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

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Mr Bernie Finn—Deputy Chair
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Ms Wendy Lovell
Mr Andy Meddick
Mr Craig Ondarchie
Mr Gordon Rich-Phillips
Ms Harriet Shing
Ms Kaushaliya Vaghela
Ms Sheena Watt

WITNESSES *(via videoconference)*

Mr Brian Davey, Chief Executive Officer, and

Mr Gerry Morvell, Chair, Australian Carbon Innovation.

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

I wish to 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 that are present today: Ms Harriet Shing, Ms Melina Bath, Mr Andy Meddick and Mrs Bev McArthur.

To witnesses appearing at today's hearing, all evidence taken at the 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. You will be provided with a proof version of the transcript following the hearing. Transcripts will ultimately be made public and posted on the committee's website.

We welcome your opening comments but ask that they be kept to a maximum of 10 minutes so that we ensure we have plenty of time for discussion and questions. Brian and Gerry from the Australian Carbon Innovation organisation are here today. Would you like to give your full names for Hansard and then begin your presentations. Thank you. Over to you.

Mr MORVELL: Thank you, Chair. My name is Gerry Morvell. I am Chair of Australian Carbon Innovation, and my colleague is Brian Davey, the CEO of Australian Carbon Innovation. We would like to make just a very short introductory statement to highlight some of the points we made in our submission, and then we are more than happy to explore the issues with the members of the committee.

Australian Carbon Innovation was established by the then Victorian Labor government in 2009 as an independent not-for-profit company to support innovation and research measures focused on alternative uses of Latrobe Valley brown coal. Initial funding for ACI came from the Victorian government and was matched by the commonwealth government. ACI used a model for the allocation of funds through research grants that required at least a matching contribution and participation from industry. This led to ACI achieving a very high funding multiplier in the research sector.

The work of ACI over the past 12 years has evolved as options were explored and assessed as either having potential as a future industry in the Latrobe Valley or rejected as not viable on either technical or economic grounds. Key factors in our assessments were the pool of highly qualified engineers and tradespeople who could form the core of a new industrial base, the availability of a low-cost and emissions-free lignite deposit, the assessments by the Australian and Victorian governments and the CO2CRC that offshore Gippsland offered some of the best opportunities for safe geological storage of CO_2 below depleted gas fields and the existing gas and electricity infrastructure in the Latrobe Valley.

Lignite is essentially a mixture of carbon, organic compounds and water and by itself is not a greenhouse gas. The lignite in the Latrobe Valley does not contain any significant greenhouse gases, such as methane, that could be released during mining. Atmospheric emissions only occur from the combustion of lignite. From its beginning, the board of ACI accepted the assessments on the science of climate change by the Intergovernmental Panel on Climate Change, which inevitably would see an end to the use of lignite for electricity generation. However, ACI does not agree with the climate response strategy that it is acceptable to continue to use carbon-based goods and products by reducing domestic mining and manufacturing to meet domestic emission reduction needs and then importing those products from manufacturers in countries which do not have the same emission reduction strategies, which results in higher levels of atmospheric emission. All

industries, including renewable energy, use carbon in a variety of ways. In particular the use of carbon is fundamental to agriculture; pharmaceuticals; construction, including the production of steel and cement; transport, where carbon fibre is used to construct planes, trams, trains and cars; and renewable energy technologies, where solar, wind and batteries all have essential carbon components.

With vision and political will the Latrobe Valley has an opportunity to transition to a global centre for the development of carbon technologies that will underpin a sustainable and low-emissions future. There are uses of lignite that are compatible with the state's climate goals and which build upon the inherent skill and capability base of the Latrobe Valley. Any significant delay in the implementation of the transition process will see this skills base evaporate, and the region will lose one of its key competitive advantages. I would now like to pass to Brian Davey.

Mr DAVEY: Thank you, Gerry. And thank you, Chair, for the opportunity. I do not intend to add too much more to what Gerry has said. All I can say is that if the state government is able to add to a proactive approach to building a new industrial base, it could see new industries in Victoria and also in the Latrobe Valley in particular. These cover things like fertilisers, low-cost carbon, hydrogen and clean fuels, graphene for electronics industries, activated carbon and chemical production. These are critical New World, new-age industries that could lead Latrobe Valley and Victoria into a new manufacturing era. Thank you.

The CHAIR: Thank you, Gerry and Brian, for that overall assessment speaking to your submission. I might actually take the first question because it is on an issue that one of you could comment on. Following the Hazelwood fire the Andrews government initiated the mine fire inquiry, which reported back on the immense complexities of managing coalmines and ultimately rehabilitating them. What could the Victorian government be doing now and when Yallourn ceases operation to ensure that Energy Australia are all prepared for the remediation task? What could be done now?

Mr MORVELL: Chair, we have not been directly involved in the issue of the remediation of mines. Whilst our activities impinge on that, we have not got a specific view on the remediation process and the preparation for that. However, in saying that, one of the issues that is clear about the remediation is the huge cost associated with remediation. If the mines close because the power stations close, which is inevitable, then the stream of revenue that comes to the government or could come to the government to offset some of those remediation costs is lost. So the theme that we have taken up, as you would see in our submission, is that the concept of transitioning from where we are today to where you are in the future is the message that we do not think is being picked up adequately. If you take the issue of remediation as a focal point for that, then having industries come along in parallel at the same time as the power stations are closing the government has the opportunity to generate necessary revenue to meet some of those costs associated with remediation.

The other thing about all of the new industries that Brian has touched on is most of them would not require the same size mining operation as currently we do for power generation, so there is an opportunity to move to the remediation process in parallel with closing down those mines and new industries starting up.

The CHAIR: Thanks for that. I think you have kind of answered from your perspective and your expertise.

I did notice—it has come in today—with the Glasgow declaration recently a commitment to phase down coal at the most recent climate change conference. Do you anticipate managing an increasing hesitation to use coal as a result of that? Do you think that will be an issue? Obviously you are saying that without the energy generation, the mine's future—can you comment on that at all? I know it's a curly one, but—

Mr MORVELL: I am prepared to comment on that. This has affected ACI in the immediate sense over the past 12 months where the government has struggled to come up with a policy framework that says, 'We'll continue large-scale funding of ACI for looking at future uses of coal'. One of the difficulties that we face and the community I believe faces is that we have sold the need to reduce our atmospheric emissions on the argument that coal is bad. Now, there is no question that burning of coal for power generation produces emissions. It has to stop and will stop. All governments have said, 'We're not going down that path'. What is missing in the story is that in fact we are using carbon in all these other new technologies. You cannot have a solar industry without silicon, and carbon is used to produce silicon from quartz. You cannot have wind turbines without having either carbon fibre or carbon polymers to make the turbine blades. You cannot have steel without carbon being bonded with iron to make steel, and that has got nothing to do with the process of

getting there—steel is actually up to 4 per cent carbon. So we use carbon, but the social licence around the arguments on coal and fossil fuels has taken governments and the community broadly into the world of, 'That's all bad; we can't do it'.

What is happening, though, is we have just shifted the products we produce and the manufacturing and mining of the carbon for those to other countries, and I am certain—and I think some of you would be certain from your own investigations—that the emission reduction strategies in many other countries are not up to the same standard as in Australia or Victoria. And in addition you have got the transport across oceans of products—in fact going both ways, in many cases. We ship out mining products which we then bring back as made products. So that is the argument we have been trying to say—that there is a market, it does fit in with the climate goals of the Victorian government, it does fit in with the future technologies and it is an integral part of it. So we do not shy away from that, but we understand the politics are very difficult. I note Harriet nodding her head there. We have had many discussions with Harriet and Melina. This is a difficult area, but I think, as I said, this is the area where we need the political will. We need government to say, 'Well, okay, you could use this, but here's the rule: no emissions', and that sets a very clear agenda for industry which I think industry could achieve.

The CHAIR: Thank you for that, Gerry. I know it is always a tough question, but I think you answered it pretty clearly. On that note I might pass over to some of the committee members. Melina, would you like to go first?

Ms BATH: Thank you, Chair, and thank you, Gerry and Brian, for coming to speak to us today. I think it is a really full and frank conversation and a very necessary one based in the Latrobe Valley. I have got two lines of questioning. The first line looks at your submission to the inquiry and speaks about the Latrobe Valley Authority. That is part of our terms of reference. And as part of it you say:

> The early response has seen the 'low hanging fruit' having been harvested. The stated investment of $288m by the state government does not appear to have represent good value for money …

Then it goes on, and then:

> … a more fundamental and strategic approach will need to be taken that incorporates all the region's natural …

resources.

The second part to that question is you have talked about seed funding for new technologies to demonstrate a commercial potential and the capacity for significant and highly paid jobs. Now, jobs to my mind are some of the key things that we need to focus on in the valley and in this inquiry. I am assuming that 'seed funding' does not mean money for consultants. Describe what you mean by 'seed funding'? So I have those two questions first off, thanks.

Mr MORVELL: I will get Brian to come in and join in this response, particularly around that first part about seed funding, and then come back to your first point as we explore that a bit, Melina. So, Brian, I will hand that one over to you.

Mr DAVEY: Yes. Thanks, Gerry. Thank you, Melina. I appreciate the question. The opportunity for the Latrobe region to move into a different phase for a resource such as brown coal is significant. It is significant not only in the fact that you can make lots of products from brown coal, ranging from hydrogen to fertilisers, chemicals, fuels, carbon fibre—some of the things that Gerry has covered—but it also gives the opportunity for renewable energy to take a more significant role in the region. I think no-one would question that the future for Australia and the world has got to be in the renewable energy space, but there has also got to be a recognition that the Latrobe Valley is not necessarily—nor is Gippsland—the greatest place for renewable energy. It is not one of our competitive strengths. However, it can be a competitive strength if it is matched with something like coal to hydrogen, for example, whereby the fundamental supply chain is paid for by a high-producing coal-to-hydrogen supply chain and then renewable energy can piggyback on the back of that without having to pay for the complete supply chain, which then makes things like Star of the South, the solar farm in Gippsland, and the Delburn wind farm even more competitive than they would be on a single product type process. One of the challenges that renewable energy will have into the future is excess supply, and they will then also have the option of either off-loading or trying to sell their product at a very, very low value. If they are able to convert that electrical energy into other products, such as hydrogen, then they have another income stream, and they can do that on the back of a coal-to-hydrogen-type process.

Ms BATH: So it is very much part of that future for renewables, and you are saying that if there is excess in the electricity in the market, it is then converted to hydrogen, which acts as a battery. Is that what I am hearing?

Mr DAVEY: Well, it could be a battery, it could be a different product. Hydrogen is a feedstock for lots of things. You can make it into electricity, you can put it through a fuel cell to power vehicles, you can liquefy it and transport it. It can be used in the hydrogenation of lots of different chemical productions, fuels and those sorts of things. It has a multiple of uses. Hydrogen turbines are not that far away, so you could easily see that you could use renewable energy to hydrogen as a firming process for electricity production, which is critical to renewable energy because they cannot produce on a 24-hour basis. So there are a lot of opportunities. One of the things that we see is that it is not an either/or type process. Coal and other carbon sources complement renewable energy, and I think we get into this false argument about it has to be one or the other, and I think that is really dangerous.

Ms BATH: And with CCS—carbon capture and storage—there are definitely camps that say, 'We love it' or 'It's not going to work and we don't like it'. What is ACI's position on that, because again I think you need to be personally agnostic about the method—and it is the outcomes and the economics of it as well?

Mr DAVEY: Look, that is exactly right, Melina. And Gerry said from an ACI perspective there is no question: whatever you use coal for or other carbon sources for it has to be carbon neutral, as a minimum, and preferably carbon negative. Carbon capture and storage is a technology that has been proven for more than 40 years. You see the narrative in the media that this is an unproven technology. That is patently untrue. Carbon capture and storage has been used in enhanced oil production for more than 40 years. It is currently being used in places like North Dakota and Canada to enhance oil production. Fortunately in Australia we do not need it because our oil comes out very easily.

The other factor, though, for us is we have some of the best storage of CO_2 in the world by a country mile. We can store securely millions and millions of tonnes of CO_2. But I would take a step back from that. One of the things I think we have to do is utilise that CO_2 before we actually store it, and there are technologies now that are able to do that. Methanol production utilises CO_2. Greenhouses utilise CO_2 to enhance their growth processes, and that is one of the huge opportunities in the Latrobe Valley if we have an industry that produces significant CO_2. You could set up a greenhouse industry, which is very employment intensive, using the CO_2 to give it a competitive edge, because there are two key cost inputs into greenhouses: one is the heating, and the second is the CO_2 costs to enhance that growth. So there is a huge opportunity in that space as well.

Ms BATH: There is one question you can take on notice, because I am sure I am running out of time. It about the Latrobe Valley Authority, so maybe you might like to follow that up on notice. But the second one around seed funding. You know, you have got the ear of a committee here, and we will be making recommendations to a state government, what do you need to hear in terms of seed funding for the utilisation of lignin or lignite from ACI's point of view?

Mr MORVELL: Well, perhaps, Melina, I might take that one. We have—because we have made submissions to the Victorian government on an annual basis. The level of funding that we believe is necessary is quite small. We are talking in the order of $4 million per annum. That is the money that is needed to stimulate the ideas and get them to the next stage in the development. There are already a wide range of programs, both at the federal level and in the Victorian government, where you can get assistance in those latter stages in developing a technology from demonstration projects through commercialisation. There are existing frameworks for that.

We have never argued that the government needs to put lots and lots of new money on the table. What we have consistently said is that the level of funding that ACI has had—and looking at the multiplier that we have been able to deliver, which is quite a significant multiplier—it is really good value for money to stimulate ideas and get them out of the laboratory and on the pathway, and that is what we have said to the government in the past. Those next steps which require the building of a pilot project or a demonstration project, which may involve considerably more money, are entirely dependent on whether those first stages work or not. There is no point in rushing off and saying, 'We're going to build a demonstration plant for this, because it is a really good idea', and getting halfway through it and finding out it was not quite such a good idea and it cost a lot of money that could have been spent elsewhere. I think a regular process of looking at technologies, assessing them—and that is what we have been doing—that is an order of magnitude of $4 million a year on an ongoing basis. I mean,

you cannot just put in $4 million and say that is it, but $4 million on an ongoing basis is not a big commitment but it gets a big return. And then, as I said, if there is a technology that looks really good, there are existing programs both federally and at the Victorian government that can then come in and assist a company.

Ms BATH: And industry funding, and partnership funding.

Mr MORVELL: Yes.

Mr DAVEY: That is exactly right. If I can add to that, Melina, one of the things that we get all of the time is industry coming to us, and the first question is, you know, 'How much can you support us?', and the second question is, 'What's the government's attitude in relation to the resource?'. We point them to the coal statement, and I am sure you have read the coal statement. It is very unspecific in relation to the support that industry could expect.

If I can give an example of two areas where we have been successful in bringing projects to hopefully a commercial outcome, one is in the activated carbon space, where we have been working with Monash University. They have just entered into a commercial agreement to produce activated carbon for water and chemical clean-up that is unique in the world. The way that they have been able to structure that activated carbon gives a huge opportunity in that space. The second area that we are particularly excited about is in carbon fibre. All of our current carbon fibre in Australia is imported. All of the precursor material is imported. It is completely oil based. We are working with Deakin and Federation University to substitute a brown coal extract that we believe will be able to meet international standards for strength and modulus in that space which could lead to a whole new industry in Victoria. You know, that is pretty exciting.

The other area that we are particularly interested in is sovereign manufacture. We have seen the risks of extended supply chains. We have seen things like AdBlue, what that means.

Ms BATH: Make it local.

Mr DAVEY: Yes, exactly. And you can do all of those things with brown coal with zero emissions. You know, industry looks to government for the lead. We are just saying you do not have to lead a lot, just lead a little bit.

Ms BATH: Thank you.

The CHAIR: Thank you for that, Brian. Both Gerry and Brian, pretty good answers so far, pretty comprehensive. I might pass over to Bev, then Harriet. Bev.

Mrs McARTHUR: Thank you, Chair. And look, this is the new line, isn't it: coal is good. I mean, seriously, we need to be out on the hustings on this. We love coal. Who would have thought?

Look, we have mentioned funding and seed funding and all sorts of things. I just wonder if you would like to comment on the Latrobe Valley Authority, which partially funds the Gippsland Climate Change Network, which comprises 17 board members. They undertake numerous climate change and renewable energy projects across Gippsland. But if we are trying to keep all this local, I am wondering what you think of the climate change network expanding their operations outside the Latrobe Valley into other areas. So this money that was given to the Latrobe Valley Authority seems to be permeating its way into other parts of Victoria for so-called climate change projects. Is that what they should be on about, do you think?

Mr MORVELL: I mean, you have touched on a subject which really we do not have the expertise or knowledge to give you a proper answer on, Bev. But I think it is fair to say that we have not been critical of the LVA decisions about what they have funded, and realistically they are the sorts of things that I think this committee and the government itself is well positioned to review the appropriateness of and the like. I noticed earlier on, with the previous witness, Harriet touched on the stated role of the LVA, which is quite comprehensive. And what we have found is that comprehensive nature has not been passed through into the real world that we see: that the coal resource in the Latrobe Valley, which does provide the base for employment now—and we believe in the future—was not being adequately addressed in the LVA decisions.

Now, you know, that is from the perspective of someone with a vested interest, so I guess in one sense people would not be surprised by that. But we think the LVA really needed to look slightly broader than where it has

with just renewable energy; it should be energy systems or the industrial base, because as we said in our opening submission, we do not think we are inconsistent at all with the government's climate policies nor the expectations of the public. The public do not understand that, and as I said, that has gone to that long history of the last 10 to 20 years of, 'Let's denigrate coal for our climate objectives', and that has killed off what is a good story inside. I might say, when we were formed and I was asked to chair this it was a decision of the Brumby government, and it was a cabinet decision to set ACI up—it was then called Brown Coal Innovation Australia—because that government at the time knew that there was another future that had to be created. We were asked to look at how we would do that, so we have done that. We think there is a future.

Where the LVA has not assisted in that process from our perspective is it has not been prepared to support those sorts of new ideas that are based on coal. The other theme that we have put forward is that this is about a transition; so it cannot be about what you have spent this year and what you spend next year, it has to be about what the plan is over the next 10 or 20 years, and that is something I do not think we have seen with the LVA funding. It has been for much shorter-term focused projects, each of which in their own right we would not debate whether they are good or bad. In fact I assume most are good. I do not know most of them, so we are not in a position to argue with them on those specific decisions. But what we have not seen is, 'What's that decadal strategy that underpins transition?', because that is what this is all about. It is the transition from an industrial base to something new.

The renewable energy activities that have been funded to date, as much as they are good, do not generate long-term employment as a general rule. You know, with a new wind farm or a new solar farm there is the rush of construction and there are jobs associated with that, but when you step back in five or 10 years time, in terms of operational jobs there are very, very few. So what we would like to see with the LVA is—perhaps through government intervention on its remit to say, 'No, we want the LVA to start looking at this long-term transition issue'—we would like them to be broader in their thinking than just renewables and some of those other socially oriented projects, which I know you have had submissions on, and of which we are not critical at all, so I do not want to get painted into the corner in that manner.

Mrs McARTHUR: Well, thank you for all of that. Yes, that long remit of the sort of policy perspective from the Latrobe Valley Authority was more about spin than actuality in my view, and I am not sure how you would be able to measure it in the 'outcomes' column on the Excel spreadsheet. But maybe I could go to asking you about negative carbon technologies, and perhaps you could give us some information on that.

Mr DAVEY: Would you like me to handle that one, Gerry?

Mr MORVELL: Yes, Brian.

Mr DAVEY: Look, negative carbon technologies are certainly possible utilising the carbon resources that we have at the moment. Probably a classic example of that is soil carbon. We know that we are expending soil carbon significantly in Australia. You know, we have gone down from something like 4 per cent to less than 2 per cent overall. The role that brown coal can play in that is twofold. One is as an additive to depleted soils. Because it is an organic material, it can be added to soil, which enhances the growth structure of plants. It has very, very high water-holding characteristics—for example, our coal is 60 per cent water. You pick it up and it looks like it is dry. We often refer to it as water you can walk on. Applying that into depleted soils gives the opportunity for enhanced plant growth. Also some of the extracts are very, very significant: things like humic and formic acids are biostimulants in themselves. They stimulate plant growth, and that plant growth sequesters carbon into the soil, particularly through its root structures. They have different decay rates, but what happens over time is that carbon builds up and you end up with a carbon-negative, if you like, balance sheet associated with that type of process.

Also, if you do something like electric hydrogen through gasification, if you have a blend of biomass in that gasification process, which they have trialled during the demonstration phase in the Latrobe Valley, and you capture the CO_2 associated with that gasification of biomass, you actually end up with a negative carbon footprint because that biomass is considered renewable. And if you sequester the carbon associated with that, you have a significantly less CO_2 footprint. So they are entirely impossible things to do, Bev.

The CHAIR: Thank you, Bev. Thank you, Brian. On that note I might just pass over to Ms Shing to ask the last couple of questions. Thank you, Ms Shing.

Ms SHING: Thank you very much, gentlemen. I apologise if my internet connection is a little wobbly. I want to take you to the availability of support for new energy tech that sits outside of what the Latrobe Valley Authority has been doing. The New Energy Jobs Fund is a $20 million ongoing fund for feasibility studies and innovative tech. Have you sought through your advocacy funding or assistance within that grants program?

Mr DAVEY: We have looked at it, Harriet. One of the very strong impressions that we got was that they would be unlikely to support anything in relation to a coal-based energy program.

Ms SHING: See, that is sort of at odds with what has happened with the $50 million funding for the Hydrogen Energy Supply Change initial stage. $50 million from the state, $50 million from the feds—there is a clear message being sent about the ongoing relevance of the Latrobe Valley as it relates to energy production. How does that fit in terms of the discussions that you have had and in particular with the earlier impression that I got from you, Gerry, that in fact there is not any support for this sort of innovation in the valley from within government?

Mr DAVEY: I will tackle that first, Gerry, and then perhaps hand it back to you to help.

Ms SHING: Thanks, Brian—sorry, Mr Davey, I should say. I am so used to being informal with you given we have met so many times.

Mr DAVEY: Ms Shing, if you can call me Brian, that would be much appreciated. Go back and have a look at when that $50 million was allocated. How many years ago was that?

Ms SHING: 2018.

Mr DAVEY: No, it was far earlier than that. It was allocated back in 2014, because I was part of that process back when I used to work for the state government. Those commitments were made very, very early on and absolutely welcomed and absolutely necessary. If those commitments had not been made, then this project for the HESC would not have occurred. The opportunity for a hydrogen economy in Latrobe Valley would not have occurred, and I absolutely give credit to the Labor government at the time that did that.

Ms SHING: That was the same government that we have got at the moment.

Mr DAVEY: Exactly. The question for us is: if you can see the potential in relation to that and are prepared to commit such funds in that space, why is the attitude different now when you have got some of these nascent technologies that need a little bit of a hand up? If you want to give us $50 million, we would be really pleased, but we are not even asking for that. We see an inconsistency—

Ms SHING: One of the things that I would ask, perhaps, because I have got so little time, Brian—and I would really welcome an opportunity for you to provide further context on notice—is around the New Energy Jobs Fund. Based on its terms of reference, based on the fact that it is ongoing and based on the fact that it does fit within the wheelhouse of what you have just talked about in your submission, separate and aside from the work of the LVA, which is about transition away from coal-fired energy which, as you indicated and as everyone has agreed, is in fact causing significant damage—the dirtiest station in Australia is the one which is a graphic that you have included in your submission as being about running interference—how does that fit within the broader opportunities that you have to continue with discussion on innovation? You are doing a heap of work, there are multiple avenues for you to pursue, and they are not just about the authority; they are about the whole of government and those funding streams that exist beyond the specific remit of the authority, which I have talked about with you earlier.

Mr MORVELL: Harriet, perhaps I might pick up on that. We are caught in a world where the politic of brown coal still plays out large inside the thinking of government. It is that issue that we created the narrative that brown coal is dirty and all that simply because of the emissions. The irony is it is actually cleaner than every other coal on the planet. It is just full of water, which you have got to dry before you can burn the stuff, so that is where your emissions come from. I think what we are finding, however, is it is not that the government settings are wrong, although they could be fine-tuned, because we have a coal statement which is not negative to our interests at all. What we are finding is in the translation of the policy into the various either bureaucratic processes or advisory processes that government relies on to distribute money that narrative about brown coal being bad is carried through. If you are saying that the government is quite happy to support some

of these new ideas, some of these ideas that we have been developing, particularly around carbon fibre—this is world-leading stuff, these are whole new industries that could be developed in the valley. The activated charcoal—we import 95 per cent of our activated charcoal to clean water and sewage; tell me why. We just got the messaging wrong. If the government's policy settings are favourable, then there is a bit of disconnect between the government and those who are making the decisions that I think might be worth you having a look at, because that is what we see.

Ms SHING: Do you accept that the Latrobe Valley Authority has had a positive influence on the work to move away from coal-fired power generation, which you have agreed at the outset is not in fact viable for the long term, and indeed development into new and decentralised economy and economic activity?

Mr MORVELL: Harriet, your voice broke up at the crucial bit of your question.

Ms SHING: I am sorry. Do you accept that the Latrobe Valley Authority has a positive role to play and indeed has played a positive role in the way in which it has supported not just the transition away from coal-fired power generation but also including new and emerging technology?

Mr MORVELL: I would agree on the first bit but not the second bit. Clearly it has assisted in that move for—well, I have got to be careful here. It has assisted in the development of a renewable energy industry in the valley, but Victorian power generation supports electricity usage across the whole east coast of Australia. So there is a national perspective around that power generation from Latrobe Valley, which I do not think the LVA has assisted in any way, and in part I do not think it has been required to do it, so I am not—

Ms SHING: You mean within the three LGAs that it operates—it only operates within three LGAs though.

Mr MORVELL: That is what I mean. It has had a narrow focus, but in terms of electricity generation and the way Latrobe Valley supports the power network across the whole of the east coast of Australia, that has been rather irrelevant to the LVA.

Ms SHING: Well, it is beyond the LVA's scope. If you have got Baw Baw, Latrobe and Wellington as the LVA's wheelhouse, then arguably it is not in a position to have more than a peripheral influence on the entire eastern seaboard and that grid. So within the remit that it has, do you accept that it has in fact changed the dynamic of discussion on what it is to exit from coal-fired power on the one hand—

Mr MORVELL: No, no. That is the bit I do not agree with you on, because from our perspective we have said that one of your biggest natural resources in the valley is that brown coal. They have ignored it. So the agendas we have been bringing forward about new technologies, new ways of doing things, have not found a home inside the LVA.

Ms SHING: So you are not able to engage with the LVA on the issues that you have discussed?

Mr MORVELL: We talk with them, but we do not get very much traction, and that goes to the point I made earlier on. If the government's agenda is made clear, that is one thing. The people who are making the decisions on the actual funds are sending different messages back to us.

Ms SHING: Okay. I look forward to you applying for the various funding that I talked about earlier, and I look forward to continuing the work that we have done to pump that initial $50 million into HESC and the work going on in relation to this particular commodity. Thank you.

Mr MORVELL: Can I just add one thing on the HESC program, Harriet? That kicked off with an initial grant from ACI. In 2010 we funded the desktop study to start that whole process. From my perspective that is the work of thing that we are doing with carbon fibre and we can do with activated charcoals, and so there is a relevance to the HESC project that goes back to the point we have been trying to make that a little bit of stimulation at the front end can lead to some very big things in the way we operate.

Ms SHING: You accept that you have had some runs on the board with this government in relation to what you are doing. That is good to know. Thank you, gentlemen.

Mr MORVELL: Thank you, Harriet.

Mr DAVEY: And we provided runs on the board for the government as well.

The CHAIR: On behalf of the committee I would like to just thank Australian Carbon Innovation, particularly the CEO Brian Davey and Gerry Morvell, the Chairman. I found it a very informative, very challenging but respectful discussion, so we will take that on board in our deliberations going forward. I know a few committee members have flagged that they may have questions on notice. Are you happy for us to forward those in due course and you can respond to us relatively promptly?

Mr MORVELL: Yes. We are happy to do that, Chair.

The CHAIR: Thank you very much for that. On behalf of the committee thank you for joining us. It has been a pleasure to have you.

Witnesses withdrew.