# T R A N S C R I P T

# LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

# **Inquiry into Climate Resilience**

Traralgon - Tuesday 3 September 2024

# MEMBERS

Ryan Batchelor – Chair David Ettershank – Deputy Chair Melina Bath Gaelle Broad Jacinta Ermacora Wendy Lovell Sarah Mansfield Rikkie-Lee Tyrrell Sheena Watt

## **PARTICIPATING MEMBERS**

John Berger Ann-Marie Hermans Evan Mulholland Rachel Payne Richard Welch

#### WITNESSES

Donna Taylor, General Manager, Future Places Division, Bass Coast Shire Council;

Cr Tom Crook, Mayor, and

Stuart McConnell, General Manager, Assets and Environment, East Gippsland Shire Council; and

Tiffany Harrison, Coordinator, Gippsland Alliance for Climate Action.

The CHAIR: Welcome, everybody. I declare open the committee's public hearing for the Inquiry into Climate Resilience in Victoria. This public hearing is for the Environment and Planning Committee, an all-party committee of the Legislative Council of the Parliament of Victoria, looking into climate resilience in the state. We will be providing a report to the Parliament that will include recommendations to the government. Can everyone please ensure that their mobile phones are switched to silent and that background noise is minimised.

I will begin by respectfully acknowledging the Aboriginal people, the traditional custodians of the lands we are gathered on today, and pay by respects to elders past and present and particularly welcome any elders or community members who are here today to participate in these hearings. I welcome members of the public in the gallery and those watching online, and I remind all those in the room to please be respectful of the proceedings and to remain silent at all times.

For our witnesses, all evidence that we take today is protected by parliamentary privilege as provided by the *Constitution Act 1975* and the provisions of the Legislative Council standing orders. Therefore the information you provide during the hearing is protected by law. You are protected against any action for what you say during this hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament.

All evidence is being recorded, and you will be provided with a proof version of the transcript following the hearings. Transcripts will ultimately be made public and posted on the committee's website.

My name is Ryan Batchelor; I am the Chair of the committee. I am a Labor Member for the Southern Metropolitan Region of Melbourne. I might ask our committee members to introduce themselves. Rikkie-Lee, do you want to start?

Rikkie-Lee TYRRELL: I am Rikkie-Lee Tyrrell, Member for the Northern Victoria Region.

**Wendy LOVELL**: Wendy Lovell. I am also a Member for the Northern Victoria Region. I am from the Liberal Party.

Melina BATH: Melina Bath, Eastern Victoria Region. Hello.

Gaelle BROAD: Hi, I am Gaelle Broad, also a Member for Northern Victoria Region.

The CHAIR: And joining us online we have -

John BERGER: John Berger, Member for Southern Metro.

Sarah MANSFIELD: Sarah Mansfield, Member for Western Victoria.

Jacinta ERMACORA: Jacinta Ermacora, Member for Western Victoria, coming to you from Warrnambool.

**The CHAIR**: Thank you, committee members. I might ask each of the witnesses to introduce themselves with their name and the organisation they are appearing on behalf of, and then we might go through and allow you to make opening statements. I do not know which end of the table you want to start. I am relaxed about that. Donna, do you want to start?

**Donna TAYLOR**: Thank you. I am Donna Taylor. I am the General Manager of the Future Places Division at Bass Coast Shire Council.

Tom CROOK: Tom Crook. I am the Mayor of the East Gippsland Shire Council.

Stuart McCONNELL: Stuart McConnell. I am the General Manager of Assets and Environment for East Gippsland Shire Council.

**Tiffany HARRISON**: I am Tiffany Harrison. I am the Coordinator for the Gippsland Alliance for Climate Action, so I am also representing the Victorian Greenhouse Alliances.

The CHAIR: Great. Thank you very much. I might invite you to make an opening statement. Mayor, I suspect it is your turn.

Tom CROOK: Happy to go ahead.

#### The CHAIR: Great.

**Tom CROOK**: East Gippsland is one of the largest shires in Victoria. It is nearly 10 per cent of the state – 21,000 square kilometres in size. About 75 per cent of our shire is forested public land. We have over 200 kilometres of coastline. Many of our communities are vulnerable to the impact of sea level rise and coastal inundation risk, such as Lakes Entrance and the beautiful Raymond Island.

The majority of East Gippsland's 50,000 residents live in Bairnsdale, Paynesville and Lakes Entrance, but we also have many small communities spread throughout the landscape from the High Country to coastal areas and many settlements deep in the forest. East Gippsland is no stranger to the impacts of climate change. We have lived the reality of the Black Summer fires, which burnt more than half our municipality. We have also recently been impacted by storms and floods, with fatalities just last summer as a result of the Boxing Day storms. In fact we have had more declared disaster events in my council term than since the council first came into being in the 1990s.

Climate change really presents a significant challenge for the management of council-related infrastructure, whether that be the impact of heat, drying, more intense storms, coastal inundation or fire on our roads, our town halls or our community centres. Council has commenced a significant climate risk assessment on our major infrastructure to guide our future design and investment decisions. This work is currently being supported by the Australian government's Disaster Ready Fund. This is critical work, but generally there is very limited guidance on such matters and council is currently unable to undertake this work without external support, so we believe the Victorian government should really look to provide this critical assistance by developing standard guidance models and methodologies to support design work for councils and Victorian government agencies to use and to better understand risks and therein respond promptly with the best possible and, critically, more resilient infrastructure.

Climate change requires us to think differently about how we design communities and infrastructure but so too our investment in community resilience and social capital, which help our communities manage the impacts of climate change, meaning they are lessened and that our communities recover faster. Those communities better prepared, from our experience, recover quicker and are ultimately more resilient to the impacts of a changing climate. This includes investment in community capacity and connectedness, ensuring that they have the information they need during an event, training communities to set up their own relief centres, improving communication facilities, including satellite communications, and advocating for more resilient telecommunications more generally, and of course we have felt the impact of the loss of those services in recent days. We believe the Victorian government should recognise and invest in social capital and the strengthening of our community resilience and preparedness to manage the inevitable impacts of an ongoing changing climate.

The tools and guidance provided to local governments within the existing planning policy framework, while considering climate change, we feel are insufficient. It is really critical that the planning scheme adequately addresses the risks associated with natural hazards and the opportunities for planning and design to mitigate against the effects of a changing climate. The Victorian government has started work to strengthen the ESD objectives in the planning scheme, and we think it is really critical that this work continue and that it gets better

reflected in the planning schemes with an amendment led by the Minister for Planning as well as in the building regulations. I am conscious that you have a submission from CASBE, the Council Alliance for a Sustainable Built Environment, that goes to these issues, and the East Gippsland shire is a member of CASBE.

Council is currently working to update the flood inundation overlays in our planning scheme, but the experience of other councils and our discussions with them really demonstrates that this is a pretty challenging process at a local level. We feel very strongly that the Victorian government needs to implement updated flood overlays and controls through a minister-led statewide planning scheme amendment rather than requiring councils to do this work in their own right and on an individual basis. This would ensure consistency in the approach and fairness, particularly given the technical nature of the issue. A similar approach was obviously adopted to the management of bushfire risk in the bushfire management overlays. With ever-increasing pressure on our council to approve developments on land vulnerable to coastal inundation and flooding risk, this work by the state we feel simply cannot happen fast enough.

Retrofitting and upgrading infrastructure is expensive but required to make it fit for purpose into the future and doing so will require sustained support from all levels of government over an extended period. Our council is planning for climate change as part of its capital works and infrastructure maintenance program but there is more that we need to do. Some existing programs support this work, such as the Roads to Recovery program, but building in the long-term required climate resilience will be more expensive in the short term and we will need to continue to keep up those efforts certainly in the short to medium terms. For some other infrastructure types, such as critical drainage infrastructure, there really currently is very little support available, so we would suggest that the Victorian government needs to support local government to plan for climate resilience through non-competitive funding rounds that support councils to design and upgrade non-road infrastructure – you know, drainage, community halls and footpaths – because these things too are most vulnerable to the impacts of a changing climate.

Already we are investing in more resilient designs for our most vulnerable roads. But more support is required for the identification, design and upgrade of other critical infrastructure, and council must be supported to build back better. There seems to be a presumption in a lot of our existing funding arrangements that when infrastructure is damaged we just build it back the same. We need to build those bridges higher so they do not get washed away in the next flood. This is a really key change that is required, so we ask for the Victorian government to work with the Commonwealth to embed an expectation of betterment for climate resilience as part of the disaster recovery funding arrangements. Ensuring we invest in more resilient infrastructure is critical to underpin our economic productivity, our quality of life and ultimately the wellbeing of our communities.

In conclusion, I thank you for the opportunity to present. East Gippsland knows and is experiencing the impacts of a changing climate, and we are really keen to work with all levels of government to strengthen our collective response. If we do not invest and prepare for the impacts of climate change, our communities will be impacted more significantly and for longer by these climate-related events, delaying recovery, increasing the need for support and increasing economic impacts. It is clearly cheaper to do better and what we need to do now.

The CHAIR: Thanks very much, Mayor. Ms Taylor, do you have an opening statement you wish to make?

**Donna TAYLOR**: Thank you. I may echo some of the sentiments of Mayor Crook. Thank you for the opportunity to present to the committee. Like East Gippsland shire, Bass Coast is on the forefront when it comes to understanding and dealing with the impacts of climate change. Our council has declared a climate change emergency and has also prepared a climate change action plan, and we are working through a number of actions, which include everything from changing our fleet through to an urban forest strategy. There is a whole lot of work happening at a local level and a real appreciation for the impacts of climate change that we are experiencing now and will experience into the future at Bass Coast.

There are a few key points in council's submission that I would like to just reinforce today. At a high level the key messages from Bass Coast shire are, as local governments, particularly those along the coast, we are likely to be the most impacted landowner in our municipality from climate change, just due to the infrastructure we own and where it is located. The cost of maintaining these assets is far outweighing the state rate cap, and it is outweighing it even when we do not consider climate change. Climate change is an additional cost on top of trying to maintain our assets in a rate-capped environment. Whilst the state has gone some way from a policy perspective in relation to an appropriate land use framework for dealing with climate change, the lack of

ownership in implementing the actions in many policies is frustrating to landowners and councils alike. We are starting to see in Bass Coast it being felt by individual landowners, and I will tell a story about one of those shortly. Finally, state and federal government must reverse longstanding trends and invest heavily in mitigation over response to disaster and climate change related events.

In relation to land use planning, many of our residents will face property loss, diminished equity and potential forced relocations as a result of climate change. Projects such as the cape-to-cape resilience project are fantastic and critical to getting ahead of these losses and supporting impacted communities, but current legislative frameworks still permit construction of buildings and infrastructure that are inadequately prepared for the weather events that are projected. Moreover, there is a lack of guidance in legislative requirements for retrofitting existing structures to meet changing climate conditions, similar to Mayor Crook's point on bridges. The reality is we are still approving development in areas that, based on current advice, will be inundated in the medium term.

I would like to share a story from one of our statutory planning applicants in Silverleaves. This lady purchased her property in 2020. In Silverleaves the mapping and what is in the planning scheme is wholly consistent with state planning policy of an 0.8-metre sea level rise to 2100, and this landowner went to the relevant flood plain manager and sought advice as to the finished floor levels et cetera on their dwelling. They then submitted a planning permit application. The Bass Coast shire planning scheme requires a mandatory referral and requires council essentially to be guided by the advice of that determining referral authority. The referral authority came back and objected to the planning permit application, and council was compelled to issue a notice of refusal. The matter was at VCAT around five months ago. The landowner has had to prepare numerous flood assessments and emergency response plans and has not yet been able to satisfy the relevant flood plain manager. Five months on from the VCAT hearing finishing, that landowner is none the wiser as to whether they will be allowed to construct a dwelling on land in a township zone under a land subject to inundation overlay. We have seen a number of examples of this across our shire, and in some circumstances landowners have been able to change the design of their dwelling and prepare an emergency response plan. In other circumstances it appears that landowners who have done all the right things with really good intent and sought the appropriate advice may not be able to realise the dream of having a dwelling on their property.

The reality at Bass Coast is we are dealing with the most strategic land use planning issue that we will face one planning permit application at a time. To address these issues it is critical that there is coordination among key regulatory frameworks, whether that be the *Climate Change Act*, the *Planning and Environment Act*, the building code and the *Marine and Coastal Act*, so that we can provide our residents with greater surety and confidence when they purchase land in and around the coast in the Bass Coast as to whether a planning permit for a dwelling could be realised or not.

Further to Cr Crook's point, we are also of the view that state-standard requirements for environmentally sensitive designs should form part of every planning scheme in the state. Council, as part of its membership of the South East Councils Climate Change Alliance, prepared an extensive report in 2021 that interrogated all of the state-standard provisions within planning schemes and made recommendations as to how ESD could be implemented. We are yet to receive a response or any change in response to that work that was completed by SECCCA.

In relation to asset management, as I mentioned, we are likely to be the most impacted landowner. And we are on the forefront: if you have seen the news in last 24 hours, there is a lot happening in and around Western Port and particularly in Inverloch. Through regular reviews and our asset management processes, we have identified that within the last five years the cost of reconstruction of our assets has doubled, and that is without factoring in the requirements of climate change. By way of example, to construct a road out of a more sustainable pavement is 20 per cent more expensive than the 50 per cent additional cost we have seen over the last five years. We need the support of government, both state and federal, in creative ways, like Mayor Crook's suggestion to ensure that when we are replacing assets we are doing it with a climate lens and we are doing it in the most sustainable way possible.

Finally, in relation to emergency management – and we have seen significant challenges this year; we have seen two quite significant events – the cost to and burden on small local governments like Bass Coast shire in dealing with and responding to these events are quite difficult. Our submission puts forward that we would like

to see more of the allocation towards disaster allocated to preparation and mitigation as opposed to dealing with post the event. Thank you again for the opportunity.

The CHAIR: My pleasure, Ms Taylor. Ms Harrison, do you want to make an opening statement?

**Tiffany HARRISON**: Sure. I probably will echo a bunch of the sentiments that have already been shared, but I guess I would just like to start by acknowledging a whole bunch of the communities around Gippsland who are currently impacted by the storms, including my own. I have been without power the last couple of days. I think it is really timely for these sorts of inquiries to be here, so kudos to the Victorian Parliament for having this inquiry and really looking into what they can do in terms of climate resilience. I know that this is an area where all of our councils across the state are really grappling with how to respond effectively to climate change and resilience. One of the key first steps, obviously, in understanding and addressing the climate risks, including to assets in our built environment, is to better understand that risk.

As a starting point a lot of councils are looking at climate risk assessments. When we did a recent workshop a couple of weeks ago with a whole bunch of councils across the state looking at where they are in terms of climate risk and those assessments, a lot of the councils are only just starting those climate risk assessments. Some of the barriers are things like funding – even doing a risk assessment is quite costly. There are also guidelines and methodology and how to do that consistently across the councils. They are looking for more guidelines on how to do that, so things like what sort of scenario do they use, what sort of RCP, what timelines. That sort of consistent methodology could be really a big benefit for the councils across the state I think. A lot of the councils are starting their journey. Some of them have undertaken risk assessments with a quite different methodology, and then there are only a few councils who have done risk assessments and have actually done something with that data to be able to go forward and plan how do we respond to resilience and how do we mitigate those risks to those sort of assets and doing the economic modelling to look at what is the cost–benefit analysis of the different types of actions you can take to respond to that and make sure our assets are protected. That is the first step. That is where councils are at. A lot of them are looking at how to respond next. Obviously, as has been mentioned already, it is funding constraints as well as the next steps of implementing those changes.

One of the things that we would recommend as well as what has already been said is betterment, so building back better. You are probably aware of the Queensland model where they have a fund where instead of just disaster recovery funding they allow for betterment, and out of those results it is really fitting and showing that about 79 per cent of those projects which have been built back better – say that five times – have not had any subsequent damage or impact from having a better result in things like elevating or looking at that landscape and how to how to build for resilience. That is where a lot of councils are also needing better support and funding. In terms of on-the-ground funding and support to respond, after these storms I am sure there is a lot of work that councils are doing at the moment to go out and respond to that.

As has already been mentioned as well, things like planning for resilience and better building our stock in terms of ESD. A couple of years ago now, in 2022, there was an elevating ESD amendment put forward to the minister, and that is still sitting with the minister waiting for approval. Something like that could be a great thing that would mean that ESD is inbuilt within the planning scheme consistently across the state. These sorts of things are the things that the state can do to support councils in this area where they are really struggling to move forward. As well as that, in terms of the ESD requirements, things like greening and improving our greening can really build resilience into our community. In our cities in particular the urban heat island effect is really important, and councils are looking to increase canopy cover. These are the sort of things that, if built within the planning scheme, can have a really big benefit across the state.

**The CHAIR**: Thank you very much. We will now turn to some questions. We will have about 5 minutes each. People will take it in turns to ask questions, but I might kick off. I was just wondering, probably to the councils first: have you done any estimates of what you think the cost of adaptation of your built and physical infrastructure would be to deal with the effects of climate change that you are seeing?

**Tom CROOK**: Across the entire asset portfolio, no. But we are certainly moving quite quickly in the space to look at and to better understand the level of risk on a range of our assets, and we are looking for that process to better inform what kind of costs we will be looking at moving forward to build in that resilience. But I think understanding the risk is really the first step in that broader process. Stuart.

**Stuart McCONNELL**: Thanks, Mayor. Again, we have not quantified it yet, but what I would say is there are some really significant investments that will be required, particularly for some of the lower lying communities. Even over the last week we have had water across the Princes Highway in Lakes Entrance simply from the effects of tidal surge and sea level rise. Those things are coming, and there are very significant investments that will be required in relation to some of those low-lying communities.

The CHAIR: Ms Taylor, has Bass Coast done any quantification of the amount of estimated cost of adaptation?

**Donna TAYLOR**: Council has through each of our five asset management plans applied a climate lens. What that lens looks like is different by asset class. I would be happy to supply that information to the committee.

The CHAIR: That would be good if you could provide that information on notice. That will be very helpful. One of the things I am also interested in is what you sort of mentioned briefly at the start, Mayor, when you talked about the range of different events that you have had to deal with in the last few years – fires, floods, storms. This committee has just completed an inquiry into the 2022 flood events, so we are well versed in the issues around flooding. In respect of some of the other disasters that you are facing, maybe you could take us through what you are seeing in terms of the intensification of those events and the implications you think of that, both frequency and intensification, on your physical infrastructure in this part of Victoria.

**Tom CROOK**: Sure. As you would be aware, the Black Summer fires were probably our most catastrophic example in recent times. As you probably also know, the scale, the severity of that event was entirely unprecedented – well, in European history anyway. We had community infrastructure damaged at a scale we had never experienced before and an impact on communities themselves as a result of not only the physical damage to, let us say, the road network. We had communities stranded, isolated, for weeks. The Princes Highway was shut to Cann River for three weeks. Increasingly, because we have a lot of remote settlements in a heavily forested environment, the impact of those extreme weather events, whether it is storms or fires, is increasingly being felt by our communities. The intensity is going up. They are more frequent, more often, more intense. That has been our lived experience just in my short time in council, but I have lived in the region for some decades.

I have a particular interest in the forested environment, and to see the scale and intensity of those wildfires has been nothing short of shocking and the impact on community infrastructure and council's infrastructure is absolutely commensurate with those observations. So we are seeing more of our infrastructure damaged more often and that is increasingly challenging for council to manage, as was mentioned, not just under the rate cap but with limited capacity to raise those additional funds for betterment when we are building back. I think we have got a lot of work ahead of us to build in that resilience to things like the Mallacoota Hall. There is already a level of background risk in these heavily forested environments. We accept that. People in our communities accept that background risk. But what we are really grappling with is the elevated risk under increasingly catastrophic weather conditions that drive those landscape-scale disturbance events, or even just the localised severity that you indicated you are familiar with with an event like in Buchan where you see the severity of these events is unprecedented and the impact on infrastructure, whether that be communities themselves or the infrastructure they rely on – roads, community halls, that sort of thing – is a really challenging space for us. But it is most certainly getting worse, and we are seeing that in real time right across our region.

#### The CHAIR: My time has expired. Ms Bath.

**Melina BATH**: Thank you very much. Thank you for coming and appearing before us today. I will keep going on this train of thought and then I want to diversify into some other questions for other members. You know, very familiar with the Black Summer fires, horrendous for everybody, environment and the built environment. I am going to pick up the theme about the Princes Highway. It is a built environment. It needs to be protected. At the time there were firebreaks built along – or the verges of the road were cleared back for, I am not going to give you a metre exactly but a good length. When you drive down there now, those verges are now full of regrowth, which looks better to the eye but not to the protection of the built environment and therefore communities. What has council said to government, done to government? What is your position on those firebreaks in relation to protection of built environment?

**Tom CROOK**: I guess council recognises that maintaining a low level of available fuels around those critical infrastructure elements is an important thing to do. It is also the case that in such a heavily forested environment – I think part of why we live where we live is because we love the trees, so nobody would be suggesting that clearing large swathes of the landscape would be appropriate. But certainly along those main transport corridors, the treatment of acacia regrowth, for example, I think most people would see that as a reasonable ask. And there is probably an expectation within our communities that the levels of government responsible for those major arterial roads, council included for our roads, are maintaining that infrastructure in a state that makes it more resilient to those impacts in the future.

We do have some specific concerns around the state's existing strategic fuel break network, not so much with its establishment – although that is potentially problematic too – more so with its maintenance. The strategic fuel break network encompasses a couple of council roads, and while we are not opposed to the creation of strategic fuel breaks, there is very little clarity on the maintenance of those areas –

Melina BATH: Who is responsible for maintaining those.

**Tom CROOK**: Who is responsible for maintaining them – because as you would be aware, much like your lawn at home, when you cut the lawn, in a couple of weeks time in summer it grows back pretty quickly. It is the same with roadside vegetation. So we recognise that there is a need for that management, and we would like further clarity on where those responsibilities lie and, I guess it is fair to say ongoing investment in the maintenance of such things.

## Melina BATH: Stuart.

Stuart McCONNELL: If I might add, Sydenham Inlet Road down to Bemm River is a case in point.

**Melina BATH**: Exactly. I have Bemm River down here because that was a very fragile community in those fires. And without leading the witness, we need a recommendation – give us a recommendation on that topic, please.

**Tom CROOK**: For Bernm River specifically, or generally, if those breaks are going to be created, the recommendation would be that they are adequately resourced so they can be maintained, because to not do that would negate their creation in the first place.

Melina BATH: Thank you. To Donna, you mentioned the cape-to-cape resilience project. It has been ticking around for three or four years. It has come out -a 70-page document. You mentioned there are a lot of good things in there, but there are no recommendations. What would you, what would council and community like to see from that, moving from that document or the project?

**Donna TAYLOR**: Probably a range of different interventions from the state. But the first one would be to make sure that the planning mapping et cetera is up to date and reflects the more recent data that underpins the plan; the ownership from the state in terms of the appropriate times to intervene; what an implementation plan looks like – the development and delivery of an implementation plan so that all of the stakeholders involved, including the community, have an understanding as to when intervention may occur, what authority would intervene and what it actually looks like on the ground as well.

### Melina BATH: And a timeline for that -

**Donna TAYLOR:** As I mentioned, we are seeing these effects in the statutory planning applications that we are receiving at council. We had one land in our chamber for an expansion to the RACV resort in Inverloch, which is a fantastic and well-welcomed development for our community; however, we had some challenges getting the application over the line due to the impacts of climate on the road out the front. So really a detailed and comprehensive implementation plan in the short term would be what we would like to see.

Melina BATH: Thank you.

The CHAIR: Mrs Tyrrell.

**Rikkie-Lee TYRRELL**: Yes, I will have a crack. All right. When it comes to climate resilience, where do you think that the Victorian government is failing or can do better?

Tiffany HARRISON: That is a big question.

Rikkie-Lee TYRRELL: That is what we are here for.

The CHAIR: That is right.

**Tiffany HARRISON**: But I guess that is why we are here today – yes, exactly. I think some of the points I made before about having guidelines, better support for councils in terms of how to (a) assess risk and then also how to implement it within the planning scheme. Once you have the data on where the risks are and how vulnerable our community is, there is also this big challenge that councils face in terms of communicating that; adopting that within planning scheme amendments – communities do not really like to be told that they cannot build where they want to build, that sort of stuff, so having guidelines that really support councils in terms of making those decisions, how to communicate, having really clear I guess structures around what to do in those circumstances where communities are not really viable anymore – I mean, what do councils do? Having guidelines, having training support for councils on the ground with that sort of stuff. More funding – I think that councils are really feeling the burden. From my experience of working with councils across the state, they are feeling the burden of having all these responsibilities to enact without actually the resources – the rate capping. I think more funding, more support, clear guidelines from across the state would be my recommendations.

**Donna TAYLOR**: I think there is another one just around leadership. This is a complicated problem with lots of different stakeholders. The cape-to-cape project is an example where the state has jumped in and pulled those stakeholders together to create a tool to take the issue forward. I think we would like to see more of that but in more of an on-the-ground, practical way – so taking it from policy to: what does that look like for the people of Inverloch? Where will the sea be in the future in relation to their property? And how do we help them with the impacts of that at a really local level? It is the leadership and the support. It is not all about the state or the federal government. We have a role to play, but we need some support knocking on those doors and talking to those landowners who may be impacted in the really short term.

**Stuart McCONNELL**: I think a number of things were set out in the opening statement as important areas and recommendations, but I would just highlight that investment in social capital is really critical and the conversations in the communities are really critical, both in terms of catalysing action but also in terms of helping people to be in a position where they can respond more effectively when there is an event. So it is connectedness between communities, planning ahead and knowing what is going to happen when there is a disaster so that the disaster is not experienced as a loss of control but is instead experienced as 'We know what to do here – we do this, this and this – because we've planned ahead.' That investment in some of those areas or in social capital are often forgotten in the focus across everything else, so I would just highlight that, I think.

**Tom CROOK**: Part of our social infrastructure, you might say. I think those decision support tools, whether that be a coastal inundation overlay app for our region, and better understanding the risk profiles of our different communities and our different assets – there is a real cooperative piece for all levels of government to work together there. I think probably it is for federal and state to lead the way, in a sense, but for council, being the level of government closest to the community, probably to do a lot of the actual physical delivery. That means working with local communities with the best information and understanding of the risk so we can put in the best mitigation measures to prevent impacts from what we know are events that will continue to happen and are likely to get worse.

**Rikkie-Lee TYRRELL**: Okay. Thank you. When it comes to talking about climate, do you think that we have achieved a reasonable balance on how much we emphasise climate in comparison to other issues that you have to deal with in councils – say, more practical things, like roads and whatnot? Do you think we are too focused on climate, or do you think we are not focused on it enough? Have we achieved that balance yet? This is just a personal opinion; this is going to be a quick answer probably.

**Tom CROOK**: No. It is complex. So in some ways I think yes. I mean, obviously the Victorian government is taking great leaps and strides in renewable electricity generation, for example, and I think that is really welcomed. I do not feel you are acting with the same level of rigour in bringing the community along for the ride. I could not say with confidence that our communities really understand the rationale behind the push to renewables. There is still a lot of climate scepticism out there, and there is definitely a role for all levels of

government to ensure that communities, like I said, understand the risks and the drivers of what we are seeing in the increase in the risk profile that our communities continue to experience.

Rikkie-Lee TYRRELL: Thanks. That is time.

The CHAIR: That is your time. Mr Berger.

John BERGER: Thank you, Chair. Thank you, everybody, for your appearance this morning. I am interested to explore a little bit more about the risk assessments that have been mentioned earlier and some of the responses to them in relation to the infrastructure. I know from my own experience that there is going to be a difference with what the outcomes will be for some infrastructure with flood as opposed to fire; one will have a different effect as opposed to the other. What might councils do across the spectrum with each council as to how those risk assessments might apply to different scenarios and getting cooperation between councils as to how they might either mitigate the outcome or have an appropriate response?

**Tiffany HARRISON**: I can start on that one if you would like. I think that what I was saying earlier around councils approaching this quite differently is quite true, but I think what is really important is that there is a consistent approach, which could be state led, in terms of what that looks like for infrastructure. Obviously, as you say, each different area will have their different impacts, but I think it is really important to look at all of them and look at the cumulative impacts as well. That is where councils are looking at doing that work, so East Gippsland I know have been doing that work, which assesses all of the impacts to a particular – and you can look at that asset and see what is coming and therefore plan across all of those coming cumulative impacts. I think that where we are now as well is we want to communicate that more across councils. Councils are sharing their learning about the best practice, so East Gippsland is an example where lots of our councils across the rest of Gippsland are looking to replicate that sort of work and there are others within metro councils, for instance, which have done more asset-focused risk assessments just purely looking at one particular asset, all the different risks to that, and from there doing the risk mitigation for that particular asset. So it depends on the council, but I think that consistent sharing of information and methodology is really important.

John BERGER: And do you think there are any ways we could get better at that?

**Tiffany HARRISON**: Yes. I think that guidelines about exactly what councils need to do so that we are comparing oranges with apples and not vice versa or we are maybe not looking at the right thing at all, but I think that support and then also there are funding constraints. So in terms of even just understanding that risk to assets is a big cost, and then from there building for resilience is really important. So I think there are also, in terms of what we can do better, more funding and resources to be able to do that well.

John BERGER: I would suspect then if you have got your risk assessment somewhat consistent across the board, your action plan would become consistent as well.

#### Tiffany HARRISON: Yes, exactly.

**Stuart McCONNELL**: If I might comment. East Gippsland Shire Council has completed a pilot for Mallacoota – we are happy to provide some information on that – and we are currently, as I said, embarking on a wider risk assessment. To give you a sense of it, we secured \$1.2 million out of the Disaster Ready Fund. That is covering off a number of things, but one part of that, so about a third of that, is contributing to this risk assessment across our assets across the whole of the shire. So you can see it is starting to be some significant levels of investment just to undertake the risk assessment, and in the meantime we still need to get on with – for example, there are some roads that we know are vulnerable already, so we are already designing upgrades to those roads to embed climate resilience. So there are some things we know, but we need to sit it in a framework, and at the moment we are working that framework out for ourselves, and I think there is the opportunity for us to do that with some better guidance.

**Donna TAYLOR**: And further to that point, the framework is the really important piece. I know this committee spent a lot of time talking about flooding. In Inverloch, as an example, what happens if the town floods and the outfalls – you know, the drains into the ocean – are inundated by a king tide? So these risk assessments are multifaceted, multilayered, township-specific and really complicated. So, you know, guidance as to what is an appropriate benchmark for that flooding – the planning schemes across the state still say '0.8 metres by 2100'. You know, the data from the cape-to-cape, from the work Melbourne Water is doing

suggests that a different number should apply, so that is sort of back to your question – the leadership from the state around actually realising this data in policy and putting it in places like planning schemes and Acts where we can use it to make really good decisions.

**Tiffany HARRISON**: Could I make one more point just on the community emergency risk assessment methodology, so that is the emergency management crews that do that work. They typically look at historical data as opposed to climate modelling going forward. So I think that there is definitely a role there of bringing in, when we are talking about climate teams, looking at climate risk assessments. We have got emergency management teams doing community risk assessments. There is a bit of a mismatch, so that is something that could be addressed at a state level as well in that framework.

John BERGER: Chair, if I could, if I have got any time left. I am just wondering: do you prioritise with your assets as to which ones you are going to put more value on in terms of having a proper risk assessment attached to them?

**Donna TAYLOR**: We have not prioritised via asset class. We have done the work around what it would cost to maintain our assets in various climate change scenarios but have not yet added any additional weight to one asset class over another. The reason for that is it is complicated. You could prioritise roads, for example, and there are a lot of roads in Bass Coast that could form levees potentially, if they were constructed better, to keep inundation away from private property for a period of time. So it all goes back to this being a really complicated and multifaceted risk assessment that would be required.

John BERGER: I am just trying to get an understanding as to what your thinking might be in relation to that.

The CHAIR: Thanks, Mr Berger. Ms Lovell.

Wendy LOVELL: Thank you. Bass Coast Shire, in your submission you mentioned that one of the first challenges that councillors face is securing social licence for investment, especially when it comes to climate resilient infrastructure. Mayor Crook, you also spoke about social licensing this morning. I am just wondering, how have you navigated these challenges so far? Do you feel that any of the state government policies have made it more difficult for you to gain the community's support for necessary investments? And if social licence is lacking, then what happens then?

**Donna TAYLOR**: It is very challenging because I think across our community there is a general acceptance that climate change is real. We are seeing the impacts. I think there is always a challenge when you knock on an individual landowner's door and say, 'We have got some updated science, and this is what it looks like for you.' We have seen councils in Gippsland in very recent history abandon flood amendments because it has been too hard and too complex to work with communities to get them over the line. And even on local projects, we have got a proposed path along Surf Parade in Inverloch and we have got half of our community saying, 'Don't build the path. Leave Mother Nature alone,' and then another half who really wants this great piece of community infrastructure. So the work that we do is, via consulting on things like our climate change action plan, on those individual projects as they come through, but it is a lot of work for local government.

**Tom CROOK**: Certainly social licence is critical, and I think the way that we go about ensuring that we have that degree of community support that we require to move forward in earnest on this stuff is about having good information upon which to be basing the decisions. It is about having as settled a science as you can get, the best available modelling and stepping communities through that information so they understand. I guess our risk piece that we are undertaking at the moment through the Disaster Ready Fund is – a big part of that is obviously trying to keep communities safe, but equally so it is about ensuring that communities understand the risk profiles of where they live and where within their communities are in fact safer neighbourhood places and those sorts of things. So I really cannot overstate the importance of having good information and agreed-upon information upon which to base these decisions so we are clear why we are making these decisions and we take the heat and the uncertainty out of the debate as much as is possible.

**Wendy LOVELL**: Recently you had the state government remove communities' rights to appeal to VCAT around renewable energy projects. Do you feel that has actually harmed social licence?

**Tom CROOK**: I think it has definitely impacted it in our region. I think any planning reform that takes the decision-making away from local communities or removes local communities' capacity to influence decisions which impact their lives is not going to be received well by local communities, and we have seen some of that in recent times with solar farm developments around Bairnsdale. That is not to say that anybody is suggesting we do not need greater levels of renewable energy in our mix; everybody I think accepts that we do. It is more around the location and the placement of those particular assets, and there is definitely concern that council has had its capacity on behalf of community curtailed to have a say in best placement of where that infrastructure is to be put.

Wendy LOVELL: Ms Taylor, would you have anything to add to that?

**Donna TAYLOR**: We have not experienced the same level of intervention in renewable energy projects or applications. I do not have a lot to offer.

Wendy LOVELL: Just going back to Mr Berger's line, speaking about assessing your infrastructure and everything and retrofitting, we heard a lot in the flood recovery from communities in my area about betterment funding and building back better, but obviously sometimes the best thing is to retrofit before because it is cheaper to protect rather than to actually build back. A couple of examples are in my area. In Rochester after the 2011 floods, around the water treatment plant there was installed a flood-proof fence. Yes, we came within a few centimetres of going over the top of that fence, but it worked. There have been levies installed around some of the substations in various areas to protect that infrastructure rather than having to build it back. In your assessments have you looked at all of that retrofitting, and have you got a figure as to what it would cost or a solution? Have you been offered any assistance from government to protect assets?

**Tom CROOK**: There is a bit in that. Obviously we wholeheartedly agree and understand that adaptation of existing assets to a more resilient standard is a much more cost-effective approach in the short term than to be building back better. Assets obviously have a lifespan, so is it better to build back better when that lifespan expires or when the asset is destroyed? Of course it is. But there is a lot that we can do in terms of adapting our existing assets to make them more resilient to the impacts of climate change, whether that is making them more resilient to floods or fire – even extreme heat is a great example. There is a huge opportunity in in our region to look at the energy efficiency of individual buildings, and it is simple stuff like door seals and in-ceiling insulation so people are less exposed to that extreme heat during summer days, which we know actually kills more people than all other disasters combined. There are some real opportunities in that space, I think.

The CHAIR: Thanks very much. I might just go to Dr Mansfield.

**Sarah MANSFIELD**: Thanks very much. Thank you for appearing today. All of you I think have mentioned ESD standards and the need for those to be significantly improved right across the board. At the moment a lot of councils try and develop their own standards around this and negotiate with developers or try and implement them in their own areas. What do you think the advantage of having a higher standard across the board across the state would be?

**Donna TAYLOR**: I think for the development community the big advantage is certainty. Lots of the developers and those who construct homes work across multiple municipalities, and I cannot personally see why ESD in Bass Coast looks any different to ESD in East Gippsland shire or Melbourne City Council. I think from an efficiency perspective the Minister for Planning could do this with one process. There was an ESD roadmap announced in 2021, and we have not seen a lot of progress on that roadmap. So it would be great to see a little bit more work there. But there is really nothing different about ESD across the state; therefore why would it not be dealt with in a state-standard way?

**Tiffany HARRISON**: Just to add to that, I have heard a lot of councils are actually waiting for those amendments to come through at a state level, so we are not going to go through the process of changing our scheme while we are waiting for the state. I think it is again that efficiency of a catch-all, and then we are all on the same page. But yes, there has been a barrier to councils progressing it on their own, because they are waiting.

**Donna TAYLOR**: And the cost and timing of the process – if I were looking to my council for budget, I would be asking probably for \$200,000 to \$300,000 to complete the technical work to run the planning scheme

amendment process, which could take up to two years. There is not a lot of efficiency in that when it is the same for all 70-plus councils.

Sarah MANSFIELD: Are there key areas where we need significant improvement with ESD from your perspective?

**Tom CROOK**: I think things like energy efficiency are obvious low-hanging fruit. We know how to build really energy efficient buildings these days. Yes, at this point in time they might actually cost a little bit more up-front, but over the lifetime of the asset or the building those costs are recouped multiple times over. The running costs are much lower, and they keep our communities safer and much more comfortable. So I would see those types of things as a really wise investment in our future.

**Donna TAYLOR**: And even back a step from that, the decisions that councils make around the layout of new subdivisions and estates – that is a really simple thing that you can do to make sure that every house that lands in that estate is oriented the right way to be at its maximum efficiency. Some councils in the state, through their ESD work, have greater ability to get those layouts, which then, as an example in a residential estate, follow through to every decision that landowner makes about their dwelling and embeds sustainability into the design. That is an example of where it could add some real value, I think.

Sarah MANSFIELD: Yes, great.

**Tiffany HARRISON**: I was just going to say blue-green infrastructure as well, from a landscape level, is really important, particularly in the urban context of urban heat island effect and increasing canopy cover.

**Sarah MANSFIELD**: Great. Just going back to the risks of not changing the way we are doing things, particularly in regional areas, what sorts of risks do you foresee for councils in terms of financial sustainability or otherwise if we do not address some of these issues that you have outlined?

**Donna TAYLOR:** I think the bigger risks are social, in that people may own dwellings they cannot afford to heat and cool or only use portions of their dwelling at certain times of the year because the cost associated with the heating or cooling is such that they just cannot fully utilise their dwelling. I think in storm events and disaster events there will be an increased reliance on local government if the dwellings are not comfortable for people to stay in, if they do not have access to power et cetera as well. So I think as a result of not doing it, councils may need to play more of a role in the event of disaster in future.

**Tom CROOK**: If we do not continue to make the investments where they are needed, we are going to see detrimental impacts on the community's health and wellbeing, ultimately. I think it is fair to say that everything council does, or governments even – everything we do is ultimately about the health and wellbeing of our community, so this is a wise investment in our future.

The CHAIR: Thank you. Thank you, Dr Mansfield. Ms Ermacora.

Jacinta ERMACORA: Good morning, everybody. Sorry I cannot be there in person. I have absolutely enjoyed listening to the discussion so far. This is going to be amazing, and I think it is going to bring a really useful outcome. Just listening, I am intrigued. I guess sort of staying a little bit high level, because this is the first hearing and this is the first time we are asking about this, I am interested in the difference between mitigation and adaptation. I am not even sure if we have used those two terms consistently in the terms of reference. If mitigation is to prevent climate change and essentially achieve that Paris agreement or beyond so it actually does not happen, and adaptation is the assumption that climate change is currently happening and is going to continue to happen, how do you juggle? It occurs to me you do not have certainty in this moving feast. Climate change has begun. We have got more rain and more dramas around bushfire and so on. How would you measure or deal with that conundrum from your perspective?

**Tom CROOK**: We have a really high degree of certainty around the changes that are already baked into the system relative to the emissions that have already occurred. So we know we are committed pretty much to at least 1.5, probably more. Obviously there is uncertainty the further we get into the future, based on what those concentration pathways look like, but we know based on what we are already experiencing that we will not see sea levels decline. We know that where they already are they present significant risks to some of our low-lying coastal areas and that we need to adapt to those changes. While we can try and do all we can to mitigate the

changes becoming more exacerbated and extreme, and that is of course through adoption of renewable energies and bringing down our carbon footprint and all those things – and that mitigation is of course key – the two are linked. For example, if we look at house building design, if you insulate your house more as an adaptation to extreme heat, then on the other hand you are using less energy to heat and cool that house, so you are mitigating further impacts of further carbon pollution into the atmosphere. They are intricately linked. We know that there is already a degree of change baked into the system that we have to adapt to, and we want to do everything we can to achieve those adaptations, but mitigation is of course a part of the longer term solution.

**Jacinta ERMACORA**: Yes, great answer. In terms of climate risk assessments, I guess what you are saying is that you are striking a balance for the unique dynamic of a particular place. For instance, there is coastal inundation, which is variable from place to place, but at the same time there is global sea level rise. Have you got an example of how that could work better?

Tom CROOK: Sorry, I am not really clear on the question there.

**Jacinta ERMACORA**: For specific scenarios at a local level, are there any examples where you can see a combination of the global data versus the local dynamic? For instance, in a planning scheme, how could that be adapted to work better for you?

**Tom CROOK**: Sure. At a local level I could use the example of Raymond Island or Lakes Entrance. We know that there is background thermal expansion of the oceans that is leading to sea level rise, but we also know the flooding regime of the Gippsland Lakes. Storm, tidal surge and riverine flooding, for Lakes Entrance, also play a really large role. So it is about understanding the different components of the flooding dynamic as part of the background underlying sea level rise, but it is also understanding the influence of storms and tidal surge and riverine flooding and how those things culminate together at a local level to ultimately produce the impacts that our communities and councils are left to try and manage. It is important that you understand the drivers of the events and the various facets to them and incorporate those in your response, I guess.

**Tiffany HARRISON**: I can add to that. I think it is important for councils to understand the RCPTUs, for instance. Did they use the highest projections? So when you are talking about the global you can have the modelling that says, 'Well, we're going towards the worst scenario, so we're going to stick to that' or 'Do we go for a medium-case scenario?' We know that we are in a climate emergency and it is getting worse, so it is generally that advice about how councils apply that global context and the IPCC's recommendations into the local context. Then they can use that model with their specific data, and that is how they can relate together – and even at a state level as well.

The CHAIR: Thanks, Ms Ermacora. Ms Broad.

**Gaelle BROAD**: Thank you very much, and thank you for being here in person today too. I just want to ask about your thoughts on drainage. You have mentioned that there is very little support available at the moment, so can you talk to how it works from a council perspective and how much you are investing? I know it is a challenge in the northern parts, as I speak to local councillors there. You mentioned also the grants and the pressure you are getting. If you could maybe all give an insight, that would be good.

Donna TAYLOR: Stuart, do you want to?

**Stuart McCONNELL**: I might, yes. Drainage obviously plays a critical role when storms and heavy rainfall events come through. Sometimes there is riverine flooding we need to deal with, but often there are also the effects of flash flooding and the like and simply the water not being able to get away. We already know we are seeing more frequent, more intense storms, so that affects the size of our drainage systems. Our drainage systems typically were put in a long time ago, and retrofitting those is quite expensive. That is a challenge for us in Lakes Entrance from that perspective. Yes, we have got a sea level rise problem, but we have also got an issue in areas where the drainage system needs to be upgraded to be able to convey the water away and prevent that flash flooding. There are programs around. I mentioned Roads to Recovery. They are really important programs, but they focus on, say, roads. There is not much available that is really focused on how we upgrade the kind of drainage and other infrastructure that we need. I think taking a much broader view about the range of support that is required around infrastructure upgrade is really important. There are some programs available to assist with infrastructure for new developments but not really for maybe the existing infrastructure that will also receive the drainage from those new developments. That is the challenge that council is facing, and

increasingly we are going to need to move our capital investment from new community facilities, new sporting facilities, new arts facilities et cetera to do some of this really fundamental work about replacing ageing drainage infrastructure because there is not support from other sources for that.

**Donna TAYLOR**: Particularly in a context of increasing density. In Bass Coast shire we have township boundaries on all of our towns. The new housing targets can be accommodated within those township boundaries but there is going to be more intense development, so no longer 1000-square-metre lots in the heart of Wonthaggi – it is likely to be 300, 400, 500 square metres. Less impervious surfaces means more drainage infrastructure is required. All this infrastructure hides under the ground, so it is probably less exciting to go and cut a ribbon in front of than a brand new road or a culvert, which I think is a challenge for all levels of government. I think the interplay between some of the challenges that we face, so storm events, even bushfires, and the impact on those assets, particularly where we have got multiple processes at play, is a huge challenge for councils, in particular things like how we upsize pipes for futureproofing our infrastructure when they may not necessarily be required for the development that the developer has rolled out the plans for now. How do we bridge that gap between meeting that immediate need for a new estate, as an example, but understanding what that looks like in 2100, in 2150, when it might be a little bit more intense as a development I think is a big challenge for us.

**Gaelle BROAD**: Are you able to fund drainage improvements out of the existing budget, or are you saying you need to be applying for a grant but there is not a program available?

**Donna TAYLOR:** Applying for grants in our case, but there are not a lot of programs available, and a lot of them do align more to roads funding. Roads are really important part of the drainage network, I have to say, so we do appreciate the funding and the support. But I think we are certainly getting to a point where, as Mr McConnell said, our focus will be on just trying to hold the assets we have rather than trying to build assets for new communities and growing communities.

**Gaelle BROAD**: Can you talk about being regional councils and the competitive grant process. I understand there is a bit of a difference structure now where it is more an expression of interest, which has made it possibly more challenging. How does a grant process – or is untied funding better, like the bridges and roads funding in the past? Can you talk to that grant process and what would work more efficiently?

**Tom CROOK**: I will just say to start that competitive grant funding has winners and losers and I do not think anybody wants to be creating winners and losers when you are talking about decent drainage infrastructure, because it is not really fair to say, 'Well, you can get wet but we will fix the pipes under your street.' The other point I will make is that it is the reality that these are legacy assets that are increasingly no longer fit for purpose. They will not serve us well with the extreme weather events that we are starting to experience now and that will become more acute into the future. We cannot fund the drainage infrastructure upgrades that I can foresee that our communities need from the rates base, or to do so you would be asking us would we rather have a library or a childcare facility or a drainage upgrade, and I do not think that is a fair question to have to ask communities. There is definitely a role for other levels of government to play in partnering with local government to see the infrastructure upgrades, and it is obviously going to be a staggered approach, a staged approach. We cannot do it all at once. The task is too big.

**Stuart McCONNELL:** Maybe I will just draw attention to two programs, one now finished, the Local Roads and Community Infrastructure Program, and then the ongoing Roads to Recovery program, both Commonwealth government programs, but they are established on the basis of an allocation based on need and requirements and then agreement around the projects that would fit under that funding envelope. I think that kind of model delivers the very best outcomes for our community.

**The CHAIR**: All right. Thank you all very much for coming in. You will receive a copy of the transcript in about a week or so for review. Provide any feedback to us. The committee will take a short break now for morning tea.

#### Witnesses withdrew.