

TRANSCRIPT

LEGISLATIVE ASSEMBLY ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Tackling Climate Change in Victorian Communities

Melbourne—Thursday, 5 December 2019

MEMBERS

Mr Darren Cheeseman—Chair

Mr David Morris—Deputy Chair

Mr Will Fowles

Ms Danielle Green

Mr Paul Hamer

Mr Tim McCurdy

Mr Tim Smith

WITNESSES

Ms Krista Milne, Director, Climate Change Action, and

Ms Kim Le Cerf, Team Leader, Climate Change Mitigation, City of Melbourne; and

Ms Maree Grenfell, Deputy Chief Resilience Officer, Resilient Melbourne.

The CHAIR: Welcome to the public hearing. I just want to run through some important formalities before we begin. All evidence taken today will be recorded by Hansard and is protected by parliamentary privilege. This means that you can speak freely without fear of legal action in relation to the evidence you give. However, it is important to remember that parliamentary privilege does not apply to comments made outside the hearing, even if you are restating what you have said during the hearing. You will receive a draft transcript of your evidence in the next week or so, which you can check and approve. Corrected transcripts are published on the Committee's website and may be quoted from time to time in our final report. Thank you for making the time to meet with the Committee today. Can each of you please state your name and title before beginning your presentation.

Ms MILNE: Sure, I will start: Krista Milne. I am the Director of Climate Change Action for the City of Melbourne.

Ms GRENFELL: I am Maree Grenfell. I am the Deputy Chief Resilience Officer for Resilient Melbourne.

Ms Le CERF: My name is Kim Le Cerf. I am the Team Leader of Climate Change Mitigation for the City of Melbourne.

The CHAIR: Fantastic. Over to you.

Ms MILNE: Fantastic. Well, thank you. City of Melbourne and Resilient Melbourne welcome the Inquiry into opportunities for the Victorian Government to respond to the climate emergency. We are really grateful and happy to be here to present on our submission.

There is one key point that we would like to collectively make—and we have made a number of suggestions and recommendations through our submission. I am happy to take questions on all of those, but I really want to focus our discussion of our presentation today on a key one, which is the foundation to our mitigation actions at the City of Melbourne, and that is to ensure that we put ourselves on an emissions reduction trajectory, which is to limit global warming to 1.5 degrees—so to be part of the global efforts that the Intergovernmental Panel on Climate Change has recommended for governments to act on, which is to keep global warming to below 1.5 degrees, because that is what the science tells us is essential.

The City of Melbourne has been amongst local and global city leaders acting on emissions reduction and adapting infrastructure within the city to the adapting climate for many years now, and we have made significant achievements over that time. One of those key achievements has been establishing the Sustainable Melbourne Fund. Through City of Melbourne seed funding that fund has resulted in unlocked investment of about \$300 million—so \$30 million in environmental upgrades to the city, resulting in 300 000 tonnes of emissions reduction through innovative finance mechanisms such as the environmental upgrade agreements. It is pleasing to see that that is now being expanded through the *Local Government Bill*, which is in front of Parliament, but that is going to potentially be expanded to non-commercial buildings.

We have also built Council House 2, which was Australia's first 6-star green star building, and that was built as a test lab for innovative technologies and both how you manage buildings with environmental credentials and show that it is commercially viable. That set in train Melbourne being a leader in green star buildings.

More recently we have developed a new electricity purchasing model through the Melbourne Renewable Energy Project, which brought together 14 large organisations—commercial organisations, universities and councils—to use their collective buying power to purchase 80 megawatts of electricity, which resulted in the construction of 39 wind turbines in Western Victoria, which led to 140 jobs during construction and eight

ongoing jobs and 98 000 tonnes of greenhouse gas emissions reduced per year. That model is now being replicated.

We have also been carbon neutral since 2012, and we ourselves have an emissions reduction plan which is based on a 1.5-degree target—so we are embedding that science-based target within our own operations.

Then on the adaptation side we are addressing the heat impacts through the city and also flooding through adapting our infrastructure. We have planted 22 000 trees since 2012 and continue to plant 3000 every year and are also embedding stormwater harvesting and permeable pavements throughout the city to collect stormwater to reduce our reliance on potable water. At the foundation of all of this is innovation, aspiration and leadership of the Victorian community and our more immediate community to ensure that we really respond to the climate emergency in front of us. Our most recent climate change mitigation strategy, which was passed last year, further embeds that science-based target, as I mentioned, and aligns Melbourne's actions towards the Paris climate agreement. We have done that to follow the advice of the IPCC because the difference between a 1.5-degree target and a 2-degree target has significant implications for our ability to respond. Some examples of the difference: loss of species under a 2-degree target will be two times worse compared to a 1.5-degree target; loss of insect species, three times worse; coral reefs would decline by 99 per cent; extreme heat will be at least 2.5 times worse, and we know the impacts of heat for the Victorian community and experience that most years now; and sea ice-free summers in the Arctic will be every 10 years instead of 100 years. So you can see the difference between a 1.5-degree trajectory at a 2-degree trajectory is quite significant. That brings us to the point of why we are really focused on our key recommendation, being responding to a 1.5-degree trajectory through emissions reduction across Victoria, which I am going to hand over to Kim to talk a bit more about.

Ms Le CERF: As Krista mentioned, we think that it is really important the Victorian Government does adopt a 1.5-degree science-based target. This is really important at this point in time because the Victorian Government is currently going on a process to set interim emissions reduction targets to 2025 and 2030, which has been mandated under the *Climate Change Act 2017*. The interim emissions reduction targets that have been put forward by the independent expert panel are not consistent with limiting global warming to 1.5 degrees, and as we outlined in our submission, which is supported by the modelling referenced by the independent expert panel, we strongly urge the Victorian Government to set a 40 to 45 per cent target to 2025 and a 65 to 75 per cent target to 2030. This also means that the Victorian Government would need to raise the Victorian renewable energy target to meet those ambitious targets, and we think that VRET—the Victorian renewable energy target—needs to double and be 100 per cent by 2030, acknowledging that to meet the interim emissions reduction targets the electricity sector would need to do the heavy lifting—do most of the emissions reductions to meet those targets.

What we are seeing is the international trend from investors is to reduce their exposure to fossil fuels—so coal, oil and gas—regardless of what the policy settings might be at a state or national level. That means they are rapidly shifting away their investments from fossil fuels, and it will most likely lead to the early closure of coal-fired power stations, which we have seen most recently with Hazelwood. We think that because of that shift within the private sector, within the markets, it places even more importance on setting an ambitious target now and giving the time needed for the industry to construct and deliver adequate supply to fill the generation gap once the next coal-fired power station is closed.

As we have also outlined in the submission, we do realise that closure of coal-fired power stations do have significant impacts on the communities in which they are operating. It would be critical for the Victorian Government to plan for and invest in industry and place-based transition to make sure that we do not have stranded workers and communities and stranded assets. The transition from fossil fuels is an issue that has been grappled with around the world by many countries and regions. I know that there are opportunities to learn from what is happening in other economies that used to rely heavily on coal, particularly within the Ruhr Valley in Germany.

Just switching gears a little bit and talking a little bit closer to home, the transition from fossil fuels also needs to be extended to the planning decisions that we make each and every day within our cities, which can lock high emissions into new buildings and into new urban renewal areas for decades to come through the gas infrastructure. A decade ago gas was considered the transition fuel to help us reduce our emissions, but all-electric buildings are possible. They are already being built and can be built for most commercial and

residential building uses, and they should be mandated within the planning scheme not just within the City of Melbourne but as an opportunity across Victoria.

I will just hand over now to Maree, who will talk about the work of Resilient Melbourne within the city.

Ms GRENFELL: Thank you, Kim, and thanks for the opportunity to speak. The City of Melbourne hosts Resilient Melbourne, which is a program that was seed funded by the Rockefeller Foundation in the US. One hundred cities around the world are participating in the program with the aim to build the capacity of our cities, communities and institutions to adapt to, survive and thrive in the chronic stresses and acute shocks of the 21st century. The Resilient Melbourne program operates within the scope of metropolitan Melbourne, so we are a bit of an anomaly. We are funded one-third by the City of Melbourne, one-third by the Victorian Government and one-third by an aggregation of the metropolitan councils, and what we aim to do is to build on the successes and to scale successful projects across the larger city. The interconnected trends of globalisation, urbanisation and climate change are the three significant trends that the Rockefeller Foundation spoke about in designing the program, saying that the biggest threat to humanity at this point in time is around urban resilience. We have many opportunities to build and to strengthen our resilience to these sudden events and also to the chronic stresses which undermine our ability to respond to sudden events, which can include, especially here in Melbourne, heat waves and extreme weather events, which we know are on the increase, but also acts of violent extremism and things like cybercrime.

Chronic stresses—for example, housing unaffordability—really undermine our ability to respond to sudden events and to be able to bounce back. Resilient Melbourne joins the dots across sectors and organisations, and we galvanise collaboration to work together and build innovation not just from a technological perspective but from a policy perspective. For example, this year we released *Living Melbourne: Our Metropolitan Urban Forest* strategy, which is a strategy that 41 organisations who have policy influence across the metropolitan area have endorsed, including the Victorian Government. This strategy aims to extend, improve and connect existing greening efforts across the city. Our mapping associated with the project indicates that areas of Melbourne with the least vegetation cover are the hottest areas of the city, and these areas also house the communities that are most vulnerable to heat, usually experiencing the highest degrees of energy poverty. We recommend investment in a metropolitan approach to our urban forest and implementation of the *Living Melbourne* strategy to reduce heat; to provide equal access to green spaces for health and wellbeing across the city; to make sure that we have the appropriate ecosystem services that we require for our population, which is set to double by 2050; and also to improve biodiversity, which in itself can strengthen our ability to survive disasters.

Through another Resilient Melbourne program, Resilient Communities, we are working with five different developers at five residential development sites, some greenfield sites and some infill sites, within the city. We are working with the VPA through DELWP and also with a consortium of academics to research and advocate for increased investment in social infrastructure up-front in future residential communities and to make sure that public transport and some of that infrastructure is really there at that critical time when communities move in not only so that communities can be better connected to each other, so that they can support each other in knowing how to deal with hardship, which might just be day-to-day or might be through an emergency or a disaster, but also so that they can connect to employment opportunities that are more local than at a fair distance.

We are also looking at how we can influence precinct structure plans in the future. The VPA are very interested in how we can introduce social infrastructure and improve not just social benefit and connected communities but social cohesion, community resilience and sustainability.

So overall, and given the challenges outlined by Krista earlier, especially through the IPCC report, we at Resilient Melbourne recommend a more courageous and ambitious approach from the Victorian Government to consider the interconnected nature of urban systems, to not only reduce our impact on climate change but facilitate community connection, social cohesion, inclusion and participation in democratic processes. If we are to survive and thrive in this uncertain future, we believe we must deepen and hasten our action and invest in a future economy that is regenerative as opposed to extractive and also bring our communities along on this journey.

The CHAIR: Thank you for your presentation. In reading your submission earlier today, it occurred to me that the Melbourne CBD has a lot of buildings; most of those buildings are probably designed for 60 to 80 years, I would be thinking, and I would imagine, depending on the point in time at which they were built, they might well be quite energy intensive as buildings. Are there strong building code arrangements and energy rating requirements for new multistorey buildings that are built in the CBD for either residential purposes or commercial purposes? And what opportunities might there be around strengthening the requirements so that they are less energy intensive and perhaps where appropriate and possible have mandatory energy-rated appliances and renewable energy? It just occurs to me that a lot of them have a lot of glass, and that is a key component to solar panels. I would just be interested to hear what regulation is in place and what future regulation might be put in place so that we do de-energise the CBD, for want of a better term.

Ms Le CERF: Our current planning scheme within the City of Melbourne clause 22.19 deals with energy, waste and water efficiency. The current provisions encourage good performance but do not mandate it, and so I guess that does not allow us much room to improve the environmental performance of a building. We are currently, through the work of our *Green Our City Strategic Action Plan*, going through a process to amend our planning scheme to lift the minimum standard but then also encourage further standards. The work that we are doing there is to put in place, through the setting of green-star building requirements—so whether that is a five-star or a six-star green-star rating requirement—a way to demonstrate good-performing buildings. Sitting alongside that we are also developing a new tool around green infrastructure to encourage the greening of our buildings as well, because we know that that not only helps with reducing the urban heat island effect, but it will help with collecting stormwater and reduce the severity of flooding in the city, so we are developing a green infrastructure tool that will help measure greening outcomes within a building, and we will set a benchmark for buildings to meet certain requirements through the planning scheme.

The CHAIR: Is there regulation or legislation that the State Government might look at which would complement the type of work that you are looking to do?

Ms Le CERF: We are currently doing this work to amend our planning scheme. This could be work that the State Government does to amend all planning schemes, so that it is not done on a council-by-council basis but it is the standard for all buildings across the state, and we would encourage that because consistency across planning schemes would also be a good outcome.

Ms MILNE: I guess the other part of that is existing buildings' performance, so there is work being done at the federal level, as I said, with the commercial building disclosure. Currently it is only at lease or sale that a building has to report its energy performance, and so there is consideration occurring as to whether that can be introduced at more regular intervals, on the communication of that and on the size and scale of buildings. So that is something again that the Victorian Government, having a very strong and vocal position on, can support—driving that at the federal level.

The CHAIR: If I went and bought an apartment today in the CBD, something that has been built in the last 10 years let us say—it could be one or two or three bedrooms I suppose—at the point of sale is it disclosed to me what the energy rating is for my little apartment?

Ms Le CERF: No. The program that Krista refers to is for commercial buildings and for commercial office buildings. It is looking at disclosing the performances of the base building. It is triggered at point of sale or lease, but it also has a size threshold so it needs to be greater than 1000 metres squared.

The CHAIR: When I buy a house—a standard suburban house—if it was built in the last period of time, its energy rating would be disclosed, I am pretty sure, because of the time at which it was built. But that does not apply to a residential tower?

Ms MILNE: An apartment, yes.

The CHAIR: Okay.

Ms MILNE: So there is a significant opportunity.

The CHAIR: There certainly is.

Mr HAMER: Just on the building issue, I notice that compared to, say, 10 or 15 years ago in the evening you do see a lot less lights on in buildings, but there are still quite a lot of lights, more lights than I would expect from people working at 10 or 11 o'clock at night. I was just thinking from a behavioural change perspective, what role have you been playing, or can you play, to work with particularly the building owners, because it will probably be a cost saving—and the tenants I guess? It might be just upgrading switches or switchboards or other things to further reduce that use when it is really not necessary.

Ms MILNE: We have been for a long time delivering a program that is delivered nationally and coordinated across the capital cities plus some other metropolitan councils called CitySwitch, which is absolutely a behavioural change program to work with the tenancies within buildings and then have them also working with their building management to address that sort of behaviour change. That is accompanied by the program that I mentioned, which is about things that the building owner can do to upgrade their energy efficiency and which enables automation of those sorts of things so lights switch on and off when there are people there. I guess we have been doing that for a long time; in 2010 we started a lot of that work and our observation is we have sort of reached diminishing returns. There are a lot of leaders in the sector and the engaged and the companies that have got corporate reputations; their employees come to work there because they have sustainability targets and those sorts of things. They are on board and are delivering and they have got a momentum of their own. But there is a lot of office space, particularly in the Melbourne CBD, that is not covered by those large corporates, and to get to the next tranche it is a lot of resource for diminishing benefit in terms of emissions. We would have to put in a lot more effort to get a lot less benefit, so there is a question about how far to go and is that the most efficient way to achieve outcomes opposed to other regulatory or compliance-based initiatives?

The CHAIR: I was going to ask: in terms of those older buildings—the ones that you are potentially referring to—is there a way by which, when these buildings have their 15- or 20-year facelift, any element to that facelift that goes to dealing with energy use reduction and becoming more energy efficient could have some form of a rate discount associated with it? It may not necessarily need to be a lot, but is there some capacity so that when these buildings are getting a refresh, any element that is associated with energy intensiveness reduction might get some form of a discount as an incentive? Is it something that could be looked at or should be looked at or be encouraged?

Ms MILNE: Yes, we have done some initial investigation and that is certainly an area that we want to look into further. As we have identified, with the voluntary area we have probably reached our limit of achievement. How do we incentivise and disincentivise the next wave? I think there will definitely need to be engagement and support at the state level to achieve that, given the role the State Government has in rate setting.

The CHAIR: And within the CBD, how many of those buildings would have some form of renewable energy on them—panels or a fun little turbine or something?

Ms Le CERF: We can go back and give you the number, but very little. We know the wind power does not work within the city or within any municipality because of the nature of the wind. Obviously Council House 2 has some very famous wind turbines that have never actually turned. They are an art installation now.

Ms GRENFELL: They are yellow as well. There was an audit undertaken as to the amount of roof space in the city that would be suitable for PV panels.

Ms Le CERF: Yes, that is right. We have done a whole lot of mapping to determine the available roof space for solar potential but also for green infrastructure. That work is on our website and available mapped out. But in terms of—

The CHAIR: You could have panels on the sides of buildings, couldn't you?

Ms Le CERF: Yes, building-integrated PV—so that is within the glass, within the building fabric—is obviously technology that is available, but it is not something that has, I guess, proliferated in Australia yet. It has been taken up in some of the European countries, but it is a little bit of that chicken and egg, supply and demand. We need to, I guess, make a concerted effort to foster bringing that technology to Australia and then driving demand for it to bring the price down.

Ms GREEN: You sort of talked about energy, and not getting into the broader recycling issue that we are all working through at the moment but I am particularly interested in cities like Barcelona. They largely have apartment living across the whole city and I notice that there is only one part of that city that actually has individual household kerbside waste collection. They seem to have a really good network of pneumatic waste collection receptacles. And it is sort of, I think, every household, within 100 metres there are various waste collections, so everyone just as they are leaving, you know, on the morning to work—

There has been a number of conversations, I think, when people have talked about growing the number of bins that you would have to separate things—

Ms Le CERF: Streams.

Ms GREEN: Waste streams, thank you, Kim. People are talking about, ‘Well, apartment dwellers couldn’t do that’. Well, I kind of think that ideally they could if you had those types of things. So, has the City of Melbourne, in its high-density areas and particularly in the CBD, looked at things like that?

Ms Le CERF: Yes, we recently endorsed a new waste and resource recovery strategy earlier this year, and it actually goes exactly to that point. There are a couple of barriers and challenges though. Because of the way that existing buildings have been constructed, they are only conducive to one waste stream because there is one chute. So how do we go in there and help them change the infrastructure within their building to help separate at source, but then how do we give them the access to the resource recovery hubs?

Ms GREEN: I do not think Barcelona actually has chutes though, they actually have on street—they look like a set of Daleks, but they were all really clean and stuff. I was quite amazed.

Ms Le CERF: What we are actually wanting to work towards is to create more resource recovery hubs throughout the city so that the different waste streams can be separated and collected at source, taking it to the hubs. We have done some of that work in the past where we do currently have recycling and rubbish collection hubs throughout the city where buildings can take their rubbish and drop it off in a compactor that is a central hub within that precinct. We would collect the waste once a day rather than many businesses organising separate private contractors to come in and collect their one wheelie bin. So we have already started doing that. We want to expand that and work with the buildings within the city to see what infrastructure they need in their buildings to change but then also providing them with opportunities to take those streams elsewhere.

Ms GREEN: I just thought, given one of the other things that people talk about in living in the CBD and the residential amenity is the number of truck movements. It was my first visit to Barcelona in July and I just could not believe what a pedestrian- and cycle-friendly city it is—and it was just minimal truck movements. Just seeing the way things were. I just talked to some people who lived there who are from Melbourne and they were just saying how fantastic it is.

Ms GRENFELL: One of the things that Resilient Melbourne would really encourage just in relation to that, there is a great opportunity—even though it is a waste hub, it is a place where community can come together and it is an incidental form of interaction. I think it is really important that we provide opportunities for people to meet on the street and to have that element of social connection. I know that in Zurich they do the same sort of thing. They have waste hubs. They do not have collection before 11.00 am—or nobody is allowed to drop their waste into any of the bins before 11.00 am on a Sunday morning, to not wake anybody up.

The CHAIR: Like the old stubbies.

Ms GRENFELL: But there is this, you know, ‘Oh, you must have had a good night last night’ kind of thing, so it does open up that ability for people to, I don’t know, identify the diversity and foster some of the social norms that we would like to see in the city.

Mr MORRIS: Yes, because they have got a reputation for hard partying.

Ms MILNE: They do not get up before 11.00 am.

Ms GREEN: In Barcelona?

Ms MILNE: They go to bed at 11.

The CHAIR: They have siestas and all sorts of weird things up there.

Mr MORRIS: Just an observation first on the 2030 target. The date for the report of this Committee's report from this review, the date we need to table that report, is actually after—

Ms GRENFELL: The targets are set.

Mr MORRIS: the Government will need to respond to the independent panel.

Ms Le CERF: Oh, right, yes.

Mr MORRIS: In your submission you talked about the Essential Services Commission considering the climate impacts when assessing business cases to encourage the use of recycled water. In my patch, which is Mornington Peninsula, there is a project or a plan in preparation to enable far more access for the agricultural sector to recycle water. Can you expand a bit on what your thinking was in terms of how the ESC might approach this?

Ms Le CERF: We might have to take that question on notice, if that is okay. I am not an expert on that.

Ms GRENFELL: Neither am I.

Mr MORRIS: It would just be useful if you unpack it a bit for us. I think it might be helpful.

Ms Le CERF: Yes, we can definitely provide you with a written response.

Mr MORRIS: Great, thank you.

The CHAIR: Thank you for your submission. We very much appreciate it. If you could provide that further material, that would be fabulous. Thank you.

Witnesses withdrew.