

CORRECTED VERSION

ECONOMIC, EDUCATION, JOBS AND SKILLS COMMITTEE

Inquiry into community energy projects

Melbourne — 20 March 2017

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Mrs Christine Fyffe

Mr Cesar Melhem

Witnesses

Mr Scott Hamilton, Executive Director, Renewable Energy,

Ms Alex Badham, Acting Director, Energy Markets Policy and Regulation, and

Mr Simon Cover, Manager, Statutory Policy, Planning, Building and Heritage, Department of Environment, Land, Water and Planning.

The CHAIR — Good morning, everyone. Welcome to the public hearing for the Economic, Education, Jobs and Skills Committee’s Inquiry into community energy projects. All evidence taken at this hearing is protected by parliamentary privilege. Any comments you make outside the hearing are not afforded such privilege. Hansard is recording today’s proceedings. We will provide a proof version of the Hansard transcript so you can correct any typographical errors. I would like to invite you now to say whatever you would like to say. State your name for the Hansard record, please, and then allow us some time so the members can ask you some questions. Welcome.

Mr HAMILTON — Thank you very much for having us and allowing us to present on behalf of the Victorian Government. My name is Scott Hamilton, Executive Director for Renewable Energy within the Department of Environment, Land, Water and Planning.

Ms BADHAM — My name is Alex Badham. I am Acting Director, Energy Markets Policy and Regulation. We broadly deal with the energy market at a national level and at a state level.

Mr COVER — I am Simon Cover with the Department of Environment, Land, Water and Planning, representing the planning, building and heritage division, so responsible for the administration of the statewide planning system, and in particular renewable energy and community wind farms.

Mr HAMILTON — I am intending to make a short presentation for about 10 minutes which will talk to the formal written submission that we made late last year. Any questions that the Committee has, feel free to ask at any time of course. I am likely to throw to one of these people depending on whether it is of a particular technical nature.

Visual presentation.

Mr HAMILTON — I would like to start off with a bit of context about how we see community power fitting in with the overall strategy of the Government in this space. One of the key objectives that we are attempting to do is to increase the proportion of energy that comes from clean energy sources, such as wind, solar and other sources, from about 15 per cent, which it is today, to 25 per cent by 2020 and 40 per cent by 2025.

A certain way of thinking about it is these three pillars. First is the VRET auction scheme. That is the Victorian Renewable Energy Target scheme, which is a scheme which will seek developers to make bids for contracts which the Crown will then sign with those developers depending on the best value for the state. At this stage it is likely that in terms of achieving that 2025 target most of the heavy lifting or else most of the proportion of generation is going to be done by large-scale wind and solar plants, so that is going to do what we would regard as the heavy lifting over this next 10 years.

However, another important part of the equation is community power at the household level generation, whether it be solar on rooftops or community wind power, those sorts of projects and those sorts of schemes. That is really, I think, setting us up for a future post the 2025 area. So it is really as we move towards more decentralised solutions for the generation and use of power that these community schemes are likely to become much more important. A key part of that is not just in terms of the wind and solar but also in terms of the microgrid, so it is the technology that goes with them so we can get the best benefit of the solar and wind and other forms of generation.

The third pillar, which is in the middle here, is the New Energy Technology Sector Strategy, so we are seeing massive change in terms of the technologies that are occurring within the energy sector. This sector strategy is really there to make sure that our state is becoming the capital for these energy technologies—that we are getting the business in to invest here and that we are bringing on the technology that is really going to set us up for this future when we have storage and many other forms of energy, like microgrids and those sorts of things.

So why community energy? This is one of the key questions that we have been working on for the past couple of years. The key point here is that community power has the benefits of providing power, so it has environmental benefits in terms of clean energy. It has benefits to local economies in terms of being able to generate power for jobs and the investment that will go with the community schemes, and also the community working together to work on these solutions for their particular town, city or area is quite important.

What are some of the road maps that we are looking at in terms of making sure that we can enhance and ensure that community power is able to thrive across the state? This is in terms of helping communities transition, so changing the way that they get their power and use their power as well as taking away barriers. Some of the examples of that are changing the regulations in terms of the requirements for holding licences and those things being a community area rather than a big company which is doing this on a grand scale. We have been doing some work in that area over the past 12 months, and we are about to come to a final position, which Alex will be able to talk about further.

Looking at the fair approach, this is really trying to work out what is the fair price for power, whether it be at a household scale or at a community scale. What is a fair price for the energy that is generated and put into the grid? The Government has recently changed the law in terms of taking into account the environmental and social benefits of power which is put into the grid. So avoiding the emissions from a brown coal plant are now accounted for within the feed-in tariff that is going to be obtained by all solar households, which is going to go from about a minimum of 5 cents per kilowatt hour now to a minimum of 11.3 cents from 1 July.

Finally, there is collaboration and innovation, and I think this is really that many communities have got a lot of enthusiasm to want to get projects off the ground, and it takes a lot of effort in terms of the various skills that are needed. You need people that understand the energy system, the connections, you need people with legal skills, with planning skills, and you need people that can bring together groups of communities. It is really bringing the ability to build their skill sets within the communities that is really important.

So what has the Victorian Government been doing in this space? In terms of the regulation changes, there is the general exemption, which I have talked about just briefly. There is changing the wind turbine setback. One of the changes that occurred was a change from 2 kilometres to 1 kilometre—the distance a wind turbine needs to be from a community—and that has meant that there are more projects that are now getting up. There was the Essential Services Commission inquiry into distributed generation, which has been in two parts. The first part has been in terms of the environmental and social value, which we have recently dealt with. The next part is the network value, so it is the benefit of communities or households putting energy into the grid in terms of avoiding the amount of poles and wires and infrastructure that are going to be needed for those areas.

Looking at the PiLoR, which is the payment in lieu of rates, currently the way that generators are charged or else have their amount of payments to councils made, rather than on the value of the property or else the investment, is a formula which is looking at a certain base load of \$40 000 and then a certain amount per megawatt of installed. That has meant that a very small project such as Hepburn Wind pays a much higher rate per megawatt than a very large power plant. So that is one of the things we are currently looking at—whether we can come up with a better formula for actually working that through. The other area is the network connections in terms of how the communities and local areas deal with connection issues.

The guidance to communities: there is a guide which was put out—the *Guide to Community-owned Renewable Energy*; the sector strategy, which I talked about; and there is a further piece of work, the Victorian action plan in terms of renewable energy and energy efficiency, which we are still coming to a conclusion on. There is direct funding support. There is the \$20 million New Energy Jobs Fund—there was the first round of that, which was announced in the middle of last year. There were 24 projects valued at over \$5 million, and 18 of those projects were community-based projects. It is trying to provide some support and assistance to those communities. Finally, there is this sharing of knowledge and things like anyone that is funded or any community project that is funded under the jobs fund needs to share the knowledge and lessons and the data and information so we can all learn and get better in that sort of space.

What are some of the key examples that we have got in our state? Again, those 18 projects—the Hepburn Wind park is a classic example from the early 2000s. It was a group of people in that area of Hepburn that got together to get that off the ground. It took about eight years or that sort of time frame to actually put in place some community wind turbines that are generating, I think, about 4.1 megawatts, which is enough to power about 2000 homes, so that is a great example of that occurring. That did need a significant amount of funding from the Government—about \$1 million was the amount which was invested by the Government at the time. A more recent example is of the Black Forest Timber Mill at Woodend, which has got a large amount of solar which has been put on an old timber mill, which is both providing power to the people that are working within the timber mill in terms of the small businesses, the communities, but also providing power for that area of the community. That project is actually now looking at a proposal to put a small number of wind turbines on Mount Macedon.

That is one of the things that is currently being looked at in terms of removing the planning and other barriers to that occurring.

Finally, the Darebin Solar Savers is very well known in terms of low-income people within the Darebin City getting the benefits of getting solar put on their roofs and then being able to pay them off through their rates over an extended period of time.

So, what are the questions that we see, or the Government, in terms of what is the role? These are things we have been talking about in terms of our submission. How does the Government help communities that want to transition to 100 per cent renewable energy? Yackandandah is an example of that. The Newstead community is another example of that. Another role for government is to help communities understand the planning and licensing and regulatory requirements to be able to shepherd their way through those many requirements. To support the knowledge sharing is a role of government—to be there in terms of sharing knowledge, making sure that as we are learning in one part of the state about the barriers and benefits of these projects we are sharing that with others.

There is creating a supportive environment—taking away barriers, whether it be in terms of the connections, the licensing or the setback requirements. The other thing is in terms of the equity. As we are seeing the uptake of more and more community or individual power options, how do we make sure that we do not have some areas of the community or some cohorts of the community getting an unfair burden because of that occurring? An example of that is the Newstead area. If we have a lot of communities which are putting in place solar or essentially looking after their own needs, how do the Government and the distribution companies and the network businesses work out what is a fair share for the costs of the infrastructure for that particular town going into the future and how is that shared?

My concluding remarks are in terms of the things which we will be looking forward to from the panel and in terms of the findings of the inquiry. We are again thinking about those access and equity issues, such as the pathway for communities to transition to 100 per cent; the changing of some of the wind exclusion zones—a classic example is the small-scale wind projects of the Macedon group in order for it to have those wind turbines; the setbacks; and the rate schemes. How much should a small-scale wind or solar farm pay versus a very large scale power plant? What is the definition of community energy?

We have given our thoughts on that in terms of whereabouts we are at from the Government's point of view in terms of the definition of community energy on page 5 of our submission. We will be keen to hear what the panel has got to say in terms of the Inquiry. Again, there is the role of community energy as part of a reliable, affordable energy system. In local energy trading, there are some exciting trials which are going on at the moment in Mooroolbark looking at how different generators and households can trade between each other. That is an area which I think we are going to see a lot more of in the future.

Mr MELHEM — Can you explain a bit more on that issue and how you see that working?

Mr HAMILTON — Certainly. Essentially, the way the system currently works is the national grid. If I am a solar generator and I am feeding into the grid, we feed into the general market and pay the minimum of 5 cents or whatever it is. The idea that is emerging, and it is actually being trialled in New York at the moment, is that if I am generating power on one side of the street, I can sell that power to my neighbours or else to my local football club or my local scout clubs. How do we create a system and a market for that occurring?

There is some terrific work going on in terms of the Mooroolbark trial, which is looking at connecting a street of about a dozen houses which have each got solar and batteries and a microgrid, which has enabled them to look at sharing those benefits of one member of the street generating power at a certain time who is not actually needing it because they are not using that power, and the next house needing it because they are turning on the air conditioners or their toasters or whatever it is. So there would be the ability for person A in the street to sell their power to person B on the street.

The two sort of steps there are: one, in terms of making sure that the technology is able to do it, which the Mooroolbark and the GreenSync trial is doing and that platform; then it is the development of the markets that then enable that to happen—so how do you create a market that allows someone to provide energy into a market and then someone else to take that energy off the market?

Mr MELHEM — Do you regulate the price they can charge?

Mr HAMILTON — I think all those things will be need to be worked through. Currently there is a minimum price for the power which is fed into the grid. I think it is likely that there will be a minimum which is still actually set. Whether the price is regulated—I think it is unlikely that that is the way that we would end up going, but you would hope that a market would determine the lowest or the best price for those areas. If people wanted to pay more for their energy because they know that it is coming from or it is going to their local football club, then you would enable that to happen.

Mr CRISP — The grid: who will pay for that? Because I think what you are saying is we are going to do away with the steel pylons and not have a grid.

Mr HAMILTON — I do not think that is the case. I think there will still be an ongoing need for a grid and a network of poles and wires and pylons. I think that there will be some individuals and communities which may choose to go off grid for their own personal reasons. An example of that is a local household that just wants to do its own thing or a community that is in a very isolated part of the state and wants to do it because of bushfire reasons and all those sorts of reasons. However, I think that the benefits of still being connected to the grid are that when part of our community or individuals are generating power and part of them are needing the power, the grid will allow them to make that transaction. It also means you do not have to oversize your power plant to deal with the extreme peaks at any particular time.

Ms RYALL — There is obviously significant cost involved in setting up if you are an individual. You talked about your own power plant, or whether that be a community-based initiative, and then obviously there is the need to have the grid. If people go off grid, who pays for the grid that needs to be there for backup purposes? And then you have got responsibilities if a major weather event or the like destroys community infrastructure. There are a number of questions in there. How do we make sure the power is retained and maintained and there are not blackouts? At the same time for people in a low socio-economic circumstance, low income, who cannot afford to buy into some program, do they essentially get left with the burden of the cost of the grid? There are a lot of questions in here that relate to costs.

Mr HAMILTON — I certainly agree, and I think that they are some of the challenges which we are dealing with now as more communities and individuals are wanting to supply their own power. I will throw to Alex in a minute to talk about the Newstead example, because that is exactly the example that we are seeing, where there is a community that is very enthusiastic about going to 100 per cent to renewable energy. The way that they want to do that is for people to put solar and potentially storage and other options on their houses. That is creating the challenge, first of all for those people of that community that put solar and storage on their houses: what price should they pay all the poles and wires? The other challenge is in terms of those members of the community that cannot afford to put the PV and storage in their communities, how do they not get an unfair burden?

Ms RYALL — Absolutely.

Mr HAMILTON — Essentially—and I will throw to Alex in a minute to give a lot more detail about this particular area—I think that one of the things that we are doing there is working with Powercor, which is the distribution business, and trying to work out how they can come up with a formula to better share and provide certainty in terms of the fixed charges versus the variable charges for those communities. Currently the way it happens is that there is a five-yearly round. Powercor sets its prices for fixed and variable charges and does that through the national systems and the regulators. However, what we think is needed in this case is a greater length of certainty in terms of those fixed and variable charges and how that is shared, and I think it will provide a terrific trial for how it might work. One of the things I think we need to do is do this not just at Newstead but at multiple places around the state and work out exactly how it will work so we can then design the system to provide the incentive to the market in terms of those areas.

Ms RYALL — So the burden essentially falls on maintenance of the grid and supply. Obviously one of the concerns is jobs—business—and business at the moment is seeing very significant increases in their bills around when they have got to lock in for future, around the uncertainty, and is therefore paying for the sustainability of power in order to run. Obviously those sorts of things impact jobs, so if you are pulling away through community, is business paying for the certainty that needs to be provided to everybody? So it is not just a burden on individuals, but it is a burden on business and the jobs certainty there.

Mr HAMILTON — Yes. I think that there are also these opportunities for businesses as well as groups of households and communities, and an example we are seeing in many parts of the state, particularly in Shepparton and that area, is that there are constraints in terms of the grid as it currently is there. So there is a barrier for new businesses to be setting up, and they are seeing higher prices and all those challenges.

Some of the terrific work that is going on—and we provided a grant to the dairy farmers association—is looking at whether those businesses can get together and have a microgrid or a connected power source which then supplies that part of the state with more power which is localised from wind and solar, probably solar in that particular area, with storage, batteries or other forms of storage and a microgrid that means that they get better self-sufficiency in terms of their actual needs and it actually makes more efficient use of the system. So rather than everyone having to build infrastructure that is dealing with the very peak loads, which is where a lot of those costs come from, if we can design and use the technology to match the demands and the needs, we will get much better value.

Ms RYALL — It is more in that transition phase. I think you mentioned before, however long it takes—however many years—to create something of this type, it is that transition phase and sustainability of business that I think is a significant concern in the interim.

Ms BADHAM — I just might mention the work that is being undertaken at a national level through the COAG Energy Council, particularly on standalone power systems or microgrids. The Energy Council—and a discussion paper on this was released, I think, mid last year—is looking at standalone power systems and particularly the consumer protection issues associated with customers within both systems and how to better establish and facilitate both systems.

The Energy Council working group is at the moment looking at two broad models. The first is a model where you actually have a distributor-sponsored standalone power system. So that is where a distributor determines that for particular reasons, such as bushfire safety reasons, it would be better that a remote community be disconnected or that the connection to the network lessened, for want of a technical word, and that the community source its own supply through distributor-sponsored local sources.

We have also seen, through Newstead, distributors working with local communities to also support standalone power systems. In that case the consumer protection issues, if you like, in my view, are less because you do have an established energy company that is involved with the community in establishing the SAPS. So that established entity can provide that support and the technical and safety expertise that is required, for example, if you do have an outage or an extreme wet weather event that damages the system.

The other model that is being looked at is the pure community standalone power system, where it is a community-driven and sponsored standalone system, and of course that does create consumer protection issues, including the issue of supplier of last resort and the issue of what happens if customers want to opt out from the system. I will just say that they are complex issues, because obviously we want to facilitate communities establishing these projects but we also want to ensure that appropriate protections are in place. Those are the issues that we are working through in that national forum.

Mrs FYFFE — The community standalone systems, whether it is an individual house or a group of houses, are going to be heavily reliant on battery storage or batteries to store the power. What is being planned for regulations as to where those batteries are going to be stored? There is concern about houses—having them in garages is very dangerous, and research is coming through on that. So how are you going to handle that? Particularly if you have got several buildings or several properties in an area, you are going to need a lot of battery storage for when there is no sun to do it.

Ms BADHAM — It is also an issue from the network business side. Our distribution networks also want to see or have visibility of homes and communities that have battery storage so that they have an idea of when customers at those homes are going to feed electricity into the network or have the capability of feeding electricity in the network, because they need that information to plan the operation of their system. So again through the national energy council forums, as a first step what is being considered or proposed is the establishment of a battery storage register—a central database where batteries and the location of batteries are recorded. That information is available to not only networks but also to emergency services so that they know, when they are responding to a fire or another event, that there is a battery on site. Again we are looking at those issues with the national council in that space.

Mr MELHEM — Just to follow on from that, are we thinking about regulating where batteries should be stored? I think that is what Christine was alluding to. For example, are we going to issue a directional regulation saying, ‘Hey, you can’t store it in your shed’, or, ‘You have to store it in a certain area’. Are you thinking along these lines?

Ms BADHAM — I will have to take that on notice.

Mrs FYFFE — Yes, that is exactly what I was thinking. You cannot have it in a garage built into a house. It is extremely dangerous.

Mr HAMILTON — In terms of how dangerous a particular battery is in the situation, I think it depends.

Mrs FYFFE — On what?

Mr HAMILTON — It depends on the technology, the particular battery that is being used, the cooling systems that they have got and the...

Mrs FYFFE — We have seen the problems with mobile telephones and batteries, and there are links to the materials used. My colleague here knows more about it than I do.

Mr HAMILTON — I am not discounting that there are issues with technologies as they are emerging that we need to take into account. I think we are going to see a whole raft of different storage technologies. It will not just be batteries, and I think we are going to see a whole raft of different scales and types of batteries. We are already seeing people purchasing batteries and having them in their homes at the moment. I will check this figure, but there are about 7000 batteries across the country at the moment.

I think we will see very, very large batteries, such as the announcements that the Victorian Government has just made as well as the South Australian Government, of up to 100 megawatts as well as people using very, very small batteries for their own solar on their roofs. I think sometimes they will be located at the end of the street or in part of a development.

There is an example in Western Australia, which was funded, which actually as part of a new development put a medium-scale battery in what looked like a house. It was not actually a house, but it was designed to give the impression of a house so that it blended in with the aesthetic of the area. It was a way for that community to have a relatively large battery, and that would have benefits of obviously not being in people’s garages and those sorts of things. You would have to have the community in that area designed, which is where the planning system comes into it as well.

The CHAIR — Have you finished?

Mr HAMILTON — Yes, I have. Thank you.

The CHAIR — We will continue with our questions then. You mentioned the community transition before. What role does the Victorian Government see community energy projects playing in the transition to renewable energy?

Mr HAMILTON — I think fundamentally it is those key areas of the Victorian Government. One is to take away the barriers that might be there because of the way the regulations or the markets or the systems are designed currently that prevent the consumer or the community from getting their projects up. I think the Victorian Government has got a role to provide the correct incentives. One of the things we are sure is a constant is that the consumer will always be there and that we need to make sure we design the regulations, the markets and the system with the consumer in mind at the centre of the system and make sure it is able to deal with the changes in technology and the movements of whether it be batteries or storage or other things.

I think the Victorian Government and the government have got a clear role in information provision, making sure that people are well informed of what the opportunities are, what the challenges are and how to do things and to share the benefits that might be in one part of the community with other areas. Going alongside with that as well is building that capability and capacity to deal with these sorts of projects. I think that an energy project is a highly technical and sophisticated project and requires a whole raft of skills—financial skills, legal skills, planning skills, community skills—and I think that we have seen a few cases of where that has all come

together. Hepburn is a classic example of that. That took 10 years to happen, and I think that how we can support communities to get those skills and get these projects off the ground is really quite important. I think that is going to be a key part of what we need to do.

Mr CRISP — Chair, can I seek some expansion on that? Where to begin? With an energy crisis as soon as next summer, the community sector largely being, I think, ideologically driven, and 10 years to get projects up, really what is the cost benefit for the state of doing a lot of work in that area when I think we have got better business solutions to pursue elsewhere to deal with what has become an energy crisis?

Mr HAMILTON — First of all, I do not see that Victoria has got an energy crisis. I think that other states have more challenges than us and we are in a terrific position in our state with a diverse range of energy sources. We are connected to three different states. We have got some of the most reliable supply and systems—and Alex would be able to help reflect on that—so we are not in crisis here. That would be the first thing I want to be clear on.

I do think that we do need to keep moving in terms of the transition, and we need to make sure we are getting options that are best value and best cost for the state as a whole. I think the primary way of doing that, as the State Government has put forward, is with the VRET scheme, which is the Victorian Renewable Energy Target scheme, which is really saying the state has got these targets of 25 per cent by 2020 and 40 per cent by 2025 and we are going to seek the best value for those targets to be met. So we will hold an auction, and the very big players building an example of a 300-megawatt wind farm will be able to put in their particular bids and what their benefits are as well as groups of communities at a smaller scale of up to maybe 5 or 10 megawatts will be able to do that. We will then seek what is the best value, and that is how we will make sure that we drive the correct benefits first.

It will not just be the lowest price, though, which I think is important. We will be looking at a whole range of benefits to the state. They will be, importantly, the benefits to jobs and investment, so a project that delivers more jobs, more investment, whether it be solar in Kerang or else in Mildura, we will be weighting those benefits and also the benefits to the communities. In Ararat there is a really good example of the recent wind farm, which is providing an annual benefit to the local community for community benefits and infrastructure, so it is helping the community.

Mrs FYFFE — Can you explain those benefits a little bit more?

Mr HAMILTON — I do not have the exact examples in front of me.

Mrs FYFFE — So what are the benefits?

Mr HAMILTON — I do not have the exact figures and things.

Mrs FYFFE — Lower prices, more jobs?

Mr HAMILTON — And also, in the case of Ararat, they are actually providing funds into a community fund. The local community is working out what it wants to do with the particular funds that are being raised. I do not have the exact number of how much that is in front of me, but I will be happy to take that on notice.

Mrs FYFFE — Please, I would like to know what subsidies, how much is being given to them and what results we have actually got from it.

Mr HAMILTON — Certainly. But it is one of the examples, from my vantage point, of how we have moved quite a long way from these projects being not embraced by communities, you might say, to, in this case, being really embraced by local communities. There was a planning application recently—for Horsham, I think—which you might want to talk about, Simon, which did not have one objection.

Mr COVER — That is right.

Mr HAMILTON — So we have moved into a new space where people are seeing there are benefits to their communities.

The CHAIR — Some community energy groups have requested that a community-specific feed-in tariff be set to encourage the development of community energy projects. What are the benefits and drawbacks of introducing this mechanism?

Mr HAMILTON — The Government has not said anything or made any policy position on this. I think that we would be open to hearing from the panel and the Inquiry what it thinks. Getting back to the previous question, I think that every time that we add a particular carve-out, if we may, potentially that could increase the costs. So we would need to be very sure that the benefits were going to outweigh the costs in that and get back to what is a fair price in those things. That is where our current position is.

Ms RYALL — We have had some experts in the wind space come and talk to us, and one person talked about the cost in relation to auctions and bidding—he gave the example of the ACT wind auction—and also said that unless you have the best wind resource, you cannot produce the best price. Then he talked at length about the complexities of how where you think might be a good place and get you the best outcome can in fact be a disaster. There is so much scientific information that is required in terms of undulation and all sorts of things in order to be able to determine that, and even then you may find it is not going to run. So in terms of that auction, what is the criteria? Is it just dollar?

Mr HAMILTON — First of all, I agree that it is extremely complicated and sophisticated about how they set up these projects and how they make them work and that it is even determined by how many turbines they might have on a hill and how they are placed next to each other. So it has moved a long way from when the first wind farms were actually built. In terms of the VRET scheme and the auctions that we are putting forward, no, it will not be just dollar. We will be looking at what is the cost that is needed in terms of the subsidy from the state in order to make that project viable, but we will be also be having a number of other criteria which are used to weight those bids.

Ms RYALL — Do we know what they are?

Mr HAMILTON — I can give an indication. I do not have the exact list in front of me, but we put out a consultation paper in June last year which has got an indication of those criteria. Essentially those criteria include the benefits to the state in terms of jobs and investment, how the proponent is engaging with the community—so whether they are using best practice in terms of their engagement with the community—whether the project is able to dispatch into the NEM and those sorts of requirements. There are some additional criteria which I am happy to take on notice and get back to you on.

Ms RYALL — Thank you. I think the point they were making was that you may have somebody who bids at a low price but gets a fantastic outcome because everything actually works, but you can have someone that paid a very high price, thinking that their sites and so forth are all going to work, and it tanks. I think that is the uncertainty that those people involved in, for example, wind energy face, and perhaps the ACT has been an example of that. When you go out to bid—and we have had a pokie auction that tanked in terms of revenue for the state—how do we make sure that does not happen in this instance?

Mr HAMILTON — I think that it is making sure that we are designing the auctions to elicit the best projects.

Ms RYALL — But they are saying they cannot guarantee because there is so much investment in the pre stuff before you would even auction for it—\$3 million to \$10 million in investment to actually determine whether it is going to be good or not. So how can the Government therefore say, ‘It’s going to be a good one’, when these people who are the experts do not even know?

Mr HAMILTON — I think it is a matter of testing the market and seeing what is available in terms of the market, in terms of these projects. We have already run a tender last year, which awarded two wind farms—Windlab and Acciona, for the Kiata and Mount Gellibrand wind farms—which was 100 megawatts.

Ms RYALL — This was Windlab actually—one of the fellows we were talking to.

Mr HAMILTON — So they were one of the examples, which was a successful tenderer. We had a very good understanding about how many projects are out there and about what the relative costs are and the relative benefits to the community.

Ms RYALL — He was under the impression that a lot of the opportunities to take up have not been taken up—in turbines—simply because at the end of the day it is not going to provide the value to anybody by taking them up.

Mr HAMILTON — I think we have seen that there have not been many projects getting up. These two that we announced last June were two of the first in quite a while. We are, though, starting to see many more getting up now—some recent solar announcements for both Kerang and Mildura—and we have ourselves, as the State Government, put out a new tender for 75 megawatts of large-scale solar. We already are aware that...

Ms RYALL — I am more talking about wind.

Mr HAMILTON — Yes. Both in terms of wind and solar we are very confident that there are many projects that are ready to go, and it is about just determining which we get the best value from. I am very confident that we will continue to get really good value for the state and also projects that are embraced by the community. The last thing we want as a state is to have projects which are in the wrong place and cause communities to be aggrieved by those projects, which is bad for our planning system and our regulatory system. So I think that is what we are very focused on.

Mr CRISP — I would like to expand on a comment you made in your introduction, which is that you are looking at community energy being important beyond 2025. Mixed with that, you have said these 18 projects have been supported from that \$20 million fund, but what have they spent it on? Because if you are not expecting it to be significant for some time, then with the technology curves that we all look at, are we wasting our time with the community sector?

Mr HAMILTON — I understand. I am just looking through my figures on the numbers of community projects in the country, which I think is about 70, but I will confirm that with you in a minute. The reason for me saying that, to be quite clear, is that when we are looking at those first targets between now and 2025 and up to 5400 megawatts, the figures were that there are 22 community projects across the country and six of them in our state. There are 70 which are in some stage of development. The point I am really making there is that there are very few relative projects which are there at the moment, especially in terms of size. So the up to 5400 megawatts of generation is as much renewable energy as there is in the country at the moment, so it is a huge amount of energy.

Our best advice and knowledge is that the majority of that 5400 is going to be delivered by large-scale wind and solar. There may be other technologies that come on board in that period, but at the moment that is what we are seeing. We are seeing wind and solar being very competitive at that large scale, because you get the economies of scale and those things working. In terms of the community projects and the more local household and community areas, I think that we are going to see that happen almost regardless of what governments do. I think that our part of the world embraces technology the most of anywhere across the world. We love technology. We have seen it with the uptake of solar on houses. I think there are over 300 000 households which have got solar at the moment or installations of solar in our state alone. We have seen a dramatic rise from a few thousand 20 years ago. It is amazing, like the uptake of mobile phones and all those things.

I think that as these new technologies become available and as the prices continue to come down we are going to see the uptake happen. I think that is particularly why it is worthwhile investing as a state in this area—so that we can understand what is happening, we can make sure that we are designing the markets, the regulations and the system to get the best benefits and we can make sure that we do not get unintended consequences or see problems of people who can afford it uptaking the technology and other people being left behind and those things. That is where I think the pendulum will swing back.

Ms RYALL — Just picking up on what Peter and Alex said about how technology advances so quickly, though, is it likely that we could end up with a situation where you have got the community locked into something that is old technology and costly when new technology advances and, as you said, economies of scale reduce cost. Is that one of the challenges, potentially? Governments usually do not define markets, and therefore part of this is out of your control.

Mr HAMILTON — I think that technology will continue to emerge.

Ms RYALL — I agree with you.

Mr HAMILTON — We have seen a whole raft of different cases where individuals, for example, have invested in technologies which were the technologies that led to the future, I suppose. An example would be the VHS or the beta versions of the video cassette.

Ms RYALL — I am just talking about communities being locked into something that is expensive because it is old technology when new technology has gone past, and I think that was the point Peter was making.

Mr CRISP — Solar gardens could be full of lemon trees.

Ms RYALL — Correct. And therefore how are you considering that challenge in itself?

Mr HAMILTON — We need to be adaptable. We need to be there to support the communities to make smart choices. I think that the more that we can have a system and communities which can be flexible and adaptable to emerging technologies, the better we are going to be. I think that things like the Mooroolbark trial are great examples. There is another terrific example in the Mornington Peninsula—United Energy is the one that is involved there—again using larger scale houses with batteries with PV to avoid a \$30 million augmentation of the grid. That is a case of us using these new technologies to get those benefits.

I suppose the alternative is that we could have built the augmentation to the grid and then that not being needed as well. Whichever choice we take, we want to try and remain as adaptable and flexible as we possibly can, focusing on getting the system to work in the most efficient way we can. The more that we can reduce those very intense peaks in terms of energy demand and those peak demands that occur, the more that we can lower them off, the better outcome we have got to get to, whether it is the poles and wires will not need to be as big augmented or the other power plants or batteries or whatever it might be will not need to be as big either.

Ms RYALL — So the answer is it could happen but we end up with the disparity.

Mr HAMILTON — I think there is a range of possibilities there.

Mr MELHEM — It is a bit like mobile phones. They get changed every three months. I think it is a very important issue, and I do not know whether we can get the answer. Some community groups have put to us that agencies like Sustainability Victoria maybe should be considered to be appointed to facilitate and help these community groups who basically put things together. I am interested to hear your thoughts on that idea and whether or not Sustainability Victoria has got the capability or resources to do it or maybe other agencies might be looked at. That came out through a number of briefings we had from various groups about how they need a particular agency to help their system doing all that stuff together. Have you got any thoughts on that?

Mr HAMILTON — Certainly, and thank you. Simon, you might talk about the planning role as well.

Mr COVER — Sure.

Mr HAMILTON — The short answer is I do think there is a role for Sustainability Victoria. That would be my first headline. Essentially from my vantage point the Department develops the policy and the frameworks and the architecture, and Sustainability Victoria is a program delivery arm of government. It has been very successful over many years in terms of waste or energy efficiency and other programs it has been running and I think will continue to run. I know that they are building their capability in this space, particularly in the community angle, and are very involved in a recent initiative in the Latrobe Valley, covering the three councils in that area, essentially to provide upgrades for a thousand homes with both solar panels for their homes and energy efficiency upgrades in terms of draught-proofing and those sorts of things, and helping those communities get a better price for their energy.

Getting back to what can we do as the state or the Government to help communities and individuals, the Energy Compare website is a fantastic initiative of the state.

Mr CRISP — But people are not using it.

Mr HAMILTON — And I think that we need to promote it better. But it is a fantastic initiative for basically just an individual being able to log onto a website, give their details about what their energy use is and find out what the products are that are being offered and how much they can save. I think up to \$300 is what the average person can...

Ms BADHAM — Over \$220.

Mr HAMILTON — Over \$220 the average person is saving when they log onto this website—a big amount of money. I think that SV—Sustainability Victoria—has also the benefit of looking at the connectivity between the energy, the waste issues, the water issues that might be facing communities or areas and bringing them together. So that when a community might be thinking about a waste problem—how to deal with its green waste—and be also thinking about its energy opportunities or needs as well as water challenges it might have and where they can be brought together, I think that is where SV can be useful.

Mr MELHEM — Just on that, consider, for example, a new community, a new subdivision, in a housing estate that is about to expand or start. Would you look at saying, for example, that solar power should be part of building a house or exploring that particular estate, small or big, having battery storage facilities? Is your Department or the Government thinking along these lines? Is that something we should think about?

Mr HAMILTON — I might throw to Simon if that is okay.

Mr COVER — Yes, that is fine. Thanks for that question. I think there are always opportunities in greenfield developments to incorporate sustainable urban design. The Government is starting to pick some of those up, particularly with the work of the Victorian Planning Authority, looking at new subdivisions in the growth areas not only in Melbourne but also across Victoria. Already, we have got a small team in the Department of Environment, Land, Water and Planning who has been engaged to support new wind energy facilities, and that can include community wind facilities. The Department has a small team who actually are helping to facilitate that thinking at the moment, and we are already in discussions with the Victorian Planning Authority about how encourage renewables better in new subdivisions and what does it look like. So while we have got a little bit of a way to go, we are thinking about it, as Scott has mentioned—

Mrs FYFFE — It could happen in the way wastewater has happened.

Mr COVER — Correct, and stormwater and those sorts of integrated projects, that is right.

Mr MELHEM — One last question from me. You mentioned that in Victoria we have got six community projects and there are 22 nationally, but internationally can you share with us some sort of successes or things we can learn from? We are embarking on going to have a look at what is happening internationally. Can you give us some thoughts on what have, in your view, been some successes or things we should look at or learn from?

Mr HAMILTON — Yes, certainly. Some areas that I would point to: Scotland would be worthwhile looking at in terms of what they are doing in that area; some of the European countries—Denmark and those sorts of areas, Germany; also the New York example is a perfect leading edge example of what we are talking about. That was actually in response to Hurricane Katrina, when they ended up with a situation where they lost a lot of their major infrastructure. Essentially that they are leading in terms of some of how to create markets and systems with this new technology is where I would be pointing to in terms of what would be really worthwhile looking at.

Ms RYALL — I just wanted to mention how you referred to government designing a market earlier, which is a bit scary because governments are not in the business usually of designing markets. What do you see the challenges of that being, and do you think it can be successful? I mean, you are probably going to say, ‘Of course it can be successful’, so I should not put a leading question, but there would be many that would challenge whether you can do that successfully or whether the market is best to do its own design.

Mr HAMILTON — I think that it is always challenging to design and implement markets and regulation. I think that when I talk about the role of government, it is really making sure that we have got clear rules and frameworks and regulations about how individuals or businesses feed their energy into a market and a price is then determined by the market participants, and then people who want that energy can then purchase that energy at a certain amount. I think we do do that in a whole raft of areas. We do that in the stock exchange, we do that in water, we do that in energy, we do that in health services now. I agree that it is very, very challenging to get right, and I think that there is a need to have a clear eye on what the objectives are that we are trying to achieve as a group of governments or communities and make sure that we are heading in that direction.

Ms RYALL — In that context it sounds like you have explored and delved into through your departments everything that we are looking at as a Committee. I am not sure that we are going to add any value to what you already do and have done, to be honest with you, because just by reading your submission you have gone everywhere we are going and you have looked into everything that we are looking into.

Mr HAMILTON — I think that the other submitters and yourselves will provide clear, fresh eyes and guidance on what is happening, and I think that is really important to us, as well as others I am sure, to make sure we are going down the right track and the right path, and I think that is really valuable.

The CHAIR — It is a good way to finish. Scott, Alex and Simon, on behalf of this Committee I would like to thank you for your time and contribution. Thank you very much.

Ms RYALL — Thank you.

Mr HAMILTON — Thanks for the questions.

Witnesses withdrew.