past with just a mechanical meter. There is lots of technology that has probably improved that gets us into a better position to where we were sort of five to 10 years ago. We can actually now have the ability, which is then where do we want to put a community battery? Where do we want to store that energy? You want to put it in the areas that might be pushing more back into the network as opposed to a community that might be using every bit that's generated on their rooftop. They actually might be utilising it.

You want to understand how much and you want to understand what times it comes back, so that's very important as well in terms of the time of the day. All of that starts to play out, but it really is based on the fact that you need to be able to have the ability to see it on a real-time basis to be able to make an insightful decision on how to use it. If I can offer something, 10 years ago everybody was worried about what the peak energy usage was going to be at 6.00 p.m., and every year it was getting higher and higher. Interestingly, it still is, but the challenge you've now got is it's also getting to a negative at midday. Now they're not only saying it used to be what the peak would be, now it's also what the smallest amount will be. That is how much has changed in the last few years.

The Hon. AILEEN MacDONALD: You mentioned urban REZs as only part of the solution. Could you tell us what that would look like? You mentioned making investment to keep downward pressure on, say, the price. How would this help with keeping that downward pressure?

GUY CHALKLEY: I think if I look at the options that have played out on the renewable energy zones, I think they can provide different solutions, so they're not all going to be the same solution. One appears to be more transmission; others don't necessarily have to be. Some of the renewable energy zones appear to be in an area that has quite mature transmission as well, so what other options are there? For us, can it stop some of our investment if we can actually start to utilise some of the rooftop solar? Can we get a better option that is a battery that might defer some of the more heavier investment that we might have made in a substation and things like that? All of that starts to play out. The Illawarra obviously has a much higher population. It's in an area that has a much higher population than, say, Central-West Orana. All of those factors start to play out. If we can actually utilise the modern technology and the options available that maybe weren't there a few years ago, then we've got an option in terms of what we might invest in that pushes prices down in terms of our solutions we could provide.

The Hon. AILEEN MacDONALD: Why do you think or believe the potential for urban REZs hasn't been pursued in the past?

GUY CHALKLEY: I think it's gathered momentum. I think it's like anything. It's quite new. In the history of energy, it's still relatively new, but it's probably now been reasonably well tested in various jurisdictions around the world. Again, it suits, therefore, certain areas. That's one of the reasons we have certainly thought that the Illawarra is an ideal location for an urban REZ in terms of its penetration that it's already got, in terms of where its industry sits, in terms of where the population sits. It's sort of there. I think they have been piloted quite well in the past. But it's interesting—I don't think they are now being piloted because the technology is emerging. I think the technology has emerged. I think the challenge we have now got is to get them to a scale that actually works. That's really where we want to push it to going forward.

The Hon. AILEEN MacDONALD: When you're talking to your customers, are they aware of the urban REZs as you have been speaking? What's their impression? Are they happy to go in that direction?

GUY CHALKLEY: Again, we have done, I would say, certain areas—certain pilots—to a reasonable extent for now, but still quite small. That still took a lot of customer engagement to get to a stage where that's a project that could then get off the ground. If you looked at 2515 from a postcode perspective, I'd say that was something that definitely had strong engagement, working with people that were local to that community. I think that got us to a stage that is effectively a mini urban REZ, in some respects, in terms of what was playing out.

LEANNE PICKERING: For our regulatory proposals, which are every five years, we have a peak customer committee which we consult with. We have a customer panel, which involves various groups and different customer segments—rather than those that are just very savvy with energy, it would be across various customer groups. I think 2515 was a good example of the community coming together and being supportive. But with Endeavour Energy we did do a lot of community consultation and a lot of trips down—the same with the microgrid at Bawley Point. There were a lot of boots on the ground explaining the concept, and very early on.

I think that's where we have started on the urban REZ for the Illawarra back in May this year. It's still got a lot of technical work to be done. We are still working closely with EnergyCo. We have to work with the AER as well, who sets the rules about what can be done within that program. Community consultation will be key. It doesn't mean that there won't be anyone who is unhappy or won't still have questions. I'm sure you'll hear from others later today about differences in opinion. But we will consult with customers as we go through at various levels.

The Hon. AILEEN MacDONALD: Just on that, in the Hunter, they were talking about having community hubs for that sort of consultation and information. Do you think something like that would work in this region as well?

LEANNE PICKERING: I think the community hubs work. We have a presence down here. A lot of the time the community hubs are in larger regions when they don't necessarily have a presence. We do have a presence here, and it will depend on how it rolls out in the future as to who is the single source of truth. That is probably the question there. I know for the CWO REZ—the ACEREZ—we've got the community hub in there. It is trying to bring people together and give them the information firsthand rather than just rumours.

The Hon. AILEEN MacDONALD: I have one other question. Knowing that an urban REZ isn't the only solution, do you have an update on where the offshore wind zone is at the moment? How does Endeavour play in progressing it or not progressing it? Where are you up to with that?

GUY CHALKLEY: It probably doesn't for us. Offshore wind as a solution would then be connected to a transmission line, which would then be connected to us as a distribution line. We're sort of agnostic. You've got a view from the wider energy perspective, but not in terms of what plays out. We would literally be asked to connect—at some stage—offshore wind. That's where we would sort of play a part in it. But even that would be after it would be connected to a transmission connection.

The Hon. AILEEN MacDONALD: If that doesn't happen, you've still got other balls in the air.

GUY CHALKLEY: Yes, totally. I think that's what you're seeing. You are seeing that there needs to be a few balls in the air as you transition out of coal. It is important that you use both the benefits of transmission lines where they can be used—and they will be needed—but you also need to use the benefits of downstream generation that is playing out in distribution.

The CHAIR: Going to some of those questions that have already been asked, obviously BlueScope is a big user of power in the Illawarra. Have you done any assessment as to whether BlueScope's power needs can be met through the shift towards rooftop solar as one of the main sources for the Illawarra as a REZ, or will they need one of those other balls in the air?

GUY CHALKLEY: We've definitely worked quite closely with BlueScope, but they've also got solutions for themselves as well. I think a bit of it plays out with different solutions. They're a very heavy user, but it's one we've coped with in terms of the history so far. They've certainly got their own solutions as well that they've been playing out, so it's a bit of both—a bit of partnering and a bit of their own solution.

LEANNE PICKERING: They were involved in those early discussions about what would suit in this urban REZ alternative as well. They have their decarbonisation plans. They will ultimately work out which way is the most useful for them as well.

The CHAIR: Their decarbonisation plans are quite intensive in terms of the power they will need to do that. What are some of the other balls that you are talking about, in terms of being up in the air, besides the batteries and the rooftop solar? It seems like offshore wind is being put on the backburner. For how long, we don't know. What are some of those other balls in the air that you're talking about that might be options?

GUY CHALKLEY: I still think they're looking at how to use transmission. That's still part of their options in terms of how they can feed into some of the transmission lines that are there, which is then going to utilise the top-end wind and solar that's available. Again, I think it's early days. We've certainly reached a memorandum of understanding with EnergyCo on an urban REZ. BlueScope's needs will be factored into that in terms of the Illawarra, one, to work out what their needs are going to be, and feeding into their decarb road map as well.

The CHAIR: The energy Minister has a bill before Parliament. If it proceeds how we expect it to proceed, it will prevent providers from charging customers for them exporting back into the grid. I wanted to get your thoughts on how that might play out with Illawarra as an urban REZ, and you relying on those customers to export back into the grid; on how would that impact you as a business; and on the whole concept of rooftop solar and exporting back into the grid.

LEANNE PICKERING: I think some of it would need to look at what incentives are there in regard to rooftop solar and what comes in. At the moment, there are limits to what the grid can take, as I mentioned, in regard to any one time. Part of the technical is in ensuring grid stability. I'm not the engineer, so I won't go too far down into those technical areas. I think the issue is that we do have solutions, and there is technology that continues to advance in regard to ensuring that we can support that solar coming back. We're looking at concept of flexible export so that people could maybe curtail it sometimes at some stage of the day, but then at other times they will have an incentive to be able to export double the amount and ultimately save on their bill during the year. The use of AI and smart-meter data will help facilitate that. We'll keep looking at different technologies and solutions.

The CHAIR: Are you currently charging people to export at the moment? Would that model shift?

LEANNE PICKERING: With the exporting, that is part of retail. What we are not is a retailer.

The CHAIR: You're not a retailer? Okay.

GUY CHALKLEY: Flexible exports is a really good example of how data has allowed you to offer a customer a better solution. As Leanne said, there was a fixed limit to how much you could export back, which was five kilowatts. We changed it to 10. The only reason five was set is you haven't really got the visibility to—we thought you couldn't do any more than five. Once you had really good real-time visibility with eight, it could be 10. As Leanne said, that might then mean that there might be a period sometime in the year that you might have to curtail the customer, but you can actually work with the customer to explain that. You can actually export more back at different times, but there might be a curtailment on a certain time of the year or certain days, so customers signed up on that basis because that was a much better option for them than having a fixed limit of five when they could actually work towards 10. But it is the data that has given the opportunity to be able to play that sort of flexible exports opportunity.

The CHAIR: Can I just ask about the 2515 project. Why was that postcode chosen as a pilot? It's a fairly affluent area. Why wasn't a set of suburbs that are probably more working class and probably lower socio-economic chosen as a project to maybe drive power prices down? Why were affluent suburbs in the northern areas of Illawarra chosen?

GUY CHALKLEY: I'll go first. That had really good customer-consumer support for it. What we certainly learnt when we did Bawley Point was that was so key to getting a project off the ground. Again, we partnered definitely with Rewiring Australia there, who sort of did very well from a community perspective. It was also a pilot. It would be nice to see if it can work. I think if you can actually see it work and then you can move into maybe something that's not quite as affluent, that actually starts to play that out. But take the learnings from the first one that's got really good support and prove that the project can work. We see 2515 as an expansion sort of opportunity. Do it on a small scale there but then take the learnings and take it to somewhere that then does have maybe less support to start, maybe harder support to somewhere, but at least you've got a project that's not desktop that might work. You've actually got some things in the community that are actually functioning and providing benefits.

The CHAIR: Did the high number of home owners versus renters play a part in that decision in terms of engagement?

LEANNE PICKERING: Not as much. It was about that community engagement because it does require a lot of rewiring—it is about changing appliances in houses, hot water and things like that. There is some work that goes in, so there are various phases. It was as much the community, and it was a lot of town hall events that were explaining it and what could be the benefits for the whole community. I think there are still renters there who will then be making their choice—making it known to landlords and trying to get them all in—so the landlords and the renter were there.

The CHAIR: Was it you that identified 2515, was it Rewiring Australia or was it something that you came together on?

LEANNE PICKERING: Yes, it was varying discussions and coming together.

GUY CHALKLEY: Yes, I think Rewiring Australia was certainly a good lead in that that we could partner with, and they've ended up being a very good partnership for us.

The CHAIR: Just going back to the exporting power back, what the grid can take and what the transmission lines can take, what's the level of investment needed in that space to get it up to a point where we are largely relying on rooftop solar for Illawarra?

GUY CHALKLEY: I don't look at it in terms of a level of investment. We're heavily regulated so we've got a five-year submission in, so in terms of where we put the investment in, we've probably tried to understand what that investment might be needing. So there's no more investment as such from what we got in the regulated. But, as Leanne said, it's early days on Illawarra, whether some of that gets carved out and gets very specific for the Illawarra. But I say that's one of the reasons we're doing the pilots is the pilots are actually showing us how we can do this.

The CHAIR: So you don't have a planned scope of works yet organised in terms of what you would need to do?

GUY CHALKLEY: I think at a very high level at the moment I would have to take it on notice for the actual dollars that we've actually worked on that one.

The CHAIR: Sure. I just wanted to gauge your response to the announcement yesterday from Tomago aluminium smelter that they're closing down. Obviously, they're a large industry. Up in the Hunter we've got our own large industry, with BHP. Does that concern you in terms of what might be needed to keep BlueScope powering and providing jobs in the Illawarra through this transition?

GUY CHALKLEY: Certainly, our models assume they're still there. So we're not actually modelling to say something's going to be taken out, unless you, obviously, were in an area that—you knew one of the coal plants were being closed. But we're still, effectively, modelled, and so our investments are, obviously, based on what we're seeing.

The CHAIR: Yes, but your models would be based on trying to keep them here?

GUY CHALKLEY: Definitely.

The CHAIR: You're confident that your models can keep them here? Obviously, Tomago's excuse was cheap, reliable power. Are you confident that your models will be able to keep them here?

GUY CHALKLEY: I think it will. I think the cheap, reliable power is a different angle in the sense that—where do you place that plant for the cost of the power? But, in terms of where we think we can supply the power, I think we're confident the models do actually work. I think you're always going to get a challenge with somebody who then chooses to go offshore or chooses to go elsewhere. You're going to try to work with that customer to, obviously, assume that they stay. That's probably a much bigger question than Endeavour itself, from that perspective. But, in terms of Endeavour being able to supply the power, that's certainly where we would see our key responsibility.

The Hon. GREG DONNELLY: In terms of drawing on, to the extent that it exists, international experiences in other jurisdictions, be it a nation-state or a state itself within a country, is there anything that you're able to learn from what's being done overseas? Or are we in a situation where you're, essentially, developing this as your own intellectual property, to be able to run the business on the lines that you're projecting into the future? Is there anything that we can learn from overseas?

GUY CHALKLEY: I think we have. I think we're foolish to think we're insular and we can only do it ourselves. So we spent a lot of time, both informal and formal, in terms of MOUs with different companies. We do a lot of work overseas and share our people resource to learn from what others are doing. I think, from our experience, Australia is very much at the forefront, in terms of that rooftop solar. They're one of the biggest takers of that. They're a long way behind on, say, EVs, in terms of—if you look at some of the learnings that others have gone through. But we certainly work with other countries to see what technologies they're utilising and what works and what's not, and I think we've got to continue doing that. I think the whole world is chasing the same thing. The whole world is, obviously, moving from fossil fuel to renewables. Some of the challenges are very similar, and so the cohort and the collaboration is pretty strong across the world. I think that would have to continue.

The Hon. GREG DONNELLY: Since you raised it, let's segue into the issue of EVs. What's the issue with EVs that you'd like to put on the record?

GUY CHALKLEY: We know we've been a late taker in terms of the EVs. I think we've had a big challenge for a number of years where we didn't have the infrastructure, and what's the point of having the infrastructure because you haven't got an EV, and then the EV saying, "What's the point of having an EV if you haven't got"—I think we've learned from that to say you've got to have the infrastructure. I think we'll start to move much better now on having the infrastructure for when the EVs actually come. We probably learnt from some of the mistakes that the Europeans made. I think our infrastructure is getting better. But there's still more work that needs to happen there. For us, we're seeing the potential advantage of a vehicle battery and what that could provide in terms of, if you can discharge to the grid, what could that actually offer, as well, from a stability perspective and a future network perspective.

The CHAIR: Just picking up on that EV, do you see the market at the moment is turning back towards hybrid vehicles rather than straight EV? Do you think that would change what the investments need to be geared towards, in terms of infrastructure, at all?

GUY CHALKLEY: We're seeing definitely, just in terms of our network generally, I think, the cheap availability of the Chinese vehicles, which are generally not hybrid but are pure EV. That's definitely been a big take-up in the last year. I think the price point's definitely helped on that one. So it's not necessarily that we're seeing a move back to hybrid. I think there's definitely now a push to EVs. But again, there's still a long way to go. I think the modelling is still a fair way out in terms of real high-penetration EVs.

The Hon. CAMERON MURPHY: To pick up on that point again, I know in Norway they utilise hydro-electric power during the day, most people charge their EV while they're at work, then they take it home and they use it to feed into the grid at night-time, or to charge. Do you see the potential for that type of use in Australia in the future?

GUY CHALKLEY: Yes. Again, in terms of working with customers and communities, getting the incentive to charge at the right time is going to be key. That's the bit that's really going to help the network in the future. You clearly don't want it all charged at the 6.00 p.m. peak, you want it charged at a different time. But you've got to then make sure the incentives are there for a customer to be allowed to do that. That's very much on people's radars, because that's a real opportunity as that starts to play out in years to come.

The Hon. AILEEN MacDONALD: I was going to ask about the bushfire season, in terms of whether you have a specific protocol for planned outages during the season, and will renewable energies impact any of that?

LEANNE PICKERING: I can take that. There is a protocol that we have in regarding bushfire season. We have to have vegetation management, and cutting and clearances around mines has to be done in September and in October. As to what we go through in a year when there are total fire bans, there are certain ways that we

won't operate the network to ensure that there are not sparks in case there are branches on lines or things like that which we have to actually patrol. In regards to renewable, we have different protocols in regard to fire management and in regard to the learnings and what may happen with lithium and what goes on, but teams will be well trained on that. In the more regional areas, I think it will still be a matter of looking at what the settings will be on the network at various times.

The Hon. AILEEN MacDONALD: And are you confident that can be managed?

LEANNE PICKERING: Yes, I think we're confident. There have been a lot of learnings as well. Close collaboration between the services like the RFS will need to happen so that learnings can be done. Even with Energy Queensland, we will do a lot of knowledge sharing, and throughout Energy Networks Australia there is a lot of knowledge sharing throughout the industry, and then also with other fire services, about how to manage.

GUY CHALKLEY: The technology that's played out in the last few years gives a real opportunity for bushfires. One of the classic ones that's played out is standalone power systems. In the event of a big bushfire, you lose power. The real challenge of losing power is firstly that you lose communication, and secondly that you lose water, because you can't pump. One of the things they found with standalone power systems is you've got this more standalone ability to therefore pump the water that actually gives you an opportunity that you might not have had during the previous bushfires. So some of the technology has really started to work as a better solution than just having a long grid with power that comes from one source. I think you'll see more of that in more remote locations going forward.

The Hon. AILEEN MacDONALD: With Electrify 2515, I don't know if you did this, but working with, say, landlords and strata, have there been any barriers in how you scale—because it's not individual landholders, but when you're talking with landlords and strata, how have you been able to work through that?

GUY CHALKLEY: I think it needs more engagement. I think it's more unique than just dealing with the owner of a property itself.

The Hon. AILEEN MacDONALD: But it's not impossible?

GUY CHALKLEY: But it's not impossible. They've got their own commercial interest that you have to play through as well. But, again, there's a better long-term solution for the property that they've got, and that, in the future, might have a better rental value. There are lots of things you can still play out, but it's like anything, you've got to work and spend a lot of time committing yourself to have that engagement.

The CHAIR: Just quickly on that, given the amount of development that's happening in the centre of Wollongong with apartments, is it your view to be on the front foot with those developers and having those discussions with them about doing a similar project in terms of what happened in 2515—to have them be built and then go through the process of re-electrifying? Is that what you're looking towards in terms of the next steps in expanding your project?

LEANNE PICKERING: For some, we do. Some developers are more proactive than others, but we do try to—we've worked with some big developers in regard to what they can do with batteries and solar up-front, on an individual basis, once we get there. Our connections team get those application requests and there are opportunities for those discussions at that stage. But, ultimately, it's an investment decision for the developer. But I'd say that often incentives and things like that—it's probably explaining it through and there are roles for us, there are roles for government in that space as well, about getting those right, those markers for how to do it.

The CHAIR: That takes us to the end of our session with you. I think you only took one question on notice.

GUY CHALKLEY: Just on the costs, I think.

The CHAIR: Yes. The secretariat will be in touch regarding getting that answer back, and there may be some supplementary questions we put to you in writing. Thank you very much for your time.

(The witnesses withdrew.)

Mr MARK HORNE, Individual, sworn and examined

The CHAIR: We now welcome our next witness. Would you like to read a short opening statement?

MARK HORNE: Unfortunately, the New South Wales representative to the nation on lobster matters had a nasty injury yesterday, so I'll be reading a statement on Mr Westley's behalf. He's asked me to take all questions on notice, through the Chair, via email. He just thinks that's a fair process without having any representation today, rather than to put me under scrutiny. This is like a little story; you'll enjoy this. This is in our backyard, out here on the ocean.

The Hon. GREG DONNELLY: How is he going, by the way? Is he all right?

MARK HORNE: He's good. He's had a shoulder put back in and a bit of surgery. I think he's fine, yes. He does send his sincerest apologies. Scott has been in the industry for 40-odd years, right around, representing New South Wales to Western Australia. I think it's fair to say they're going through their own transition at the moment, with some sonic testing over there which is really playing havoc with their lobsters. This is New South Wales's story. It's my honour to read this on his behalf:

> Good morning, my name is Scott Westley and I have been a lobster fisherman for 40 years. Today I am here representing the NSW Rock Lobster Fishery only. The NSW Lobster Fishery has two distinct sectors; inshore and offshore. The inshore fishery, as the name suggests, operates from around 0.5 metres of water depth near the rocks to approximately 20 metres. The offshore fishery generally has two depth zones: the mid-shelf, around 100–120 metres, and the continental shelf, ranging from about 150–240 metres in depth. Back in the 1980s and early 1990s, the fishery was in a very depleted position, with far too many boats and absolutely no management at all. This coincided with the increased advancement in both boats and accompanying technology e.g. GPS's.
>
> Serious fisheries management discussions commenced in 1993, and developed into the fisheries management we have today. I have been actively involved since the first discussions of management and continued to be involved for over quarter of a century, until Mark Horne took over in 2019. The fishery became a share managed fishery, which introduced significant reforms including:
>
> - Substantial reduction in the number of active fishers
> - Implementation of TACCs (Total Allowable Commercial Catches) and ITQs (Individual Transferable Quotas)
> - Mandatory tagging of every individual lobster;
> - Introduction of maximum size limits to protect breeding stock (which has since been further reduced)
> - Verification of catches within two hours of landings and
> - A demerit point system for compliance purposes, resulting in potential share forfeiture
>
> Over the years since the implementation of management, several businesses have lost their shares due to noncompliance thus resulting in share forfeiture. All this has made the fishery highly sustainable, robust and profitable thus making the shares valuable. Around 10 years ago, the NSW Rock Lobster Fishery was declared to be back above pre-Second World War stock levels, and the outlook was extremely positive. We have recently achieved MSC certification (Marine Stewardship Council), a globally recognised standard of sustainable fisheries management.
>
> The NSW Lobster Fishery is quite unique, where most of the breeding stock is in the North of the state, above Newcastle. The large proportion of the eggs when hatched and become small lobster called Puerulus, settle on the South Coast. Therefore, each year around Christmas, once lobsters reach a certain size, we see a mass migration. The lobsters migrate from inshore to offshore waters and then northward along the mid shelf and the continental shelf.
>
> However, studies conducted overseas on both lobsters and crabs have shown that electromagnetic fields produced by subsea power cables and related infrastructure, can be highly detrimental to crustaceans. These reports are available if required. The two offshore sites identified for proposed offshore wind farms are positioned directly in the middle of this migration path. This poses a serious risk — potentially leading to the collapse or even extinction of our state's lobster stock.
>
> At present, the NSW Rock Lobster Fishery is arguably the most successful fishery in the state, generating a GVP (Gross Value of Production) of around $12–14 million annually. There are 9,621 shares spread across roughly 100 businesses, with about 70 vessels actively fishing. A collapse of this fishery would bring financial ruin to hundreds of families and associated industries—and would also deprive the public of access to local, sustainably caught lobster or if able to, catch one themselves.
>
> To give some content, a single share currently trades for around $16,000, meaning my—

Mr Westley's—

> 440 shares are worth approximately $7 million, in addition to the income from my 9+ tonnes of quota. If this fishery were to collapse due to offshore wind farm development, who would be responsible for compensating us for both the current asset value and future income losses—for myself, my family, and future generations?
>
> I want to make it absolutely clear: we are not opposed to renewable energy or wind farms. What we oppose are projects that present a direct threat to the lobster fishery, the marine environment, and our way of life.
>
> My question is—why can't these wind turbines be located along the escarpment, where they are accessible by road in all weather conditions and free from the corrosive forces of the sea? Alternatively, Jervis Bay could be considered—it offers shallower, calmer waters where fixed-bottom turbines could even act as fish attractors rather than disruptors, without impacting lobster migration.

> It's also important to remember that NSW regularly experiences East Coast Lows, with winds reaching up to 70 knots, swells recorded up to 20 metres, and the East Australian Current running at up to 5 knots. It is difficult to imagine how a floating, anchored structure taller than the Sydney Harbour Bridge could withstand these extreme forces. The risk is enormous—it's a disaster waiting to happen.
>
> Finally, it has recently come to my attention that off the coast of Fremantle, WA, wave turbine technology is already in operation. These systems are designed to lower themselves to the ocean floor during periods of excessive swell, then rise again to operational levels in the water column when seas are calmer.
>
> This setup pumps water through pipes to a shore-based turbine, meaning
>
> No electricity generation occurs at sea …
>
> The system is built from recycled plastic …
>
> The water, after passing through the turbine and generating electricity, can also be directed through a desalination plant to produce drinking water …
>
> This seems like an innovative, environmentally responsible alternative. Has anyone explored the potential for implementing this technology in the Illawarra region?
>
> Thank you for your time.
>
> Scott Westley

The CHAIR: Thank you. The Committee has agreed to have a free-flow of questions. I might just start off.

MARK HORNE: Mr Chair, in response to what Scott and I have delegated, we've decided not to take any questions on the floor today. If any questions wish to be directed through you via email, once we are back together, we are more than willing to answer questions. Based on my legal advice at current, there is no way I'll be answering any questions here today alone.

The CHAIR: That is your choice to do so. That essentially means our time with you is over.

MARK HORNE: I apologise for that sincerely in Scott's absence. But that is the direction that I have been given today, both from legal teams and Mr Westley himself.

The CHAIR: Sure, no problems. I'll collect those questions on behalf of the Committee and they'll be essentially sent to you like supplementary questions would normally. The secretariat will be in touch in terms of time frames to get them back to us. We pass on our well wishes to Mr Westley. We look forward to hearing your responses back to our questions.

MARK HORNE: I'd like to say thank you very much for the opportunity to present that on behalf of the NSW Lobster Fishery.

(The witness withdrew.)

(Luncheon adjournment)

Mr ALEX O'BRIEN, President, Responsible Future, Illawarra Chapter, sworn and examined

Mrs AMANDA DE LORE, Vice-President, Responsible Future, Illawarra Chapter, sworn and examined

Mr JIM PINKERTON, Consultant Power System Engineer and Past President of Electricity Engineers Association of NSW, Responsible Future, Illawarra Chapter, sworn and examined

The CHAIR: I welcome our next witnesses. Would anyone like to make a short opening statement?

ALEX O'BRIEN: Thank you, Chair, and members of the Committee. My name is Alex O'Brien. I'm the president of Responsible Future Illawarra. We are a volunteer-run organisation fighting for fair treatment and honest information in energy decisions that protect the Illawarra's future. I'm joined by Amanda De Lore, the vice-president of Responsible Future and an incredible grassroots campaigner who has been there since day one, and Jim Pinkerton, who is a power systems engineer and past president of Electricity Engineers Association of NSW. He is Responsible Future's lead engineer and has spent over 1,000 hours modelling the costs of floating offshore wind.

We are a strong community. We have more than 17,000 Illawarra locals who support our organisation. Our community opposition to this project has delivered 2,000 people at a rally at Flagstaff, the nation's largest protest against the renewable energy project, which included 250 surfers at a paddle-out. We've had 5,000 people attend community information sessions that have been run and paid for by the community. We've seen 35,000 petitions and submissions in the community opposing offshore wind. Some 65 per cent of submissions to the Federal consultation opposed offshore wind. Eight developers have withdrawn based on community backlash, costs and weak winds. This is a region strongly opposed to offshore wind. We are not a fringe minority.

This has been a David and Goliath battle. We are unpaid volunteers. We receive zero fossil-fuel or special-interest funding. Meanwhile, the climate energy groups campaigning in the Illawarra have about $25 million per year in combined revenue, backed by renewable billionaires like Cannon-Brookes through his Boundless Earth organisation; foreign foundations, many of them from the United States, including one organisation that received $1 billion from the Biden administration; and party-aligned activist groups like Good for the Gong, fronted by Greens members and candidates, Labor branch presidents, union officials and associates of Simon Holmes à Court. In our opinion, these are not grassroots movements and in no way represent the community or the majority.

Many of these climate groups have a paid salary. Melbourne-based group Friends of the Earth advertises a paid role in the Illawarra for $85,000 to influence views and sentiment for offshore wind. Our community was aggressively attacked by a media organisation that had $688,000 provided to them by Climate 200 and its donors in 2022. So when people ask us, "Who funds you?" I urge this Committee to ask the very same question of every witness today, "Who funds your group and how does your group financially benefit from this renewable energy zone?"

We're here today as unpaid volunteers because we live here and we are raising simply our community's legitimate concerns. We are not anti-renewable; we want a credible, sustainable transition. The Illawarra has already faced one major failed renewable project: the Oceanlinx wave generator. It broke loose from its moorings, it rusted in the oceans for years and left taxpayers to deal with the wreckage while parties—the Government and the developer—fought it in court for six years. We will not accept experiments like that again in the Illawarra, let alone something 200 times the scale of that project.

The offshore zone and green ammonia plans cut through a major whale migration highway, the East Australian Current and continental shelf; areas of marine abundance; huge rocky reef ecosystems; Bushrangers Bay, a grey nurse sanctuary and one of Australia's best snorkelling spots; Five Islands sanctuary, a sanctuary for little penguins and an albatross habitat; Bass Point, a world-class whale watching area. Transmission lines also proposed by the Spanish developer are to go through Killalea regional national park, a protected coastal reserve. BlueFloat's own studies identified 104 threatened marine species offshore and 91 threatened species onshore. Our certified sustainable lobster and prawn fisheries, among the first to get that certification in Australia, are in jeopardy. Local operators of those fishing operations are clear: Two-thirds of the entire red prawn catch is in the Illawarra. "There just can't be an Illawarra offshore wind zone," one of them said. Frank, from Better Choice Fisheries, a multigenerational family-run business that has employed hundreds of locals, said, "If this windfarm goes ahead, my business will not exist." These are real livelihoods; these are not hypotheticals.

The REZ depends on floating offshore wind and green hydrogen technologies, which are unproven at commercial scale, not currently viable and would drive prices up dramatically. BlueScope's energy bill very clearly, based on current UK strike prices and the electricity that BlueScope would need, would see their energy bill increase from $200 million a year to $5 billion per annum. With the news of Tomago just yesterday, this is a

real concern for the steelworks in the Illawarra if we continue down this path. This is not a pathway to green steel. This is a pathway to no steel in the region. This is deindustrialisation disguised as decarbonisation.

What we simply want is a pause in this project. We want a new consultation process with the community. We do not want developer PR or government mistruths. We want independent full system cost analysis and environmental modelling to happen before anything proceeds, and we want a pathway to protecting Australian industry, jobs and sovereignty. We want to contribute to the energy solution. We have made this clear to Minister Sharpe as well, that we would have liked to be involved in the discussion about the urban renewable energy zone. But we refuse to be an experiment and we refuse to be lied to as a community. We ask the Committee to ensure that decisions affecting the Illawarra are grounded in evidence, accountability and genuine local consent. We thank the Committee for the opportunity to speak here today and we welcome your questions.

The CHAIR: Thank you. The Committee has resolved to have free-flow questioning, so the questions can come from any one of us, including Mr Murphy, who may appear on a screen in front of you.

The Hon. AILEEN MacDONALD: Is the Illawarra chapter part of a bigger group? If so, what are the other chapters and what do they do?

ALEX O'BRIEN: I suppose when we first started the association, we thought we'd take that structure and replicate it in other areas, but to date we haven't set up another chapter. What we found was that a number of those communities already had a well-grounded group, and they were quite developed in terms of fighting for their respective communities.

The Hon. AILEEN MacDONALD: On the ground in the Illawarra, when you've been debating renewables and that kind of thing, on both sides of the argument, would you say the tone has been respectful or aggressive? How would you describe that?

ALEX O'BRIEN: I think it was a mix, and the problem all stemmed from the fact that it was such a poorly rolled out consultation. It was rapid-fire consultation sessions. The panel that they put together were not a wide range of experts. You had controversial figures in there that have been very divisive in the community. What was clear from the community's perspective is that the panel did not understand this project. Naturally, it's a new type of technology. There are only 25 turbines that are floating in the world, and they were planning 300 at that time. The lack of information and knowledge from the panel members was what really infuriated the community even more, and that's what led to a huge expansion in community opposition and the creation of a number of groups online. Our association came together to try to bring those groups together and try to approach this in a professional, strategic manner, to try to tone down the issue and the community discussion.

The Hon. AILEEN MacDONALD: You say that you're not opposed to renewables as such, from what I gather, just the offshore ones. Having said that, what specific capabilities or industries should government leverage first?

ALEX O'BRIEN: Should government leverage first in terms of—

The Hon. AILEEN MacDONALD: In renewables. I know you're opposed to the offshore ones but not opposed to renewables as such, so what should we be doing?

ALEX O'BRIEN: I think the first real reason for floating offshore wind was to produce green hydrogen. That's what Matt Kean came in 2022 to promote with the Hydrogen Hub. It was seen as a way to decarbonise the steelworks. It was seen as a way to create export revenue by exporting green hydrogen via green ammonia to countries like Japan, South Korea and Germany, to help decarbonise their heavy industry. But what was very clear was that with the amount of energy that would be needed to actually produce green hydrogen, you just couldn't achieve a cost-competitive outcome. So the whole premise of the entire project fell apart once a number of issues and failures happened with green hydrogen.

It's not just us, but a number of people, individuals and renewable advocates who have been in the industry for decades have also admitted that, basically, this green hydrogen was hyped up. It was like the dot-com boom, to use Tim Buckley's own quotes, where they basically now advocate that they need to look at alternatives to green hydrogen like electrification as, potentially, an alternative. Interestingly, as well, steelmaking around the world is grappling with this issue of how do we decarbonise. It is a hard-to-abate industry for a reason. Again, the difficulty comes in terms of green hydrogen trying to achieve that, which Jim can talk a bit more about on the cost side there.

What steelmakers are now looking at doing is actually dividing up the steelmaking and producing iron first, through green iron. That's why there is a focus in Western Australia, with a pilot program with BlueScope, BHP and Rio, to try to make it work there with renewable energy—again, a small pilot program, which is just to test to see if it is achievable.

Again, even BHP has come out with some concerns there. They just can't see it working. There is interest in Whyalla as well with BlueScope at the moment. That may be using an electric arc furnace, which is different to the blast furnaces we have here. I think it is a global issue at the moment. I don't think there's a quick solution at this point in time for steelmakers. But BlueScope CEO Mark Vassella has been very clear that there is no Future Made in Australia unless we have a gas reservation policy. This has been echoed by former Labor members and union leaders as well. This is a clear issue for heavy industry in terms of looking at gas. If you look at natural gas, it is a way to decarbonise—not completely, but that is a first immediate step that could be considered.

JIM PINKERTON: Could I add to that? In terms of cost for green steel, my reading internationally is that in order for green steel to equate the current form of steel manufacturing and provide that energy through hydrogen, you would need a cost of energy of less than $50 per megawatt hour. Our estimate is that this project will produce energy at around $800 per megawatt hour. That just blows the concept of economic green steel manufacturing out of the water for this area.

ALEX O'BRIEN: Just to add to that, BlueScope, in multiple climate action reports—the latest they provided was in September—indicated that the energy they would need to produce green hydrogen would be between 13 to 15 terawatt hours. To put that into perspective, that is the equivalent of the entire energy grid of South Australia. Even if you made floating offshore wind half the cost of what it is today, it will still make BlueScope steel uneconomical and unsustainable. If we want to kill the steel industry and force BlueScope and steelmakers to go down the floating offshore wind path with green hydrogen, they'll just move offshore. Mark Vassella has made it extremely clear that he's got a responsibility to his shareholders, so why invest in Australia if energy is three to four times more expensive than the United States? They do have a number of operations in the US which also include nuclear.

JIM PINKERTON: This proposed offshore wind farm can generate eight terawatt hours per annum with the capacity factor that exists out there. They need 10 to 13, so it can't provide the energy they require for steel manufacturing.

The Hon. AILEEN MacDONALD: If we took offshore wind off the table, what projects would you recommend for this REZ?

ALEX O'BRIEN: I think we've been clear that we've been supportive of household rooftop solar and batteries.

AMANDA DE LORE: Yes, definitely.

ALEX O'BRIEN: Again, you've got to understand there are implications with that as well. But from an environmental point of view, it is less damaging. In giving consumers and households immediate benefit as well, there are positives there. But there is still an issue for the national grid of how to cope with so much solar as well—and further to that in terms of replacement costs. They're challenges, but they're something we would be more considerate of. Again, there are many challenges. The Illawarra's emissions predicted for households is not as significant as other parts of capital cities.

The Hon. AILEEN MacDONALD: You mentioned in your opening statement, with regard to the panel, that communication wasn't ideal.

AMANDA DE LORE: I'd love to comment on that.

The Hon. AILEEN MacDONALD: How can it be better managed so that there's not misinformation and still continued transparency, so you don't have communities against communities? You guys have got to still live here and get along with each other long after the consultation process has finished. How can that be better managed?

AMANDA DE LORE: How we're actually sitting here today—most of us found out about this through a letterbox drop. I was shocked, because I hadn't heard anything about it. It started with three people in a coffee shop who wanted to know more about what was happening, because it was such a major project but it wasn't advertised well. Except for the little pamphlet in my hand, we knew nothing about it. So, like most of us, I went on the internet and started finding out other people who were interested in doing this. Their big concern was how come—the letterbox drop only went to the major roads. There were all these people in the back communities that didn't know anything about it. When we started asking around, no-one knew anything about it. In a week, we had organised our first meeting. We ended up with people who knew a lot about the environment. They came to have a talk to us about what they thought the implications could be.

We found the consultation process appalling. They had these meetings. I went with a big list of questions, but not one person could answer any of them. That led us to question why aren't we able to access this information. When a major process is done, such as in Shell Cove, you're presented with a big grid of what's going to happen

and where it's going to happen. This had no information. Every time we asked about something, nothing came back. That forced more and more people to go onto the net. A lot of the information that we got was actually from government websites that we all had to compile together to create a picture of what was coming, but that should have been readily available. It was appalling.

As Alex was saying, when we did ask questions the press was very hostile towards us, simply for asking what are going to be the impacts on our community. No-one has ever come to speak to the fishing industry. No-one has spoken to the paragliders. No-one has gone down and spoken to the people who care about the whales. What I'm saying is, no government representative spoke to them. So we took it upon ourselves to say, "Tell me what's going to happen if this goes ahead. You tell us the implications for your industry," and it was horrific. That then spurred all of us on to organise a rally. Our main aim of coming together was to inform people that this was coming. Because, honestly, the government information was so scant and so badly delivered.

As Alex was saying, I went to these meetings which had a lot of social media personalities but there weren't any engineers; there wasn't anyone to tell us about the impact. There were no environmental people. I think one had an environmental person, Dr Jodi Edwards. But that was it, out of all of the meetings. There were a lot of social media stars there and people pushing the idea of it, but the information was not there. So right from the beginning there's a big lesson to be learnt here. You really need to talk to people. You need to organise specialists in the area. As far as we found out, it sounded like the developers are responsible for the environmental impact studies. If that's true, that's appalling, because their main driver is profit. No-one could tell us any different. They didn't know.

I have to say, I spoke to a whale expert. I asked her, "Do you know this is coming?" She said yes. And I said to her, "Do you know anything about how they're going to do the environmental impact studies?" She said to me, "The Government has got that in hand." As the whale expert, she knew nothing about how this was going to be dealt with environmentally. When you leave out the environmental consulting people—and this is a unique area, as Alex was saying, so we have a lot to safeguard here. I don't think that our interests have been met. The State Government are the same. We've found that they haven't presented us with where things are going. It's been, "We've heard that they're going to Killalea" or "We've heard that they're going underneath Lake Illawarra."

But you really have to come up with more concrete things before you present an idea that's going to change the whole way of life of a community. That wasn't done here. It was actually appalling and the community have been treated disgracefully. When people became aware of the implications of this, it's amazing how the tide turned and they thought, "We're all for renewables but not for this." I think knowledge is the key and we weren't getting that. We had to find it out ourselves.

The Hon. AILEEN MacDONALD: How could it be improved? Would a community hub add to that?

ALEX O'BRIEN: Yes, I've seen the suggestion of that community hub which is just all the same climate groups who are all getting conflicted funding. I don't see that as being the way to get that information across. What should have been done first and foremost was any modelling that was done, the cost-benefit analysis should have been revealed to the community. We are talking about a seven to nine trillion dollar transition as per the net zero report which was done by Princeton and University of Melbourne and even funded by Twiggy's Minderoo Foundation. That is a gold document there to be referred to. It is an expensive transition and therefore we have to go down that path. Every single dollar needs to be spent wisely. If we waste money on the wrong projects, that means there's less there. Governments have responsibility as well to the taxpayer. Taxpayers and voters will always make a decision based on what's the benefit of going down one path versus the cost of living, housing crisis and the like.

I think being up-front and transparent with the community—we've got 30 freedom of information requests out at the moment and we have been pushed back several times. An accumulative total of thousands of dollars we've been asked to pay for information that should be public. We have reached out to many Labor Ministers, the Minister for climate change himself for a meeting. We've done that several times now. We appreciate things got a bit heated but we still think it's important to have those conversations. When there are heated moments like that, and because they didn't roll out the consultation well, they should have tried to tone it down themselves but they didn't. They antagonised the community. They called them Trumpian, they called them cuckoos, they called them—again we've heard it several times, anti-renewables. We're not anti-renewables. I think it's really important that government representatives, when things are heated, do what they can to try and tone things down and sit with those individuals and those communities to try and understand.

Also be careful with the language that you're using. Don't say, "Offshore wind won't harm whales." You cannot say that. The developers in their environmental referral indicate that 104 threatened species will be impacted by this; thirty-six of them significantly impacted. We've seen that from whale activists. You've got Paul Watson, founder of Sea Shepherd. He's very vocal on offshore wind and whales do not mix. He even posted this

himself on Facebook. This is not something that's come out of the US or an organised Atlas Network. This is Paul Watson who spent 50 years chasing Japanese whalers to protect whales. He's reached out to our community. He's told us his views. He's posted about this.

When we've talked to conservationists in whale groups, they are afraid to speak out. They've been told they're not allowed to speak out on this, but they are actively against it. They've told us this. We are seeing this in the conservation movement at the moment. We've seen Christine Milne come out and say there's a problem with the climate non-for-profits at the moment. She's tweeted this. We've had Steven Nowakowski, a former Greens candidate come out and he's documented the destruction of rainforests with these projects. We've got also Bob Brown who's fought against Robbins Island and Marinus Link. I think it's okay to oppose projects on environmental grounds and also from an economic point of view, but to dismiss those concerns by elected government officials, it just infuriates the community even more. That's definitely an area the Government needs to work on.

The Hon. PETER PRIMROSE: Thank you for coming. Page 9 of your submission, if I can just read one of your sentences, says, "Responsible Futures (Illawarra Chapter) Inc is of the opinion that nuclear energy should be considered as part of the mix for baseload power." Can you give us the reasons you support nuclear power? And where you would locate it in relation to the Illawarra?

ALEX O'BRIEN: Just before Jim jumps in, I think what we're clear on is the energy main issue at the moment for the Illawarra is clearly dealing with gas for BlueScope Steel. They've been very vocal on that. They've re-lined their blast furnace, which is going to require coal for the next 10 or 15 years. Therefore, floating offshore wind and green hydrogen are not immediate alternative options for decarbonising the steelworks. We don't necessarily feel there needs to be an alternative energy option at this point in time that needs to be discussed in regard to nuclear. There is still a lot there that needs to be done, but it's more at a national grid level. We don't believe there should be a ban.

JIM PINKERTON: I'm part of the engineering group with Responsible Future. I'll quote the Tasmanian Premier who was recently elected. He said, "I don't like fighting against something; I like fighting for something." What we found we were doing was fighting against the wind farm for a whole lot of valid reasons, so we asked ourselves, "If you're against it, what are you for?" As a power system engineer, I'm strongly in favour of having a strong and viable base load form of energy. Renewables in the forms that are currently being developed are not base load. They are intermittent. They are unreliable. They are unpredictable, and they can lead us into a state of instability within the power system. What are the alternatives to base load? There are two. One is coal, which we've relied on for eons, and the other is nuclear. I've looked closely at nuclear, and nuclear is the safest form of energy production in the world today. I'll make that statement very clearly and very strongly. It is the safest form of energy production. Also, nuclear is in a development stage. I know you'll say "Fukushima" and "Chernobyl".

The Hon. PETER PRIMROSE: I'm pleased that you are saying those.

JIM PINKERTON: But they are generation II reactors which, if left uncontrolled by human intervention, can fail catastrophically, and they did. The current day generation III and III+ reactors—and we're headed on to IV—will passively save themselves and will not go into a thermal breakdown as those two have done. If coal is not the answer, the only other form of base load—and I certainly strongly believe in a strong base load form of energy—is nuclear. Nuclear can be in various forms. There is lots of development going on in the world today, particularly in the area of thorium, which has a far shorter storage life. I'll be honest: I was a signatory to the letter that went out into the public advocating nuclear energy. I don't advocate it as the total and only form of energy, but I do advocate it as a form of base load energy.

ALEX O'BRIEN: That letter also had signatories like Dick Smith and Craig Scroggie, who is the CEO of NEXTDC. Obviously, they manage data centres in Australia. To BlueScope's point of view, they are reducing emissions in the US with their electric furnace, with an energy grid that does have nuclear. We feel we need to be agnostic with energy if we are to truly decarbonise. But still, steelworks have an issue, especially with blast furnaces, in terms of how to decarbonise. That's why we've seen a bit of a shift in where steelmaking is done. Traditionally, it has been near coal deposits, and that's why BlueScope steelworks were set so close to our coal cliffs. Your challenge now is being close to a cheaper energy source and also iron ore deposits. Again, this is another reason why they're looking in the Pilbara, and at Whyalla to look at electric arc furnace steelmaking.

The Hon. PETER PRIMROSE: You've made your position on nuclear clear.

The Hon. GREG DONNELLY: Thank you for coming along today. We appreciate it. Page 5 has the diagrams of the fixed-base turbine versus the floating. This is not a trick question in terms of, "Do you support one that might possibly be less disadvantageous?" It is a factual question. Looking at the two, is there viability and efficacy associated with the fixed turbine model as opposed to the floating turbine model?

JIM PINKERTON: The simple answer is no. Our friend Mr Bowen has dictated that this REZ will be no closer to the shore than 20 kilometres. That has pushed the REZ in total over the edge of the continental shelf. The depths range from 135 metres at the closest edge to over a kilometre deep on the outer edge of the REZ. You cannot—and the world has never been able to—achieve fixed-base turbines in that depth of water. It's pretty simple.

The Hon. GREG DONNELLY: Do we know approximately what the depth of water is that would be defined as or seen as a maximum depth for the fixed turbine?

JIM PINKERTON: About 60 to 70 metres—and we are double that to start with and getting deeper.

ALEX O'BRIEN: And that's not even factoring in the floating substations.

JIM PINKERTON: That creates huge complexities, when you have to go to floating. I want this Committee to realise that this is going to be a floating offshore wind farm. The entire wind farm and all its componentry have to float out there. The turbines have got to float, and they are going to be tethered to the ocean floor, possibly by catenary chains that will reach out to the ocean floor bottom. There could be three to six of those chains off each turbine. There could be two cables looping in and looping out. The underwater configuration of those—

The Hon. GREG DONNELLY: You can look on page 5.

JIM PINKERTON: You may not be able to see it, but there's the turbine. The cable will come down. It's then weighted down. They are looking for flexibility in the cable because it's going to rise and fall with the tide, it's going to yaw with the winds, it's going to suddenly be hit by the waves et cetera. These cables, which are extremely stiff, have to sustain those weather conditions. You want dynamic cables—they are called dynamic cables. Here is one of your stumbling blocks. There is no international standard for dynamic cables—none. All floating offshore wind farms that have been built in the world today are less than 50 megawatts and are experimental. They have used experimental cables from a standard that the cable manufacturer themselves has proposed. The international community has not agreed on the standard yet.

If you want to put 2,900 megawatts out there, you can bet your bottom dollar that the insurers are going to say, "We want a standard for you to commit to." And there isn't one. Alternatively, they say, "Go ahead with your standard, but here is the policy value, mate." And they will stumble at that value. That cable rotates and it's tethered down. There will be two of them because they will loop from there and then out to the next one and the next one and the next one and so on. We would contend that all that apparatus, including the six chains, the cables et cetera will be a significant impediment and a danger to cetaceans or whales, if you want to put it that way. Our Government has dropped this REZ in the middle of a whale sanctuary. I ask you, is that the brightest thing to do? They have done the same at Newcastle. All of these questions—I understand this Committee is concerned about New South Wales REZs. The offshore REZs are all floating windfarms. To my view, they are not sustainable. The other thing that is needed as a component of the offshore are substations. If you look at that in detail, it's a bloody monster. Sorry if I—

The Hon. GREG DONNELLY: That's all right.

JIM PINKERTON: It's a description. That will be about a 13-storey building. That's a fixed space one. You've got to make it float, bob up and down with the tides and incorporate inside it things that are very sensitive to move. There have been no developed floating substations in the world today. If you're considering whether you put a floating wind farm out there, you've got to ask yourself, "Can I get the componentry?" The answer is no. I know there are people trying to develop an answer to this. From the advice I get it's 10 to 15 years minimum away from a small one, and not one that size.

The CHAIR: How many would you need for the proposed—

JIM PINKERTON: We would need six of these out there. That is a 500 MVA—you might call it megawatts—substation. You need six 500s to bring that energy to shore.

AMANDA DE LORE: They were missing from the visualisation presented to us. The other thing that needs to be considered when we talk about offshore is not just what is going on the floating—it's the actual turbines themselves. One of those broke off in New Jersey—one blade. Can you imagine how many blades are going to be out there when there is over 150 to 200? One blade broke off, and all of the beaches right across the coast for kilometres were shut. It took them six weeks to clean up the damage from one blade.

JIM PINKERTON: Fifteen truckloads.

AMANDA DE LORE: Fifteen truckloads. Can you imagine if a few of those break down here? That's the end of our beach life. This has implications too for the way we use our beaches, because we live here with the

coast. We live in a place where we use the beach all the time, and not just for the economy. We use it socially too. All of that is being put at risk. This is happening overseas. At least we can look over there now and see this is what's happening. This could be happening here on a much grander scale if this goes ahead.

The CHAIR: I will just ask a couple of questions. Mr O'Brien, you spoke in your opening statement about your financials and this story that's been put out that you're funded by fossil fuel companies. You put out the allegations that the counterparts to your concerns—the green groups that we'll be hearing from this afternoon—are funded quite heavily by renewable energy companies. Are you able to table your financials, or will you commit to tabling your financials on notice, to put to bed the rumour?

ALEX O'BRIEN: We've got no problem with that. We'll sign a statement as well, as long as the other groups do the exact same thing.

The CHAIR: I'll put the same question to them in terms of—

AMANDA DE LORE: Sorry, can I add to that? We're a community grassroots organisation. Guess where our money comes from? Membership, meat raffles, lucky door prizes and passing the hat around at meetings. Nothing infuriates us more than these false allegations that our money is coming from overseas companies. How dare they say that to us. You know what that says? That says that we're not intelligent enough to run a campaign to safeguard our community, that we have to rely on overseas money and that we're not intelligent enough to use our own strategy. This organisation has ended up with people with a variety of skills. We've got people that can do event management and finance. We've even had lawyers involved. So we have people who are very talented here, all giving up their time. Not one person is paid. I'd love to see the same questions asked to those other groups. We can tell you—hand on heart—we are a grassroots organisation. I think really those questions need to be asked of some of those others.

The CHAIR: I commit that I'll be asking the similar questions about their funds because it's something that's been put out quite regularly by different proponents.

AMANDA DE LORE: Thank you.

The CHAIR: I'll just go to some questions around the proposed economic benefits. A lot was put out there around jobs and job creation with the offshore wind proposal. Have you as a group ever seen any credible stats to back that up or was it just a figure that was thrown out?

ALEX O'BRIEN: I think let's start with the big number that was released by Bowen through the RepuTex modelling, which was 604,000 green jobs. Now, again, that was criticised pretty significantly. It was the same organisation that put out the report on a $275 price reduction in energy bills. The modelling was quoted as the most comprehensive modelling ever undertaken. But the jobs are just not there. We haven't seen anything anywhere near that level of jobs created. Interestingly, out of the UK, a similar job number and a similar price reduction promise was made, so maybe they were using the same company. But what actually has come out of the UK, interestingly, is that there are actually more jobs created in climate groups as part of this green transition than there is actually in these jobs. We know from the Illawarra job numbers—when one of our members contacted the department, they did discover that the job numbers were just extrapolated from the Gippsland project, so no detailed analysis actually went into determining the amount of construction jobs and ongoing jobs. We know again with local union groups—who've probably been a bit disappointed with how things have developed—that they've also been clear that if it's not local jobs, then there's no deal.

What we're seeing with the number of projects across the world is that with a lot of these jobs, we don't have the technical expertise available, so a lot of the jobs have to come from foreign employees or they come from another region. There's been a claim that you can transition coalminers to become wind turbine technicians. Again, we just don't see that, and I haven't seen any numbers. In the Illawarra we've got 3,000 coalminers, and I haven't seen any evidence of one of those being transitioned to any alternative renewable energy type of job. We've got to factor in as well that if we push down this path we've got 3,000 direct employees at BlueScope and 10,000 indirect employees that benefit off the steelworks. We've got 15,000 people employed in tourism across the Illawarra. It's a $2 billion per annum industry. Then we've got our local fishing industry. Just one of those—Better Choice Fisheries—employs 100 people at the moment. And those jobs are at risk, let alone the other industries that will be impacted, like short-term accommodation and film and TV.

The Sea Cliff Bridge has been used many times for advertising, and I doubt a lot of people want that if there are turbines in the background. These are the size of Centrepoint Tower. If you're coming—like many of us do—across Sutherland shire and you go on Tom Uglys Bridge that's 20 to 25 kilometres out, you can easily see Centrepoint Tower from that distance. And that is the distance that this project is off our coast. So there are real concerns on the job side of things. We've also seen an acceleration in drones and robotics being used for offshore

wind maintenance. Again, that takes away jobs from locals. So we're not convinced that there are real local jobs of an equivalent level to replace the jobs that are at risk with offshore wind.

The Hon. SARAH MITCHELL: Some of the other areas I've wanted to ask about have already been covered, in terms of community sentiment and lack of consultation. But I just wanted to ask about the issue of decommissioning, which you did mention in your submission. This has come up a lot, particularly in more of the inland areas. People are concerned about what happens at the end of solar and, especially, wind? These companies might start a project but then disappear. I know you mentioned the wave project, but did you want to make any comments about concerns from the community around decommissioning?

JIM PINKERTON: One of the things we've done in our costing is to actually cost that, and I can assure you it is significant. According to *Harvard Business Review*, they estimate that the cost of commissioning is equal to the cost of construction. And that's quite significant. What I have witnessed in the world today is that a lot of the manufacturers get heavily involved with the provision of—componentry manufacturers get heavily involved in the initial project. Ørsted, Vestas et cetera, who are turbine manufacturers et cetera—Equinor is another one—quite often get involved in the initial construction and financing of the project. Throughout the course of the project, they then hand over their stake to someone else, a capital venturer or whatever, in order to then continue on to financially operate the wind farm.

I see a strong move towards not putting funds towards end of life or the demolition process that must take place. In a wind farm such as this, it's a very, very significant process. You will have 300 turbines, barnacle-ridden turbines, complete with chains, cables et cetera, that you've got to remove. If you want to restore the ocean floor, you've got to remove all these things and take them out. And that's not a trivial job. I've seen some proponents say, "We'll just cut the cables and let them drop to the ocean floor." That's not on if we want to maintain this area as a viable coastal area. The demolition is something that quite often gets put on the backburner: "We'll invest something towards it during the course of the project." They don't invest enough. At the end of the project, the big fear I would have is that—let's say it's a 20-year project. I think that's, roughly, the maximum life. At about 15 years, they might say, "We've done well out of this. We'd like to donate this to the community" and walk away and leave us with a junkyard of apparatus out there to deal with. It's not on.

AMANDA DE LORE: Because it's offshore too, they deteriorate faster than land. So their working life is much shorter than if they were on land. So they're going to be—we're going to be left with a terrible mess to clean up, and who's going to foot the bill? That's the big question.

ALEX O'BRIEN: And that Oceanlinx wave generator is still a sore point for the community.

AMANDA DE LORE: Prime example.

ALEX O'BRIEN: It was just over here that it was rusting for six years, for the Government and the developer to determine who was going to actually pay for the cost to remove it. It was quite close to shore, as well. That's a concern the community has. Interestingly, with the offshore infrastructure legislation in '21, a decommissioning was a discussion that the developers provided input into. Their view was, "Let's just treat it like oil rigs. Let's just leave it in the ocean. It creates an artificial reef", they say, "and so be it", and I just don't think this community, who's got a close attachment to our coast and is—the number one concern is the environmental impact of industrialising that ocean. We will just not accept anything to be left out there, and that's again another reason why we have fought so hard in this project.

The CHAIR: That takes us a little bit over time. But I think that was valuable. You have agreed to take some things on notice. You agreed to table financials. You can do that on notice if you don't have them to hand. Mr Pinkerton, it would be helpful—are you prepared to table those photos that you were holding up?

JIM PINKERTON: Yes. Of course.

The CHAIR: It was a little bit hard for some of us to see, but I think they might be valuable for the Committee to understand some of the scale of what's being proposed or was being proposed.

ALEX O'BRIEN: And I'm sure Jim is available for long chats if anyone would like to.

AMANDA DE LORE: Yes. He's very knowledgeable, our Jim.

The Hon. GREG DONNELLY: Can I just check on that point about financials. I thought that Mr O'Brien made that conditional.

ALEX O'BRIEN: Yes. We would like to see the same level of transparency with the other groups that come through, as well.

The CHAIR: Yes. As I said, I'll put that question to them, and I guess the secretariat will be in touch, in terms of whether they are so forthcoming as you are. That concludes our time with you this afternoon. Thank you very much for your time.

(The witnesses withdrew.)

(Short adjournment)

Ms MADELEINE HOLME, Good for the Gong, affirmed and examined

Ms YAEL STONE, Founding Director, Hi Neighbour, affirmed and examined

Mr FRANCIS VIERBOOM, Chief Executive Officer, Rewiring Australia, affirmed and examined

The CHAIR: We now welcome our next witnesses for the final part of today's hearing. Would any of you like to make a short opening statement before we go to questions?

MADELEINE HOLME: I will try and keep it brief. Good afternoon and thank you for the opportunity to appear before the Committee. I am going to talk just a little bit about Good for the Gong. We are a group of locals who joined together because we care deeply about climate change, the environment and the future of our community. We strongly support the establishment of renewable energy zones and the transition towards clean renewable power. We see the energy transition as an enormous opportunity for our region to create local jobs, strengthen manufacturing, reduce pollution and protect the environment for future generations. For the Illawarra, it can mean ensuring that the skills and ingenuity of our community can play a big part in Australia's clean energy future. But, to realise these benefits, the transition must bring people with it. That means community engagement that's genuine and ongoing.

Good for the Gong was formed because we were incredibly concerned at the mis- and disinformation that sprang up in our community almost immediately after the announcement of the Illawarra as a potential offshore wind area. Community groups like ours have worked hard to provide accurate information to people, but this responsibility shouldn't fall just to small organisations and volunteers after official consultation processes have ended. We believe that when communities are genuinely informed and included, when they can have a say about things like community benefits, they're far more likely to support renewable energy, and the transition will move faster, fairer and with less conflict.

The CHAIR: Ms Stone?

YAEL STONE: I am the Founding Director of Hi Neighbour, and we started our work in 2023. Just as a bit of background, we offer scholarships to local people to support them to pursue their clean energy career goals. We offer support for electricians, engineers, project managers, environmental stewards and cultural heritage management. We are really excited about the possibilities for employment and meaningful careers for local people within renewables, and we'd like to see those positive stories really flourish in our community.

We've been disturbed and directly affected by some of the community division around offshore wind. It's been really upsetting, on a personal level and a community level, to see that sort of social tear happen and continue. We haven't been able to come back together. It would be great to see some more support for groups like ours, and for anyone with concerns to have a forum and a way to come together and have a bit more support around those mechanisms, where people can start to heal. We're going in one direction, but we have to make sure there isn't massive social upheaval and wounds created in small communities like ours on the way to that destination. I'm really excited to be here and thank you for the opportunity to share the perspective of Hi Neighbour.

FRANCIS VIERBOOM: I'm here on behalf of Rewiring Australia and as a resident of the northern suburbs of Wollongong as well. Rewiring is an organisation that's focused on the science and the engineering that underpin our energy system. We also highlight the really important role that our communities and households have to play in the transition to renewable energy. A lot of what we talk about is small machines, about 60 million of the machines in Australia that burn fossil fuels. There are 60 million in total, and about 59 million of those are small machines that burn gas or petrol, that are in our households and in our communities. That means hot water systems, cooktops, cars and heaters. That ends up representing more than 25 per cent of the carbon emissions that Australia has to solve for. But it also represents a huge fraction of the change that needs to be adopted by people. These are decisions that have to be made millions of times by people all over the country, in communities like this, in communities in regional areas and in the inner cities as well. It's a part of it that we're all in together, and it's not going to be made in a boardroom somewhere else.

The good news is Australia is in an amazing position to benefit from it. We save about $4,000 a year on our household bills when we make the switch to electric machines instead of fossil-fuelled ones. It's going to be a really positive change for Australia, and we get to avoid importing $160 million of fuels every day when we make that change as well. But it's really important for people to feel the connection of these changes to their own community. The urban REZ that's been proposed here for the Illawarra is a great opportunity to demonstrate what renewable energy means in denser areas and not just in rural Australia. If we can maximise the solar and the battery that are on the rooftops of our homes, as well as on all of our businesses, we can run an energy system that costs less for everyone. If we can smooth out the energy that's moved across our grid throughout the day, that fundamentally lowers the cost of our energy bills.

Although we spend a lot of time talking about the role of households and businesses, the role of large industry is also incredibly important. I think that, unfortunately, the crucial role that BlueScope Steel plays in this region wasn't connected to the offshore wind project proposal sufficiently. The amount of power that is required to stop using coal to make steel and keep making steel in the Illawarra is really big. We won't be able to achieve it just off rooftops alone; we need to have big new sources of energy. The Illawarra has been powered by energy for a long time. Lots of people in this community still work in coalmines that supply the steelworks. For there to be a long-term future for that industry here, we need to have an energy future for this region too.

The offshore wind proposal might have provided up to four gigawatts of energy in the original shape that it was, and it could still supply big bulk energy that would be a huge benefit for this region to keep being a steelmaking place into the future. We're really keen to see people better understand the connection between the future benefits to the region and the underpinning engineering and energy physics that drive the need for there to be renewable energy abundantly here in this region.

The CHAIR: The Committee has resolved just to have free-flow questions. They will come from any one of us. I believe we now have two of our Committee members online, Mr Murphy and Ms Hurst—or maybe at least just Ms Hurst.

The Hon. SARAH MITCHELL: Thank you all for being here today. I wanted to ask—probably to each of you, because you all touched on it a little bit—around community information and what needs to be put out there versus some of the challenges and the community division, Ms Stone, that you spoke about. I think in the Good for the Gong submission you talk about having a community hub, or places where people can go. What would that look like in an ideal world? Who would run it? Who would be working out of it, and how do you think that would help the community? I'm happy for all or any of you to answer.

MADELEINE HOLME: I can jump in. What we found was that around the kind of consultation process for offshore wind, there was a big focus and then that process concluded, and there's a bit of a gap after that. The idea around having something like an ongoing presence of clean energy hubs is—I think in an ideal world you would have physical shopfronts that people could go to for a whole range of information, whether it's about how to reduce their household energy bills, whether it's about job opportunities and training opportunities for these new industries, but to have a physical presence and an ongoing presence in the community, and a real commitment to giving people information that's accessible but also evidence based, because we have unfortunately seen a fair bit of disinformation in the community. Being able to give people accessible, quality information and somewhere to go to have their questions answered—also, as Francis said, there are a lot of decisions to be made around electrification and things like solar panels and batteries, so a way for people to go and sit down with somebody who can answer a bunch of those questions for them—somebody that's trusted.

The Hon. SARAH MITCHELL: Like government? Who would you think would be best placed to run it?

MADELEINE HOLME: As long as it's trusted. I think it probably needs to have government backing, but access to people that are independent—not necessarily associated with an energy company or a developer, but independent and access to good information.

The Hon. SARAH MITCHELL: I think that's something we've heard in some of the other areas that we've been. People have all sorts of questions—and it's more for inland projects, but "If this is next to me, what does that mean? What are my rights? What can happen?" But you would advocate for something similar down here, even though obviously you don't have the advanced level of projects that there are in some of the other REZs.

MADELEINE HOLME: I think having a presence ahead of that, because what we saw is that emotions are quite heightened, and I think a lot of people thought with the offshore wind process that it was going to be banged up and there were going to be turbines out there really quickly. I think people didn't appreciate that these processes take time. There are several steps in the process—so being able to be there ahead of time to make sure that you're addressing and flagging what some of those concerns might be for government or for developers, so that they know there are certain questions they need to be able to answer as well.

YAEL STONE: I would only just point to the work of Yes 2 Renewables, and this is a big focus of their work. It's not part of Hi Neighbour, but I know they've kind of fleshed out a lot of these proposals for this energy hub-style work. I would just say I really support it, and it would be great to have many voices represented in those hubs, and ways for folks to connect into the community. Because I think our presence here shows there are a lot of people who really care about this stuff and who are doing the work on the ground. We just need those forums for connectivity with community.

The Hon. SARAH MITCHELL: I think to pick up on what you said, Mr Vierboom, the part about even the household role—it was interesting hearing you speak about cars, heaters and all of that. There is probably an information gap there for the community, as well, in terms of what people can do on their own.

FRANCIS VIERBOOM: Absolutely. I do think that there's a role for hubs and point solutions, and there's just as important a role for what the other people in your trivia team say over the pub table. That's, I suppose, the approach that we think about at Rewiring Australia—that this is a personal decision as well as a community decision that people are making through this energy transition. The reason why I get out of bed and get excited about this is because it's just obvious to me that there's a really positive future when we make our way through to all-electric homes that are healthier and cheaper to run, and locally sourced energy. That's something I just feel great about and look forward to.

I think that, as people adopt—especially, solar and battery are the mini-system that we're all looking to adopt at a nationwide scale. Luckily, we already have four million solar rooftops in Australia. A lot of people have started to understand the role of that energy and what it can do for them. We're well set up to make our way through this change, but it's going to be really hard because change is confronting and difficult and change that is 220 metres high is scarier than most kinds. But we need to make sure that, as people encounter this information, they've got a framework to understand why this transition is important.

The Hon. SARAH MITCHELL: Ms Stone, I was interested in you talking about the scholarships that you offer for people. Can you tell us a little bit more about those? Is it for people who are looking to transition out of other work into renewables or is it school leavers or everybody? How does it work?

YAEL STONE: I'd be delighted to talk about it. Thank you for asking. Our scholarship rounds seek to highlight the needs that we have and seek to provide this opportunity to inform the community, engage people in different conversations around what this transformation really looks like—that really positive future. I'll give you a few examples. That might be the most helpful thing. Our first round targeted local electricians. It was actually in collaboration with the Electrify 2515 pilot, which is connected to Rewiring.

The Hon. SARAH MITCHELL: We heard about that earlier today too.

YAEL STONE: An amazing community volunteer example. What we were seeking to say, as this project launched, was, "How incredible that we're creating all this work. Let's make sure our local electricians are set up to benefit from it." What we did was we had $20,000 to support 10 local electricians to go through the battery or solar design and install certification process so those folks came out ready to be part of that program. We had a real focus on coal-connected people in that first round, because we also seek to highlight that this is a coal community and we don't want to demonise folks. We'd seen a little bit of that and it wasn't pretty. We need to recognise that those industries have kept the lights on and those folks have really important industrial knowledge that can be, if harnessed well and supported well, transitioned into this new industry in a really effective way.

We had folks who were working underground who were upskilled. I can speak to Nathan Robert's journey. He has worked at BlueScope for over a decade. We have got him his certification as an electrician. He is now qualified to install solar. He has done work experience with some of our other folks that are involved in the program. There is this great community building. Our next round was for women and gender diverse people interested in entering these careers. There is no prerequisite. You don't have to be in coal. It's about supporting new journeys or journeys of transformation. There was an enormous amount of enthusiasm for this round. We actually had to close applications because we couldn't deal with the amount of applications. We're a small organisation. We had folks that—we're supporting two engineers, an electrician, a project manager and an environmental steward in that round. Just incredible stories, which I'd be happy to share—we've made some video stories that go along with each round.

For our most recent round, it was called First Power. This is really interesting. As an example of the urban renewable energy zone, what we did was we lent money to Buckaroo. They make tool belts for coalminers and electricians. They're a really successful brand locally. We lent them a certain amount of money to build 100 kilowatts of energy on their rooftop. They paid us back with interest with all agreed financial terms. The interest went straight into our scholarship fund. The interest has now paid for this First Nations round. In this round we've had some really fantastic engagement with the community. We've got three young men who are wanting to be electricians. We're supporting a young woman who is just setting out to do her PhD in marine biology and another woman, further along in her career, with kids, who is wanting to get a bit more serious about her project management and pivot into clean energy.

Those are just some examples. They're quite diverse examples. What we're trying to promote is this idea that in this industry, as we transform, we want to make sure it's open to everybody. We want to see that workforce be really dynamic and really diverse, because that's what makes it strong and inclusive. We're excited about that

vision. When Francis talks about getting up in the morning, I have that same feeling. We all have kids. Building that positive future for our children is so motivating in this. Having that be a place with real possibility is so crucial to me.

I shared in the submission we made for Hi Neighbour that it has been tough to build these systems and build this organisation to support future jobs given the commitments that were made in the REZ announcements. To see the $43 billion of potential investment in our community and then, down the track, nothing has happened, that's really disheartening. It's tough to set up an organisation on the basis of that promise and have nothing happen so far. We are trying to be as responsible and responsive to our Government by saying, "Hey, these wonderful things are coming down the line. Let's get ready." When they don't happen, communities lose faith. You build trust and it's misplaced. That has been a really disappointing part of the process.

The Hon. GREG DONNELLY: Thank you all for coming along. Can I just press you on this issue of information that enters into the public domain that informs debate about a public policy issue? Ms Holme, you used the phrase—and I'm not being critical here—"good information". How would you define what "good information" is? I presume everyone wants to be on the side of good information. Can you just help me understand what is good information?

MADELEINE HOLME: Yes, I can. We've really prioritised, at Good for the Gong, that anything we put out there is evidence based. We've relied a lot on experts at the university, people with expertise or peer-reviewed journals to make sure that when we're sharing information, it's grounded in expert evidence. We say "evidence-based information". Also, I would add to that and say that some of the best conversations that we've had have been when we've been out doorknocking or at street stalls, because you're responsive to the people that you're talking to. Not everybody is going to want to get whacked over the head with a scientific journal article. It has to be accessible but also responsive to what people's concerns and questions are. We've prioritised making sure our information is accurate but also that it's accessible and it's delivered in different forums, whether it's doorknocking or doing videos—we've got a YouTube channel—or on Instagram, so that you're reaching different audiences. We're catering to different audiences but making sure that what we're sharing is accurate.

The Hon. GREG DONNELLY: Assume there's an organisation X that believes it has good information it wants to put into the public domain and assert that it is good information, and let's assume for the moment that it contests with what you're saying is good information, how can that be resolved in practice?

MADELEINE HOLME: It's a big question that a lot of people are grappling with at the moment. How do you counter disinformation or misinformation in communities?

The Hon. GREG DONNELLY: Or an alternate view.

MADELEINE HOLME: Sure. I want to be clear: I think there's a difference. We've seen a lot, in our community, of people sharing information that is incorrect about the impacts on whales or that offshore wind turbines are going to change the weather or change the swell. There has been a whole lot of information that is incorrect. I use the two terms "misinformation" and "disinformation" because a lot of it is being shared by people who genuinely are concerned. They've read it and they're concerned about something. But we also have seen that there are some trends.

There was a journal article that I think we referenced in our submission that was intentionally put out there. It was altered from the original intention and shared. I think it's different when there's a nefarious kind of position behind it versus somebody has heard something and they're concerned. So we've tried to make sure that our information—again, yes, we're doing what we can as a community organisation that is volunteer run, having people share some of the information around their reasons for supporting renewable energy transition, actually trying to make sure that part of the community debate is what are the benefits people might like to see. Is it that they're interested in job opportunities and the great work that Hi Neighbour is doing? Are they interested in how it is going to bring down energy bills? Do they want to talk about community benefits schemes? So we are talking about some of that information, but also making sure that we've got access to experts and doing things like Q and As where people can come and ask their questions of somebody who is an expert in their field and they can give them a reliable, evidence-based answer.

The Hon. GREG DONNELLY: Please don't misunderstand me. I'm just trying to tease out. We live in a pluralist democracy—thank goodness for that—where there are competing views on public policy issues and it's not unusual sometimes to have heads knocking sometimes against positions. Is not calling out something put forward into the public domain which is just not true—and can be established to be not true—in fact the best way to proceed to uncover these sorts of issues?

MADELEINE HOLME: I don't think anyone has a perfect answer for how you really address disinformation because sometimes I think you're actually adding some fuel to the fire potentially. But I think there

are some really good processes and all of us in the community I think have been, as Yael has said, quite disappointed at how negative and how nasty some aspects of this issue have become in our community. I think there is a really good model that we've kind of been looking at in Gippsland. They had like a deliberative democracy process where they facilitated bringing together a whole bunch of people with different ideas to talk about their shared values, their concerns and how you could address them. So I think there are some really interesting processes for how you can really understand what is driving people's concerns or their fears or their worries and respond to that in a positive way. I think there are some good models out there for how you can do that.

The Hon. GREG DONNELLY: Are you able to elucidate on any more details about that? Who set that up? Can you talk to that in any detail?

MADELEINE HOLME: Yes. It was run by the Gippsland Climate Change Network and I think they ran it with an organisation called DemocracyCo. They recruited a representative sample of people from across Gippsland and they went through a several-step process, but basically that group came together and they spent a lot of time basically devising a road map for what they would like offshore wind to look like and the impacts they would like it to have in their community. I just read a report about it, so that's all available online, but it was really interesting in that it built social cohesion and helped to build empathy and understanding, but also to build the skills of the participants around how you have conversations where there are differences and debate. How do you do that in a way that's not pulling apart elements of your community but actually building that social cohesion? I think that's a really good model.

The Hon. GREG DONNELLY: Thank you, that's helpful.

YAEL STONE: I'd just love to echo. I've been sharing with Maddie that I've been recently learning about this collaborative design process that DemocracyCo have developed. I think structured processes that help us speak to each other with differing views, as you've mentioned, in a healthy framework—it would be so great to invest in those kinds of things in our communities because, it is probably hard to imagine, but it got really nasty in a very damaging way. We're a small community. The Illawarra is long and thin, so you're up against people all the time and there were physically threatening moments even, and times when I felt not safe. I got calls accusing me of all kinds of things that were simply not true from people who knew my home address. I've got two young children. I have a public face as well. It started to feel very unhealthy and really not what I'd signed up for when I tried to make a really cohesive, inclusive community organisation. I just want to echo Maddie's point that any structured programs that help us—all of us, with differing views—to regain the ability to talk to each other in healthy ways, I really support.

The Hon. GREG DONNELLY: That's very helpful.

The Hon. AILEEN MacDONALD: Could I just follow up on that, Ms Stone? You said that you were deeply disturbed about the division in the community. I gather from what you said that the debate regarding offshore renewables wasn't respectful. How would you describe it, then? You were saying you didn't feel safe. Was it people butting heads within the community, or was it the project people coming in? Why did it happen like that?

YAEL STONE: I think we were all very shocked, and I don't think, probably, any of us have all the answers. We don't know the parties that were invested in the different arguments. Certainly a lot has been written about this astroturf movement idea and where certain funding comes from. I can't speak to that. I know there are a lot of questions around that. It was just that it sprang up with such an energy behind it. I was on a panel with a local Elder, and her position on offshore wind is neither here nor there. But people made assumptions about her views and shouted her down while she was sharing her cultural story, speaking in language and being very generous. There were racial slurs being shouted in a small community meeting. It was like nothing I've ever seen in our community. I had people follow me to my car, shouting things at me, after that meeting. It was just out of nowhere. There was just a vitriol that was very unexpected and very disturbing.

The Hon. AILEEN MacDONALD: Could you see healing from this? What happens now?

YAEL STONE: I think that's why we're here. We'd really love to see some positive processes that bring us all together, because there hasn't been any healing, and it is upsetting for a regional community.

The Hon. AILEEN MacDONALD: I get it too. I can walk down the street in my home town and people will be yelling at me because of positions that I take, so I understand what you're going through. Ms Holme, in your submission, under "Improving Consultation and Community Engagement", you said:

> Consultation processes can often see opponents as the loudest voice, but not necessarily the voice that is representative of wider community sentiment. We believe this is potentially the case of offshore wind in the Illawarra.

Can you expand on this and tell us more about what you've seen in the loud voices not necessarily being representative of, say, the silent majority?

MADELEINE HOLME: Yes, absolutely. One of the things that we've done is some doorknocking in different parts of the Illawarra and different communities. We've found from that that, overwhelmingly, the people we speak to are, like, "I don't know. It seems like a fine idea," or they don't know what all the fuss is about, or they're not that bothered, or they haven't thought about it, or they're quite supportive. They feel like they're doing their bit, they've got their solar panels and they want to see this happen at a larger scale. We've had that repeated. We've done things like have street stalls and community events, and sometimes it is the people who are the most agitated and activated around it that you hear, whereas, for us, the more conversations we've had in the community and the more proactive we've been about reaching out to people, that's certainly been our experience. The vast majority of people think it's a good idea or they're not too fazed about it at all.

The Hon. AILEEN MacDONALD: So in your experience, you would say the sentiment has been quite positive, against what you might see on TV and at rallies.

MADELEINE HOLME: We've certainly felt all of the things that Yael was talking about as well. But I think what we've found is that the more proactive we've been to reach out to people and to talk to people, in a whole range of different settings and in person as well—obviously, there's a whole lot of conversations that happen online, but we've found that there's a lot less heat in it. Our take on this is it's a small but vocal minority who are very much opposed to offshore wind in particular, but it's not been our experience that that is reflected when we're out there engaging more broadly in the community.

The Hon. AILEEN MacDONALD: From your experience, can you see a way this process can be improved?

MADELEINE HOLME: What we would like to see is something like the project that we've seen in Gippsland, which has huge potential. I think that would be an amazing thing to do. In our community there has been a lot of division. We'd also like to have more ways for people to access information about it. Potentially that could be like a shopfront or an energy hub, similar to the model that Yes2Renewables has done a lot of work around. We think there's a real benefit to that. As I said, us being proactive about street stalls, Instagram and different kind of platforms could help. The more ways you have to engage the community around this, the better it is. We should also have a conversation about what people's hopes are for the community and what they would like to see. That taps into all of the things that are benefits to our community, from the retraining opportunities to being able to transition people from industries that are winding down into new industries.

The Hon. AILEEN MacDONALD: Mr Vierboom, I have a question for you regarding rewiring. We see that rental households in apartments are often excluded from benefits. What are the policies you believe the New South Wales Government should bring in or talk about or enact to ensure that individual renters in the Illawarra can share in the benefits that you're talking about?

FRANCIS VIERBOOM: That's a great question. I think there are two parts to that. One is about the need for there to be a planned transition off the gas network. Despite the fact the industry has promoted blending 10 per cent hydrogen into the pipes in an effort to prolong that piece of infrastructure, it's clear there won't be a way to have net zero gas into our homes. So, in my opinion, it's going to be important for the New South Wales Government to follow what Victoria has done, which is to set out a clear timetable that says, "We're going to stop replacing gas appliances." From 2027 Victoria plans to replace gas appliances with electric appliances for renters' heating and hot water systems. Some 65 per cent of gas burned in Australia is burned in Victorian homes, so that dings the bell on the supply chain for gas appliances in Australia. It's going to affect New South Wales, whether we like it or not. We need to stop building the problems into homes.

We're also calling for the Government to step in to ensure there is a finance option for homes to transition to electric and benefit from those bill savings. We've got a scheme design based on letting people borrow money from the Government, have it indexed to inflation and paid off when the house is next sold. It's an improvement to the home, and it's the right place to recover those funds. If you have a flexible finance option like that, then it's a reasonable step to start saying to landlords that they're required to make that upgrade. Sometimes that upgrade does cost money once off, to make that change. It costs money to unsubscribe from gas, but the savings last for the rest of the lifetime of that home. There are important options that cover lots of people. There are all kinds of issues that affect apartments, and retrofitting apartments will be important.

It's also important to act quickly to stop building gas into new developments when New South Wales has big housing targets to hit. When you're in a hole, you've got to stop digging. Overnight the City of Sydney confirmed that they're going to stop gas installations in new buildings. That's the smart move. I know that Wollongong council is also considering that move right now, as are other councils in the State. There is a lot of

grassroots clear understanding of the need to stop digging that hole. There are a range of policies that are going to work across people. But it is true that, as you mentioned, renters, who are nearly a third of households in Australia, have particular barriers. It's very difficult to avoid seeing solutions that are going to start nudging landlords to act at replacement time to deliver those benefits to rental homes. That's going to require the State Government to take a clear position at some point.

The Hon. AILEEN MacDONALD: You say community energy solutions can be an answer to that. What would you say would need to happen in, say, the next 12 to 18 months, or what actions should be taken to prevent, say, bill shock? Because that's what it all comes down to. When you get that bill, if renewables are going to cost more then they're not going to sign up for it. What kind of things, so the bills aren't going up?

FRANCIS VIERBOOM: If you decompose the energy bills at the moment, wholesale prices are relatively stable and the big issue that the urban renewable energy zone has the chance to address is the potential for costs to be added to the grid. That's nearly 40 per cent of the typical energy bill. The biggest single slice of the pie of what people pay for when they pay for electricity is the local poles and wires. If we can maximise the solar and battery that's actually onsite in businesses and across the street from you in your community, we can actually run the electricity grid in a way that reduces the capacity needs and the infrastructure build up needs of the grid. The success of a model like the urban REZ is really important. It's one that can be replicated all across New South Wales and across Australia if we get it right.

A lot of it amounts to streamlining adding batteries onto the grid. If we have a lot of storage spread throughout the grid at each layer of the grid, it gives you the ability to basically run the system really smoothly. A battery can take the edge off the peaks and soak up the extra energy out of the middle of the day and lets you run, if you like, a thin wire, you can run that constantly throughout the day and optimise the way that energy moves around. At a physics level, the opportunity to actually save a lot of money in the electricity system's future is to get that system right, and it amounts to a mix of land planning rules, connection streamlining that Endeavour Energy needs to deliver—and the electricity networks like it—and having the right economic signals for those batteries to act in a smart way that they get rewarded for doing that.

Some of it's going to be batteries and some of it's going to be electric vehicles as well, I should say. Basically, the more that we do to encourage vehicles to be charging during the day, the cheaper electricity system we get as well. I think it's important to think about things like requiring workplaces that offer parking to their employees to offer a power point that they can slow charge their car at. That kind of thing would actually make the electricity system billions of dollars cheaper over the course of decades as well.

The Hon. AILEEN MacDONALD: Things that could already be implemented. So smart little things that we can be doing straight away.

FRANCIS VIERBOOM: Yes, that's right. If you can even imagine like carshare cars that are electric that can be a community battery while they're not being a carshare vehicle. If you think about like the GoGet type things that are parked around the corner, that can be trading on the grid a couple of hours a day while it's not being driven around.

The CHAIR: I might start with you, Mr Vierboom. I was talking to Endeavour Energy this morning about the 2515 project and I put to him that obviously Wollongong is getting a huge lot of developments in terms of high-rise apartments, particularly around Collegians. We've got two big developments happening there that are most likely going to have gas as part of their development. I'm just wondering what engagement you'd had with developers that are doing big high-rise in Wollongong regarding your work in terms of electrification, and what engagement you've had with them. Because obviously the cheapest way to do that would be at the beginning, not having to retrofit afterwards. I know a lot of those developments that I mention are going to be low socio-economic housing. That's already been touted so, obviously, them having cheap electricity is part of that puzzle. What engagement have you had with some of these big developers in Illawarra to get them on board?

FRANCIS VIERBOOM: We haven't engaged with developers in Wollongong central about that. We've had general conversations with developers to try and understand why you're still building gas in. At some level, it's what they're used to. If you're a real estate developer, and most of your job is selling apartments off the plan and that's what drives a lot of your decision-making, anything you can do alleviate your fear that you won't be able to sell the apartment is what you'll do. That's my understanding of the main reason why people do it. It's another unfortunate example of a split incentive, where the developer is not motivated to deliver a home that costs less to live in. They're motivated to deliver a home that costs the least to build, and gas appliances are a little bit cheaper than more efficient electric appliances are up-front. But it's a great prompt to give a call to some of those developers and ask the question.

The CHAIR: Is there still an education piece you think that needs to happen around consumers choosing electrical appliances over gas appliances? Is there a consumer choice factor there that a lot of people like cooking with gas, like gas heating and have this notion that they get a better result with gas cooking? Whatever their reason is, is there an education piece that needs to happen there?

FRANCIS VIERBOOM: That's absolutely true, and it was a bit unfortunate that MasterChef signed a contract with the Australian gas lobby to promote the fact that they were blending a little bit of hydrogen into their MasterChef gas cooktops when lots of globally successful chefs use induction cooktops in their kitchens. They find it's cleaner, faster, safer and gives them more control. Frankly, that's my own experience after moving into a home that had induction.

It's also good to be aware that the AEMC that writes the rules for gas connection economics has published a draft rule that will ensure that the up-front costs of connecting to the gas network will be imposed on new connections, where it's currently amortised over a really long period of time and basically makes most new gas connections free at the moment. From 1 July next year it's proposed that the cost of connecting a building to gas will be much higher and cost reflective of the future of the gas network. I'm actually quite hopeful that will be another huge signal that will stop new buildings connecting up to gas. At the same time, I think it would be better for New South Wales people and for the developers to have a clear signal from the Government that that's the direction it's going to. That's what we've seen in the ACT and Victoria.

The CHAIR: Ms Stone, just going to some of your comments around astroturfing and who funds who, as a local I've heard this going back and forward as well. It's not always local people who are saying it; sometimes it's outsiders weighing in. I put the question to the group that appeared before you about their finances, because obviously allegations have been made of them that they're funded by fossil fuels and they're saying other groups are being funded by renewable energy companies. So I just put the call out. I asked them whether they would table their financials to prove where their money comes from. I extend that same offer to you, if you, on notice, would like to table your financials to, as you were saying as well, highlight where you get your funding from and prove that you are grassroots community-funded organisations. I think that would probably—

The Hon. SARAH MITCHELL: Alleviate?

The CHAIR: —alleviate all the BS that's going out in the community from all sides. Would that be something that you guys would be open to?

YAEL STONE: Yes, I'd be very open to that, and I'd like to add that I've never been paid a cent for any of this work. It has been volunteer from me from the day I started it, and I'm very happy to share how we've been funded. I might add that we have no money. You'll find that our bank balance is very, very small.

The CHAIR: Like a lot of community-run organisations.

YAEL STONE: Exactly. Just to be fully frank, we've received funding from philanthropic organisations like WWF and Groundswell, but I'm very happy to detail where our money comes from. We've only been able to pay people on a very short contract basis based on when those philanthropic funds come in, and I can confirm I've never been paid.

The CHAIR: How does that work? Given that it's intermittent funding that comes in, how does that work? You're obviously looking to do a lot of scholarships. How do you manage that?

YAEL STONE: We've been really innovative in the way that we've raised money. Our first scholarship was funded by Groundswell, which is a climate change-focused philanthropic organisation. They aggregate funds from donors and then they all vote on which project they want the money to go to. I will say that, from what I understand, of all of the philanthropic funds in Australia, 2 per cent of that goes towards climate change action. It's a very small and competitive piece of the pie. Our following round, the Women in Clean Energy, was funded by WWF. It has a program called Innovate to Regenerate. That was funded by that group. Our most recent round, as I mentioned, was this innovative way of raising funds where we lent money and then the interest that came back from that has gone to fund that round. We've got one more round that's funded in that way, and that's with a business called Thomas Creative that operates out of Unanderra. After that, I do not know where the money will come from. It may not come from anywhere.

The CHAIR: One final question for you, Ms Holme: You spoke about the Gippsland democracy project, and said that was set up or organised by clean energy—

MADELEINE HOLME: I think it's the Gippsland Climate Change Network, and they ran it with an organisation called DemocracyCo. They facilitate deliberative democracy processes.

The CHAIR: DemocracyCo was the independent mediator?

MADELEINE HOLME: Yes.

The CHAIR: That was going to be my question: Would there be more buy-in if there was an independent media that didn't necessarily seem to be picking a side in the debate?

MADELEINE HOLME: Again, I'm not an expert. I've heard about this project. I found it really interesting and read their report. But I believe it seemed quite critical to the success of it. You had people that are experts in that process of how to take different groups and different people on a process. I think having those experts run the process feels like it was quite critical.

The CHAIR: This is a question we have put at all of the inquiry hearings we've been to, and it's about the social cohesion, or lack thereof. Do you think it has stemmed from poor planning from government and just allowing the proponents to come in and pick and choose what information they give to the communities? Perhaps if government was more hands-on in providing that information and guiding what information was put forward to communities, do you think that would have helped to alleviate some of the angst and social disruption in the community?

MADELEINE HOLME: To be honest, we all live here and we were all deeply shocked at the response. We are locals and we didn't anticipate this. Also, this is a community where there are a lot of groups doing really great environmental projects. I thought it might have been a community that was more receptive to this, particularly because we are also an industrial town. It's a steelmaking town. I don't know that there is—I don't have any blame around that. I think we were quite surprised by it. One of the other things is there weren't projects here ready and it's a long process, particularly with offshore wind. I think a lot of the questions people had couldn't be answered because there wasn't a project ready to go, necessarily. I almost think that that timeline, people didn't understand.

Some of those questions may have been able to be answered if developers were more advanced in their thinking around it. We've all learned from this that consultation needs to be ongoing. It can't just be that you come in around a proposal and then leave. Despite the fact that there are lots of good organisations doing lots of good work in this area, it's under-resourced and challenging to be able to have that same kind of level of resources to do that ongoing and deeper engagement with the community.

The CHAIR: With eight developers now that have walked away, if one comes back, would you like to see government be more hands-on in that process?

MADELEINE HOLME: We've recently run a survey around what people's expectations are around the role of government with these big projects. I don't have the results on me, but it was really—

The CHAIR: You can take it on notice if you want to provide the results.

MADELEINE HOLME: Yes, sure. I can get that back to you. There was a really clear desire for people to have government play a leading role in things like the environmental monitoring and assessments. I think there is definitely a degree of comfort that people have with government playing quite a leading role in some of those protections around what it would look like.

YAEL STONE: I'd like to echo that. I think there's a really interesting tension point with the environmental assessments. For a lot of people that I spoke to, some of the real genuine concerns were about sea life and ocean safety as we roll out these big industrial-scale projects. People struggled with this idea that you have to approve the zone before you start the environmental assessment. I would agree it seems really counterintuitive that we can't get the information on environmental impacts unless we approve the zone. It seems like that process does stoke a lot of concern, because you have to approve the zone before you learn what's at stake.

It would be great to see perhaps a conversation between government and those private enterprise groups that want to invest about what kind of early up-front investment can they make in an environmental assessment before the rezone gets approved. We don't have a lot of that information on hand. So for a community to say, "Yes, we think this is a fabulous idea," having a deeply considered and well-funded process around an environmental assessment could really help the conversation. For those who were worried about it, the genuine concern centred around marine safety. It would be great to find a way to navigate that conversation so that we don't have the cart before the horse.

As a final statement, I echo what was said. I too was really shocked. I set up this organisation in anticipation of community division. It was more around renewables and coalmining than offshore wind in particular, but that is where the spark happened. We can't go back in time and change what's happened, but we have an opportunity to create some structure around healing. Certainly this DemocracyCo process sounds really

interesting, where lots of different voices can be heard and we can learn to talk to each other in respectful ways, even if we have differing opinions. I think we've got a real opportunity for healing in the future.

FRANCIS VIERBOOM: I see a strong and positive way forward. I think that the urban REZ concept has been widely welcomed. I think rooftop solar continues to be a well-understood technology that is going to help power the community forward. I think also, at an engineering level, the right step forward for offshore wind in the deep waters that are proposed here—it's a research and demonstration project. The Federal Government has announced a licensing framework for that. If we had one or two testing platforms that provide people with a visual indication of what this is going to look like and also some real evidence of the environmental impacts and potential, then I think there's a pretty clear path forward for people to see there has been rigorous analysis of the situation and that this is a project that makes sense environmentally and economically.

It shocked me to see, like it did these guys, the level of division in the community. I think it's worth noting that it came at a time when American media had just gone through a cycle of generating conspiracy theories about offshore wind off New Jersey and then this offshore wind zone was announced. To be honest, I think it was American stories that seeded a lot of the misinformation that got around. The largest anti-offshore wind group has a sticker that featured a whale underneath an offshore wind zone. The impacts on whales is some of the least substantiated concerns that the group brought to the table. I think that it was a bit of a moment in time. Everyone was a bit crazy from being stuck inside due to COVID in 2022 as well. It was all happening at once.

The Hon. SARAH MITCHELL: That's a good way to finish.

The CHAIR: That is a good way to finish. Thank you very much for your time and for your evidence. You have agreed to take a few things on notice. The secretariat will be in touch in terms of how you can get that information to us.

(The witnesses withdrew.)

The Committee adjourned at 15:25.