T R A N S C R I P T

LEGISLATIVE COUNCIL ECONOMY AND INFRASTRUCTURE COMMITTEE

Inquiry into the Closure of the Hazelwood and Yallourn Power Stations

Melbourne—Wednesday, 16 February 2022

MEMBERS

Mr Enver Erdogan—Chair
Mr Bernie Finn—Deputy Chair
Mr Rodney Barton
Mr Mark Gepp
Mrs Bev McArthur
Mr Tim Quilty
Mr Lee Tarlamis

PARTICIPATING MEMBERS

Dr Matthew Bach
Ms Melina Bath
Dr Catherine Cumming
Mr David Davis
Mr David Limbrick
Ms Wendy Lovell
Mr Andy Meddick
Mr Craig Ondarchie
Mr Gordon Rich-Phillips
Ms Harriet Shing
Ms Kaushaliya Vaghela
Ms Sheena Watt

WITNESS *(via videoconference)*

Mr Tom Quinn, Head of Policy and Research, Beyond Zero Emissions.

The CHAIR: The Economy and Infrastructure Committee public hearing for the Inquiry into the Closure of the Hazelwood and Yallourn Power Stations continues.

I acknowledge the traditional owners of the land, and I pay my respects to their elders past, present and emerging.

My name is Enver Erdogan, and I am Chair of the committee. I would like to introduce my fellow committee members present today: Mr Andy Meddick, Ms Melina Bath and Ms Harriet Shing.

To the witness giving evidence, all evidence taken at this hearing is protected by parliamentary privilege as provided by the *Constitution Act 1975* and further subject to the provisions of the Legislative Council standing orders. Therefore the information you provide during the hearing is protected by law; however, any comment repeated outside the hearing may not be protected. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament.

All evidence is being recorded, and you will be provided with a proof version of the transcript. But ultimately transcripts will be made public and put on the committee website.

We welcome your opening comments, but I ask that they be kept to a maximum of 10 minutes to ensure we have plenty of time for discussion. Could you please begin by stating your name and the organisation you are representing for the Hansard record and then start your presentation. Over to you, Tom.

Mr QUINN: Thank you, Chair. My name is Tom Quinn. I am the Head of Policy and Research at Beyond Zero Emissions. Thank you, committee, for the opportunity to make this submission today. I will keep my opening remarks brief in the interests of technological failure. Beyond Zero Emissions is an independent, solutions-focused think tank. We have been working extensively with industry and community in fossil fuel regions across Australia, and much of our work is focused on developing zero-emissions industry that can create good-quality jobs and utilise existing local industry skills and resources.

Now, much of our work has been focused on what we term renewable energy industrial precincts. We have identified 14 of these across the country, and Latrobe is one of those regions that we have identified as having high potential for establishing one of these precincts. Now, at a high level, what these precincts are are essentially clusters of industries which are powered by 100 per cent affordable renewable energy, typically located in industrial centres with good access to port infrastructure, rail infrastructure, energy infrastructure as well as that existing industrial base, and also have access to high-quality clean heat and green hydrogen potentially, depending on the local dynamics of the sector.

In two locations across Australia we have been conducting some very deep analysis, including in the Hunter region and the Gladstone region, which both bear some similarities to the Latrobe Valley region. Now, we have conducted quite extensive economic analysis of those two regions, and it showed that in the Hunter region if a renewable energy industrial precinct, or a REIP, is established, by 2032 that would generate $28 billion worth of capital expenditure and create 34 000 jobs and an additional $11 billion worth of revenue for the region. Across in Gladstone it is a much smaller region, but on a per capita basis the numbers are similar. There we see $7.8 billion worth of capital expenditure, $2 billion of additional revenue by 2032 and 11 000 new jobs in the region.

Now, when it comes to the Latrobe Valley, we are not as far advanced along our economic analysis as we are in those two regions, but the indicative numbers are very strong. We have been looking at proposed industries that could be established in the Latrobe Valley and looking at predominantly the direct jobs. That is the main game for us, 'What are the direct jobs?', because there is always a question mark on indirect jobs on a multitude of analyses. But just on the few projects we have analysed alone, it is showing a potential number of jobs created in the Latrobe Valley, if a renewable energy industrial precinct is established, of 2500. I expect that will be higher upon greater and deeper analysis and can really position the Latrobe Valley for a future that is strong, vibrant and has high-quality jobs. We are very excited about the potential of the Latrobe Valley.

Look, I will conclude my remarks there, but I am happy to explore in detail any aspect of this as well as what we see as the top priorities for ensuring a strong and prosperous future for the Latrobe Valley this decade.

The CHAIR: Thank you, Tom. Like I said, I appreciated your submission as well, because it kind of covered most of the work that you are doing and the issues you are interested in in terms of responding to the terms of reference. On that note I might pass over to Ms Melina Bath to ask the first few questions, then Ms Harriet Shing and then Mr Meddick, in that order. Ms Bath.

Ms BATH: Thank you. And thank you very much, Tom, for being here today. I am most interested in the work that you have previously done in the Hunter region, which is probably the most on par with the Latrobe Valley in terms of scale and population, without knowing it intimately. You mentioned that you had done a fairly deep-dive investigation into renewables and your position in that. Would you be able to give that to the committee—or an edited version of that—for us to be able to have a look at? Because it has been going on, but the issue is really new in that we are winding back on our power stations and we have to replace jobs, and if that is happening in the Hunter, it would be really good to have those comparisons to look at, if that is okay with you.

Mr QUINN: Yes, certainly. I can certainly take that as an action to provide you with the economic analysis. No worries at all.

Ms BATH: Thank you. That is helpful. I notice in your submission that you go to some of the potential growth areas and some incentives: the food-manufacturing precinct on Alexanders Road; the logistics precinct, the logistics hub; the Latrobe City Aerospace Precinct—there are some interesting things happening out there potentially, always lots of good things—and the CAAF, the Centre for Australian Automotive Futures. Knowing the Latrobe City Council's wish list—and it is far more than a wish list; it is a heck of a lot of work that they have done over a period of time into this—they are on their major list. From your point of view and your analysis, you are concurring with what Latrobe City Council is saying are some good priorities. Do you want to speak to that a little bit?

Mr QUINN: Yes, certainly. And I will also touch a bit on the Hunter dynamic relative to Latrobe too if I may.

Ms BATH: Thank you. That would be fabulous.

Mr QUINN: Yes, certainly. At a high level there are certainly strong parallels between the Hunter region and the Latrobe Valley region. Both have been really the energy powerhouse of New South Wales and Victoria respectively for over 100 years. It is a very strong story of industrial success and innovation as well as the deep skills across electrical engineering and management in both regions. We think that is a huge asset. It is something that we ideally would not want to lose going forward, but it obviously will have to change as our energy system changes. One of the key differences is Latrobe Valley has access to the Gippsland offshore wind zone, which has the richest offshore wind resources in the country.

Ms BATH: We are the windiest place in the world apparently. My washing can verify that.

Mr QUINN: It is nice to have the positive aspect to that. I am a Gippsland boy—not Latrobe Valley, more South Gippsland—so I fully appreciate the windiness of the region. That is very good. There is a very strong generation aspect to that that links in with the transmission infrastructure that is there. One of the key differences, however, between the Latrobe economy and Victoria more broadly versus, say, New South Wales, is that for New South Wales in particular what we are seeing in the Hunter region is the enormous export potential. It is very export ready for bulk commodity exports, predominantly green hydrogen and also things such as green aluminium and green steel going forward. We have conducted a separate analysis, called *Export Powerhouse*, which has been looking at the story nationally for that, but in short we have found a $333 billion export opportunity for these green commodity exports by 2050—huge; 2½ times greater than our fossil exports.

The Latrobe and Victorian economy is different, however. Traditionally we have not focused on bulk commodity exports, we have focused more on advanced manufacturing and value-added manufacturing, and that plays out particularly in places like the Latrobe Valley too. It does not have a port, for starters, so you are not going to be shipping large, bulky commodities out of the Latrobe. What you will probably do is create value-added, high-value products for predominately the domestic market but potentially further afield. There is certainly an opportunity for establishing a component-manufacturing sector for the offshore wind sector in the Latrobe Valley. There are a lot of parallels there. Those are the similarities and what I see as the key high-level differences between the Hunter and Latrobe.

In terms of the second part, could you just refresh me on the exact aspect that you would like me to address?

Ms BATH: I just wanted you to drill down—by the look of your submission you have had some good conversations with the Latrobe City Council. They have done some considerable work over time in their economic development sector. They are certainly talking about food manufacturing, the Gippsland Logistics Precinct, aerospace and the centre for automotive futures as being priorities, and you are in effect—I am not leading the witness here—endorsing them in your submission, Tom.

Mr QUINN: Yes, we are, absolutely. We definitely concur with that assessment of local skills and the potential. The food manufacturing space in particular we think has a lot of potential. The aspect which we are interested in, which I think can be drawn out further, is that in the food-manufacturing sector today a lot of heat processes are gas fired. Now, we know gas prices are rising very considerably. We know electricity costs are largely trending downwards. We have done a lot of research looking at how you electrify industrial processes like food manufacturing, and basically our technological heat pumps can provide very high temperatures that are suitable for the food sector. The reason I raise this is that it is not just the benefits of us, say, having a food sector. There is also the opportunity potentially to have an industrial heat pump manufacturing sector to meet that industrial need in somewhere like the Latrobe Valley that I would just like to bring the committee's attention to as a potential growth area for the region.

Ms BATH: And on that, there is also the thermal heat from below the surface.

Mr QUINN: The aquifer. Absolutely.

Ms BATH: The aquifer, there is potentially that. And, Chair, if you could indulge me with just one more. In your submission you have priority locations for establishing renewable energy industry precincts, and in Latrobe Valley you talk about energy to waste—or we say energy from waste where we are down here, with the Australian Paper and the very importance of them getting the raw material for their energy from waste facility to drive a lot of what they are doing—but also your zero emission buses, and I know Latrobe Valley Bus Lines are really leading the forefront of that Volvo technology and zero emissions, or ZEVs. Can you speak to those a little bit from your priority?

Mr QUINN: Yes, certainly. I think the priority and the core advantage for most of these regions is in the offshore wind sector and solar. I think there is probably going to be a role for different waste to energy, but I think it is more likely to be in the biofuel sector, so using, say, agricultural waste to create advanced biofuels to decarbonise tricky sectors such as aviation. So I would just, I guess, urge caution in looking at, say, using forestry waste or waste to produce heat or electricity directly. I do not think that is going to have a strong competitive advantage and particularly has some question marks over it for different subsectors of the investment community we speak to.

On the bus side of things, absolutely—enormous opportunity. Victoria has—actually, I do not have the figures to hand; I did half an hour ago—thousands and thousands of buses that will need to be converted, not just the state fleet but school buses, touring buses, the works. It is a very big opportunity. It makes a lot of sense to have local assembly. You know, buses are very large. It does not make sense to transport them in bulk. There is also a good opportunity—and whether this is the Latrobe Valley or Melbourne and Victoria more broadly—to establish a component manufacturing industry that is built to Australian standards locally, because one of the challenges we know that there is, that some parts of the electric bus sector are facing, is a lot of imported components are built for their domestic market, which, you know, might have a life of eight to 10 years. Our buses are typically built for a life of 20 years, so there is an opportunity to establish a local sector that can build those components for our standards and the expected lifespan of our buses so that they are fit for purpose. You do not want to be re-kitting your bus every eight to 10 years and it is meant to run for 20.

Ms BATH: Thank you, Tom. I have loads more, Chair, but thank you very much. Time for you, Harriet.

The CHAIR: No. Thank you, Melina. They are very important questions. Ms Shing.

Ms SHING: Thank you very much for that, Tom. We are glad you could join us, and you are not the only one having horrific issues with connections. If I do drop out, I apologise, and if my connection becomes shaky I will turn my camera off so that hopefully my audio will be preserved. I am really interested to expand upon some of the comparisons that you have drawn with the Hunter. I know that this is been a pretty significant part of the conversation in the Latrobe Valley around the challenges that the Hunter has faced, the way in which social cohesion and social licence for change have been developed over time, and how we can work to build community confidence in transition and development. That is very much at the heart of what the Latrobe Valley Authority has been focused on: to bring people along, particularly after a difficult history of raised expectations and dashed hopes and of those dynamic and really volatile social and economic circumstances, with privatisation and other forces that have really tackled or really struck at the heart of what communities define as success. So what are the things that you have to add to this inquiry's considerations around how we can combine a sense of realism with a sense of hope for the purpose of delivering outcomes that bring people along and provide that sense of not just actual but perceived momentum? Thank you very much. I will leave you to expand upon that.

Mr QUINN: Wonderful question, thank you. I think that is a really good one, and I think having that community buy-in is absolutely key to making this happen. As a headline message can I just say I think the Latrobe Valley Authority have been doing a wonderful job in trying circumstances. I think it would be very good and in the interests of the region for their work to continue and possibly expand as we move forward and start to see the economic transformation of the region.

One of the key things that we have found in the Hunter is having deep buy-in from both the industry sector and the community sector has been absolutely instrumental in changing the local conversation, in shifting perspectives and in opening up new business and job opportunities in the region. I would particularly like to acknowledge the work that HunterNet have been doing in the Hunter to bring together businesses in the region to explore what the opportunities are going forward as well as the work of Hunter Jobs Alliance, from a broader union jobs perspective, to really identify what the future is. Because we need to be very pragmatic; we cannot live in a fairyland where nothing changes. We are going to see significant economic change. Community on the ground get this, and these two groups in particular are really bringing that together to not just go, 'This is reality', but to then go to the next bit about, 'Well, what are we going to do about it, and how do we create the jobs and support the industries to upscale in this region?'.

We were lucky enough last year to run a large event in the Hunter looking at the huge job creation potential. we had a number of businesses come together and showcase what their growth plans were and the types of jobs and skill sets that would generate, and we had people from the community, predominantly people in high-vis after work, coming in to learn about these opportunities. That, to be honest, has generated a huge amount of energy, because it was not just people in suits like me saying there are going to be jobs, it was actually articulating what the real jobs are, what the skills are. Then people can start to go, 'Oh, my skills are actually very transferable there'. Because if you are, say, driving a coal truck in the Hunter—our economic analysis goes into this more, but it shows the number of drivers, heavy industry drivers, that are going to be needed to work in a renewable energy industrial precinct. When you see that, suddenly the transition starts to become an opportunity, because it is no longer the fear about, 'Okay, I'm going to get left behind. I don't know what these green jobs are'. Suddenly it is like, 'Oh, what they need are drivers' and 'I've already got that skill. I can see that transition path'.

We can certainly see that opportunity in the Gippsland region more broadly, not just in the Latrobe Valley, with projects like Star of the South, because you have got a lot of workers in the maritime sector who are servicing the offshore oil rigs. They are exceptionally skilled people—very highly skilled—and when you start to see the huge economic opportunity of building an offshore wind sector off Gippsland's coast and beyond, the skills transfer becomes very obvious, because it is going to rely on much of the same skill set to establish this very exciting offshore sector.

So I think being able to bring industry—who are thinking ahead, who are building a future—together to look at the opportunities to build those industrial ecosystems, to support each other and their components and supply chain needs as well as connect with community has been the key ingredient in the Hunter for building that excitement and really starting to get the investment dollars flowing into that region. The other thing I might—

Ms SHING: Thank you very much for that, Tom. Again, that excitement is sometimes a difficult current to swim against—the idea that unless we replace like with like there has not been a successful transition, and this is something which I know numerous countries and jurisdictions have grappled with.

What is your take on how to diversify an economy and therefore spread risk through any volatility in conditions on the one hand whilst also enabling acceptance to develop that 100 jobs spread over five different enterprises is in fact a surer bet and better for the ongoing trajectory of an economy and a region than perhaps what may have been in the past around 100 being located under the one roof?

Mr QUINN: Yes. That is a very good question. I am not sure whether I have got a satisfying answer, but I would say a diverse economy is absolutely a strong economy. And as a regional Victorian myself I absolutely know that. If you have got all your bets on one horse, it is great when that horse is winning, but you are in a lot of trouble once it starts to falter.

One thing that I would say is establishing renewable energy industrial precincts or your own version of them can send a very strong signal to investors and to companies that this is the desired industrial future for the region. That helps certainly to improve investor confidence to get those dollars flowing to the new sectors as well as, I guess, helps to shape and put up those guardrails about the type of industry, because if we can cluster like industries or complementary industries together, they are much more likely to succeed. They are much more likely to build that skills ecosystem needed as well for them to succeed. and having government policies such as renewable energy industrial precincts—or maybe you have got a nicer name you would like to call them—can certainly go a very long way to setting that vision and getting that industry investor buy-in to make it a reality.

Ms SHING: Well, clusters are a big part of what we have been doing on key priority industry developments. There was a Future Industries Fund back in 2015–16. But then there has also been within the Latrobe Valley region, and as auspiced in process as much as engagement, the Latrobe Valley Authority which has been focusing on new energy technology, health and allied services, the way in which we have got advanced manufacturing and food and fibre. So they are the sorts of things that are happening within and through the LVA from a whole-of-government perspective onto the ground as far as those industries are concerned. To your mind, and based on what you have just said and in your experience, is that the way to go in the context of bringing together clusters for that critical mass even while economies diversify?

Mr QUINN: Look, it is certainly a strong direction in which to go. But I would say that by breaking them up into subcategories that can create more of a perception that these are diversified, which is one of the reasons we have basically been seeking a unifying title where these things can get nested within, because then you can attract a broad range of investors and actually build those ecosystem complementarities between the different sectors. That said, obviously we are doing a lot of work on renewable energy industrial precincts. We have a very strong view that this is an effective way forward, and I would not want to dismiss at all any of that work that is going on in each of those sectors because we do see them as the key components and areas of very strong future growth for an economy like Victoria’s.

Ms SHING: Yes, to my mind it is a jigsaw with many components that all need to come together to support each other, but they are my gratuitous views for what it is worth. Thank you very much, Chair. I appreciate that. Thanks, Tom, for your evidence and submission.

The CHAIR: Thank you, Ms Shing and Tom, as well, for that interesting discussion. Mr Meddick.

Mr MEDDICK: Thank you, Chair. Thank you, Tom. Look, I am just curious about a few things there. If you could name some specific industries, for instance, that you would see moving into the Latrobe Valley as a result of this type of investment?

Mr QUINN: Yes. Certainly prescribing the area like this, let us take the offshore wind sector. The offshore wind sector is going to require a lot of different materials. It has got the tower stacks that will need to get produced somewhere, the blades will probably be imported into the region, whether from Geelong or elsewhere, as well as all the componentry within the turbines. There is a big question mark about where those industries will establish today, because the industry is totally nascent. Having a strong policy that prescribes an area like the Latrobe Valley or the broader Latrobe Valley region as a renewable energy industrial precinct will send a very strong signal to investors, particularly international firms, because that is what we are likely to see.

The offshore wind sector has been established for many years now in places like Europe, the UK and China. We will probably see a lot of those firms look to expand here. Where will they establish is the question. A policy like this could attract them in.

Similarly in the broader industrial space like, say, food manufacturing I think having a very clear policy for industries in this region, whether they are supported or it is just indicated that 'this precinct will have 100 per cent renewable energy', will certainly help those companies manufacture and market their food not just as, you know, healthy Victorian produce made naturally in the hills but also then produced with 100 per cent renewable energy. That will certainly open up premium export markets both domestically and internationally. I guess they are just two examples off the top my head. As I said, we have not done the deep work into Latrobe yet, so these are, I guess, as much my own personal view as our organisational view—but just to give you a flavour of what we are seeing elsewhere and how it could apply to Latrobe.

Mr MEDDICK: Thanks, Tom. And I guess then perhaps using that correlation between the Hunter Valley and Gippsland—and I get that correlation completely. I was born on the central coast of New South Wales, and we had many a school excursion up into the different industries that are based in the Hunter Valley. So as someone who has come into Victoria and chosen to live here, I can see the correlations very, very well. In the Hunter Valley, I know in various iterations over the years, the New South Wales government have put into public-private partnerships in various forms. Do you see that as being integral to the transformation of the Latrobe Valley in that respect? And if it is, what kind of splits do you think will need to be offered up to the renewable energy sector to be able to base manufacturing there, like manufacturing turbines, for instance?

Mr QUINN: I probably do not have enough detail to provide a considered response to that. I guess we see the core competitive attribute for Australia going forward is having very low cost renewable energy resources, just because we have the richest renewable energy resources in the world, and that is a core competitive advantage if we choose to use it.

I think one of the challenges is: how do we make sure those low energy costs translate across to the industrial sector? And some of the mechanisms that government could look at could be looking at an industrial sector targeted contract for difference, whereby industry is guaranteed a set very low rate for renewable energy, with government obviously being the guarantor of that, with both the up and the downside risk factored in. That would probably give industry the confidence that they have got long-term energy cost certainty. That is certainly one of the challenges we are seeing with industry and exposure to gas at the moment. If you have no long-term certainty, you are very exposed. You know it is going to go up. 'How much?' is the question.

With electrical energy it is completely different. Not all industry has access to it yet. We do have exploitative pricing still occurring in some parts of industry, but with a government-backed industrial energy guarantee that could be a pathway to give industry confidence to know, 'Well, we can lock in that part of the business. We can forecast that out for 10, 15 years if we want'. That would help change investments.

Mr MEDDICK: Yes, and I agree. Look, it is so much about the confidence that they can gain from that, and to some extent too I think signalling to the sector that this is the place to be and it is all going to work out for them. One of the previous witnesses we had was the Marinus Link, and I think that completion of that project—in my mind at least, and I am looking to see if it is yours too—is the type of thing then that would give the sector the confidence to say, 'Hey, the energy supply is there for us. We can go in there because we know that the infrastructure is there for us to go ahead'—that sort of confidence.

Mr QUINN: Yes. 100 per cent. We 100 per cent think that type of project. And you know, with that again there is also all the supply and components that could be brought into the Latrobe Valley. Cabling is harder, but if you have got that long forecast of demand, then that helps make those local investment decisions easier.

I would also say there is potential for more battery storage to be located in the Latrobe Valley region, because we do have that very, very heavy-duty electrical infrastructure. While most of the generation today is happening in the west of the state and the north of the state, we still need to balance. We are currently shifting power between daytime to night-time, and over time we will be shifting more power between seasons. For that latter side I think Latrobe is going to have a lot of opportunity, both connecting to the battery of the nation down in Tassie as well as potential pumped hydro projects through eastern Victoria.

Mr MEDDICK: From what I have seen, and I am not in the government, there is a very, very large commitment not just in monetary terms but even philosophical terms towards getting as many batteries into the state as we possibly can. They see this as the way forward.

But look, I just want to touch on something that I noticed when you were talking in a previous answer about waste to energy, and you seemed a bit cautious about that. I served on another committee, which at the time, the largest and longest inquiry that we had was into waste and recycling, and this was an area that we actually explored. A couple of the things that we found about it—and I think this might go a long way for other people to understand your hesitance—were that it requires a lot of energy to actually run those plants to begin with and, secondly, they are not without their own waste that they generate. There is a lot of concern around particularly two areas: bottom ash and fly ash, which are two by-products of that and quite toxic. If we look at the one for the paper mill that we are talking about in Gippsland, for instance—I think it is APM—they are producing only enough power to actually run their own recycling plant at this stage, because it is so heavy on the energy that it actually produces to run its own operations that there is not much movement to be able to pump that back out into the grid. Am I right on all of those counts, or am I way off the mark?

Mr QUINN: Yes, I think that is broadly—I would probably add two additional aspects to it. One, with any combustion heat you are going to lose a lot of that energy as heat. You have got much better conversion ratios with solar and wind. They are much better at turning energy into electrons down our power lines. The other aspect, which is probably the caution, is that from a business case perspective, your highest energy yield waste stream is going to be plastic. So there is going to be an imperative to burn plastic through those, and while that is a secondary step, it is still a linear fossil fuel based process. It does not get us to a circular renewable basis. As you say, we lock in a large amount of demand, and that somewhat inverts the waste pyramid in theory of what should be done first.

Mr MEDDICK: Great. Thanks so much, Tom. I appreciate it. Thank you, Chair.

The CHAIR: Thank you. I notice that we are kind of at the end of the day and a couple of our committee members have other appointments afterwards. I do have a couple of questions for you, Tom. I will just ask them very quickly. How about that? That might be easier.

Mr QUINN: Wonderful.

The CHAIR: I noticed that you did talk about the component part industry, somewhere in Victoria possibly. That just reminded me that actually in my early days when I finished high school I was a vehicle builder for a few months, if people do not know, at the old Broadmeadows plant. So it is very upsetting the way the federal government, I guess, chased the vehicle industry out of our country. I understand that for component parts of any large-scale manufacturing you need the volume, so for us to try to re-establish any kind of component part industry is going to be very challenging. But I love your ambition. It does not mean we do not try. The two questions that I will just hit on are: given that every attempt at national energy policy at the commonwealth level has ended in failure—the carbon price was killed by Tony Abbott; the National Energy Guarantee was killed by Scott Morrison—how important is it that states take action to provide a smooth transition for the energy sector to a renewable energy future; and just as a supplement to that one, how much more complicated is the task of decarbonising our electricity system in Victoria, where all the fuel generation assets were privatised by Jeff Kennett, compared to the states where these assets are state owned? So there are kind of two questions.

Mr QUINN: Thank you, Chair. Look, I just want to reiterate that BZE is not a political organisation. We will not take partisan, political positions on these things, but I would say that the challenge of climate change is very real. The scale of decarbonisation required is immense, particularly once you start crunching through the figures. We need to move very, very fast. I think any ambition being brought by any level of government or corporation is needed, and we probably need to up the ambition at every scale if we are to both seize the economic opportunities and create the jobs, as well as to get our missions on track with achieving the Paris climate commitment.

The CHAIR: I understand—very diplomatic. On that note, I think we have come to the conclusion of today’s hearings. Thank you, Tom of Beyond Zero Emissions, for your submission and also your presentation today. It has been a very thoughtful and informative discussion.

Mr QUINN: Thank you.

The CHAIR: Thank you.

Committee adjourned.