

REPORT ON PROCEEDINGS BEFORE

**PORTFOLIO COMMITTEE NO. 7 - PLANNING AND
ENVIRONMENT**

**PLANNING SYSTEM AND THE IMPACTS OF CLIMATE CHANGE
ON THE ENVIRONMENT AND COMMUNITIES**

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At Macquarie Room, Parliament House, Sydney on Friday 15 March 2024

The Committee met at 9:00 am

PRESENT

Ms Sue Higginson (Chair)

The Hon. Mark Buttigieg

The Hon. Anthony D'Adam

The Hon. Peter Primrose

PRESENT VIA VIDEOCONFERENCE

The Hon. Scott Farlow

The Hon. Jacqui Munro (Acting Deputy Chair)

* Please note:

[inaudible] is used when audio words cannot be deciphered

[audio malfunction] is used when words are lost due to a technical malfunction

[disorder] is used when members or witnesses speak over one another.

The CHAIR: Welcome to the second hearing of Portfolio Committee No. 7 – Planning and Environment inquiry into the planning system and the impacts of climate change on the environment and communities. I acknowledge the Gadigal people of the Eora nation, the traditional custodians of the lands on which we are meeting today. I pay my respects to Elders past and present, and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the land and waters of New South Wales. I also acknowledge and pay my respects to any Aboriginal and Torres Strait Islander people joining us here today.

My name is Sue Higginson, and I'm the Chair of the Committee. I ask everyone in the room to please turn their mobile phones to silent. Parliamentary privilege applies to witnesses in relation to the evidence they give today. However, it does not apply to what witnesses say outside of the hearing, so I urge witnesses to be careful about making comments to the media or to others after completing their evidence. In addition, the Legislative Council has adopted rules to provide procedural fairness for all inquiry participants. I encourage Committee members and witnesses to be mindful of these procedures.

Ms STELLA AGAGIOTIS, Acting Manager, Sustainability, Randwick City Council, sworn and examined

Cr PHILIPA VEITCH, Mayor, Randwick City Council, affirmed and examined

Ms SUZANNE DUNFORD, Manager, Sustainability and Resilience, Waverley Municipal Council, sworn and examined

The CHAIR: Welcome and thank you very much for making the time today to give evidence. Would one of you like to begin by making an opening statement?

PHILIPA VEITCH: Yes, I will. I too would like to acknowledge that we're meeting on the land of the Gadigal people, and pay my respects to Elders past and present and to all Aboriginal people in attendance today. Thank you to the Committee for having us here today. I'd also like to acknowledge that I'm here with Stella Agagiotis, who is Acting Manager, Sustainability at Randwick City Council. I'm the mayor of Randwick City Council. I have been a councillor since 2017. I'm a second-term board member on Local Government NSW, as well as a member of the Australian Local Government Women's Association, so I have a very strong interest and—I believe—knowledge of the sector, not only within Randwick but across Sydney and across New South Wales through my involvement in these boards and committees.

We had 128 local government areas with disaster declarations over the last four years. There's not a single community in New South Wales that has not been affected by climate change and the storms, floods, fires and other impacts. Every single person has been affected and it is having a huge impact on the sector. Communities have not recovered from one disaster before the next one hits. It's a real problem. In Australia, 117 councils representing close to 11.5 million people, or over 45 per cent of the population, have declared a climate emergency. In Randwick, our community cares deeply for the environment, and Randwick council has committed to taking action to protect the environment and tackle climate change for over 20 years. We declared a climate emergency in 2019. We were one of the first councils in Sydney to do so. Since that time, we have been publicly advocating for action at a local, State and Federal level.

Randwick council is a coastal council with a very fragile environment. Our community is being affected by storms and flash floods, as well as heat, and will bear the impacts of storm surges and sea-level rise in future years. The last 1 per cent of the fragile eastern suburbs' banksia scrub is just literally hanging by a thread. Councils and communities want to tackle the problems and have been calling on the State and Federal governments for support for some time now. Planning so that our communities can cut their emissions and plan for the impacts now and into the future is absolutely essential. In closing, I'd just like to say that we need to ensure that all residents are given equal access to support. At the moment, one of the really, really big issues is the fact that if you fortunate enough to own or have a mortgage on your own standalone home, you are able to install rooftop solar, batteries and so on, but if you rent or live in an apartment, you are locked out.

This is one of the really big policy issues where we are really calling on the State Government and Federal Government for help. We need that policy change to ensure that renters—particularly renters, and people who live in flats—can do this. They are locked out. They are locked out, and we are going to see a lot more people living in high-density urban situations, in apartments and so on. Many, many people rent; the cost is already unaffordable. This is a real issue of equity for our community. Thank you once again. I hope that the recommendations of the Committee are bold and implemented in a timely manner. There is literally no time to waste.

SUZANNE DUNFORD: I'd also like to make an opening statement. I'd also like to acknowledge that we're meeting on Aboriginal land and pay my respects for this very important inquiry, so thanks again for holding it. The task of reducing the negative impacts of climate change on communities, known as adaptation, grows greater every day as accelerating production and concentration of heat-trapping greenhouse gases disrupt our climate and weather. Therefore, the adaptation task is reduced by any and all greenhouse emission reductions.

The New South Wales planning system must not only anticipate and respond to climate impacts on natural and built environments, but also deliver low-emissions development, as any measures that increase emissions are maladaptation. By failing to plan for climate change, we are planning to fail our community's environment and future generations. Back in 2012 the Productivity Commission published its great inquiry report into barriers to effective climate change adaptation, noting that Australian planning regimes are based on historical data. It recommended State governments' planning frameworks facilitate climate risk management, and that local governments consider flexible planning instruments to manage climate risks.

Again in 2014, the New South Wales vulnerability assessment program noted that although the planning system can support climate adaptation through land use and strategic and population planning, urban planning had failed to incorporate climate risk and hazard information, and a key vulnerability to Sydney's future was

insufficient consideration of climate change in planning processes. This project also recommended building codes and planning instrument revisions.

In 2021, Waverley won New South Wales grant funding and modelled the performance of approved dwellings across our regions against future climate projections to determine the effects of climate change on building performance. Essentially, we replaced historical climate files used by NatHERS and BASIX with projected climate data for Eastern Suburbs (Climate Zone 56), using a high-emission scenario. I'd like to table a published article on this research to the inquiry. Although average temperature is projected to rise by only one to two degrees centigrade, modelling showed that an extra month of warm days by 2030 and an extra two-and-a-half months by 2070 would occur. Consequently, all the modelled buildings we had across the three council regions of the eastern beaches failed the thermal performance requirements of BASIX at the time and for their design life.

We then modelled design changes required to ensure dwellings would stay thermally safe and comfortable in the hotter climate of the future. With that same State grant funding, we investigated the current and projected impacts of development on tree canopy and deep soil, which provide multiple adaptation benefits, including regional cooling capacity. While council have managed to increase vegetation in public streets and parks since 2005, we are rapidly losing canopy and deep soil on private land, which is 60 per cent of our LGA. The exempt and complying codes SEPP is silent on the need for deep soil on lots, and although it requires minimum landscaped area it is highly uncertain if this is being delivered through principal certifying authorities. Once plantable deep soil is gone, its adaptive capacity—its cooling, stormwater absorption or biodiversity benefits—are unlikely to be recovered in future. Provisions to the codes SEPP to mandate minimum canopy, vegetation and deep soil should be pursued urgently.

Supported by our evidence base, Waverley changed our development control plan to deliver adaptive and low-emissions outcomes, and I would like to table part B of our DCP. Our new DCP, updated in 2022, will improve thermal safety by requiring high-performance glazing for windows and skylights, ceiling fans in all habitable rooms and light-coloured roofs. It will improve indoor air quality by preventing the installation of residential gas stoves, ovens and space heating, which also reduces greenhouse gas emissions. It will improve transition to low-emissions living by requiring homes to include designs for future all-electric capacity, powered by renewable energy.

It harnesses cooling and shading of neighbourhoods by strengthening protection of existing vegetation on private land, and it supports the uptake of electric vehicles by requiring certain new developments to include EV charging and/or supporting power infrastructure. In conclusion, State and local governments can work together through the planning system to reduce the impacts of climate change on communities. The roles of risk management and adaptation are already enshrined in the New South Wales Local Government Act, section 8A, which requires council decisions to manage risks to the local community or area effectively and proactively and make appropriate evidence-based adaptations to meet changing needs and circumstances.

However, effective decision-making on climate impacts requires consistent, accessible information and a requirement on the urgency to act. Sub-regional hazard mapping from the State Government reflecting climate projections would inform and support consistent planning decisions at all scales in New South Wales. It could also help manage biophysical and social vulnerability risks of climate change over political risks that may arise due to the uncertainty in timing, location and impact of extreme events.

The CHAIR: We will grab copies of those tabled documents, thank you. I wanted to note, Ms Dunford—and obviously from Randwick too—you raised and you have tabled the DCP. These are not legally binding documents. I'm just curious about how you are going as a local government authority with the acceptance and the implementation of your DCP standards at that granular level. I suppose what I'm asking is are developers saying, "Yes, we accept those and we want to be able to do that", or are you experiencing any pushback on the actual terms that the DCP is providing in relation to those climate adaptation and mitigation measures?

SUZANNE DUNFORD: From Waverley's point of view, we have not received—there was a lot of media interest in our development control plan, interestingly six months after it was put into place. There was pushback from certain parts of the industry, but there has not been a strong pushback from developers or from residents to the provisions in that DCP. My team does the DA referrals for—we see the multi-unit development DAs that come through, and we are seeing all of those that come through have no problem removing gas and going all electric. For those multi-unit dwellings, the bigger developments coming from the developers—no problem. They see that as a reasonable thing to do.

Local councils are not the only people who have declared climate and biodiversity emergencies. There's a lot of people in corporate Australia who also recognise this need. How we're going for the DA team—they condition these provisions as it comes in but, in some instances, they provide guidance notes instead. That's up to the DA planners. That's not my team's role. One thing I will say is, though, we work with the New South Wales

Government's planning team, and the BASIX certificate is where we can actually see whether things are on a plan or not. At the moment, you can't see if, for example, a stovetop is electric or gas. It's not marked on the plan, so it's very difficult for us to know whether people are still installing gas in residential houses, because it's not marked on the BASIX certificate. We have met with the BASIX team and said, "Could you please change that?", because that's been in place since 2004 and the instrument has not been updated since then on that measure.

The CHAIR: You said you worked on a high-emissions scenario. What was that? When you say "high emissions", was there—I hate saying this—a simple way of explaining what that high-emissions scenario looked like?

SUZANNE DUNFORD: The IPCC—the Intergovernmental Panel on Climate Change—works with the World Meteorological Organization to determine pathways of emission trajectories. We used SRES 8.5, which is the highest emissions scenario, which is the scenario for emission productions and concentrations that the world is currently tracking to undertake our climate modelling. That was a deliberate decision, because while some risk management approaches, say, model a high and a low so you can see where you sit, for something actually modelling the performance of buildings that actually exist there is no point pretending that we could get to a low-emissions scenario when we're already in a high-emissions scenario. The fact that the heating impacts of greenhouse gas emissions stay in the atmosphere for 70 years means we're on that path; we are locked into a high-emissions scenario now. That's why we elected to just model the high-emissions scenario, and also because we had limited funding. This was a grant-funded project.

The Hon. JACQUI MUNRO: Thank you so much for coming and for your submission. I'm curious about the final substantive paragraph in the Randwick submission. It says, "By encouraging Green Star certified buildings, research has shown these developments typically use 66 per cent less electricity" et cetera, which sounds very positive. I wondered what the source for that research was, and if you don't know, you can take on it on notice.

STELLA AGAGIOTIS: I will take it on notice.

The Hon. JACQUI MUNRO: That would be very helpful. I'm also curious about how you are modelling density and how you expect population increases to affect the use of general infrastructure but, more importantly, how it possibly feeds into modelling, for example, on any sort of climate change adaptation plans that you have. This is to either council.

STELLA AGAGIOTIS: I can answer that. At the moment our planning for our housing growth areas is based on our housing strategy, and in that housing strategy there are considerations for location being accessible to transport—walkable locations close to services and employment. To answer your question, climate change isn't a direct consideration in our housing strategy, although the other strategic aspects of Randwick, which is the Local Strategic Planning Statement and also our Environment Strategy, do have very clear and direct considerations for climate change and sustainability in new developments. Coming back to the planning, our planning for housing growth is based on more of a geographical accessibility consideration. There is a basis for that, which is accessibility means people will less likely use vehicles for travel to access their daily needs or commute to their places of work. As part of that, when we prepare DCPs, like Waverley, we have considerations for deep soil, tree canopy cover, encouraging no gas and similar requirements.

The Hon. ANTHONY D'ADAM: Can you explain this deep soil concept? Sorry, it's not something I'm familiar with. What is deep soil?

STELLA AGAGIOTIS: Deep soil is where basically you don't have a basement car park, for example, so the trees have a deep area for growth and enough depth in the soil for achieving maximum height of trees on a site. For example, it's harder in a town centre where you have boundary-to-boundary development and the development usually has a basement directly underneath the building, so deep soil has to be planned in at the early stages to allow areas of the site on the ground level to have trees and planting. In residential, say, dual-occupancy developments, deep soil is easier where you have two dwellings on one lot and the backyard is usually free of any basement car parking, so you actually can achieve deep soil.

The Hon. ANTHONY D'ADAM: But you've got no guarantee that there will actually be tree planting in deep soil anyway?

STELLA AGAGIOTIS: There are requirements for the number of trees to be planted on a site, but 12 months down the track, we actually don't—and I don't think many councils do—have an enforcement to see whether the tree is reaching a mature height. The final certificate of that is issued by a private certifier, who will tick off on the requirements for the landscaping as one aspect. But what happens 12 months down the track is not something that is followed up.

The Hon. ANTHONY D'ADAM: So far as plantings, there is no specificity in terms of the maturity of the trees that are required to be planted, is there?

STELLA AGAGIOTIS: Yes. Our tree policy has specifications for the types of trees and the mature height of those trees to be provided on sites.

The Hon. ANTHONY D'ADAM: As in on planting or on maturation?

STELLA AGAGIOTIS: On maturation.

The Hon. ANTHONY D'ADAM: The trees that ultimately get planted might be saplings, and there is no way of assessing, I suppose, the viability of those. After 12 months, they might comply. They put a sapling in and it dies in a heatwave, and then there's no follow-through, is there?

STELLA AGAGIOTIS: Yes, that's right. That's been raised by many councils and discussions at officer level, how we—

The Hon. ANTHONY D'ADAM: Do you have a capacity to ensure compliance on those?

STELLA AGAGIOTIS: No, we don't have capacity to follow up.

The Hon. ANTHONY D'ADAM: There is no way of actually enforcing that?

STELLA AGAGIOTIS: If they don't comply with their conditions of consent, we can go and issue a requirement to plant trees.

The Hon. ANTHONY D'ADAM: How often have you done that?

STELLA AGAGIOTIS: I'll have to check with the enforcements. I'll have to take that on notice and check with the enforcement team. We have a landscape officer and, at that level, when the development application is assessed, the checking and the requirements come into effect and the conditions are put on. It's the same situation with CDCs where private developers are issuing certificates, and whether or not the landscape provisions are fully met on a site.

The Hon. ANTHONY D'ADAM: I suppose what I'm trying to get at, is there an issue about the follow-through? I accept that the compliance capacities of the councils are already probably pretty stretched, so any kind of expanded or more energetic compliance of this 12 months, 18 months to make sure that the actual canopy is being replenished is going to put an impost on the council. I suppose I'm trying to get to is whether that's the issue that needs to be addressed in terms of changed public policy, around how we make sure that, if we have expectations about tree plantings on sites and deep soil and utilising that, that there is actually follow-through on it.

PHILIPA VEITCH: Could I make a comment? Just to add to that, one of the issues that I've encountered on council is council is obviously trying to map our own tree plantings and existing canopy and the new trees we're putting in. But the ability to track canopy and tree plantings on private property, and then actually to quantify how many trees are being removed, so even setting aside the ability to plant new trees and the provision for that deep soil, often it's just a percentage of the property site. It might be 20 per cent or less that we're trying to preserve, so it's not hard cover driveways or tiling or whatever. Policies that would allow councils to track and enforce just the retention of existing trees would be very, very helpful, because as fast as we're planting new trees on council-owned land, our street verges and parks, people are removing trees. There are rules in place for the removal of trees but, as we all know, trees are getting poisoned. That's quite a common occurrence, and we do get a lot of inquiries from neighbours when there is a new DA put in, and they're concerned about the trees on that site or they notice that the tree has died. That's another issue.

The Hon. JACQUI MUNRO: Just on that, how common are we talking? There's been some news reports recently, particularly around the North Shore. How often does that happen in your councils?

PHILIPA VEITCH: I couldn't give you an exact figure.

The Hon. JACQUI MUNRO: Do you record that kind of thing?

STELLA AGAGIOTIS: Tree removal?

The Hon. JACQUI MUNRO: Tree poisoning, or reports of tree poisonings?

STELLA AGAGIOTIS: I'm not aware of any recent issues that have come up with tree poisoning. It would probably go through to our tree services team to investigate.

PHILIPA VEITCH: As councillors, we do get representations from community members reporting suspected tree poisoning. It's very difficult to prove. That's the problem.

The Hon. SCOTT FARLOW: I imagine in an area like yours, that often is in association with views and being able to secure views and the like. I know some councils in the past have responded by putting up large signs, alerting people to tree vandalism and reporting in those instances as well.

PHILIPA VEITCH: It is absolutely to do with views but it's also to do with DAs, so when people are perhaps looking to sell a property or they've acquired a property and are looking to redevelop, perhaps for a dual occupancy or something like that, they may want to remove trees to allow for a new driveway or a greater amount of space for a new dwelling. It's both.

SUZANNE DUNFORD: I think it's important to note that there are instances of wilful vandalism to trees. It does happen in Waverley regularly, and it is managed by our compliance department. But there is also the point that you raise where tree removals can happen through the DA process, and it is very difficult to monitor and prevent that and remediate it, and actually say, "Okay, now you have to put the tree back in, and it has to be grown back to its canopy crown and level that defines a tree." We do ask, prior to occupation certificates, for a tree monitoring report and a final tree protection certification, but I know that, as the Randwick submission said, resourcing—having sufficient staff at the local level to monitor and report and evaluate these sorts of outcomes—is really important. I think it is really happening through the DA system, through the planning system, that trees are being removed.

The Hon. JACQUI MUNRO: Are there tools that are used to monitor tree canopy from above, like satellites, that kind of thing? Are they utilised often?

SUZANNE DUNFORD: The State Government has recently released ArborCarbon data—monitoring done by a company called ArborCarbon—which allows for councils to digitally assess for tree canopy. I think there will be, in future, the opportunity to use digital tools for compliance potentially. The data that's available at the moment is 2022 data, so it's historical. I mean, you can use Google maps, of course, to say, "Oh, the tree was there; oh, the tree's not there", but using it from a compliance point of view is a real opportunity, I think.

The Hon. SCOTT FARLOW: Just in respect to that data, I know Ku-ring-gai Council disputed that data. What's your perspective on it? Were you comfortable with that data and its methodology?

SUZANNE DUNFORD: The most recent data provided by the State Government?

The Hon. SCOTT FARLOW: Yes, the ArborCarbon one.

SUZANNE DUNFORD: Yes, I think it's pretty good. It's different from the 2019 data they released, so a different method. There may be a few issues in changing datasets but, no, it looked good to us.

PHILIPA VEITCH: At Randwick council, we are trying to monitor tree canopy. I believe we do have some type of software in place. I would have to take that question on notice. In terms of very site-specific measurements, I know council officers use a software application called Nearmap, which is used for all sorts of different purposes to track changes from an aerial view, and that could be used. You can literally slide back and forth over a site to see changes, and that certainly has potential as well.

The CHAIR: Can I just ask, on the mapping and the projections that you have done in your various councils—I know we have talked about a lot of what we do being based on historic data, but it is quite clear councils have taken a lot of initiative to try to look forward, to do some risk-based strategic planning yourselves as councils. I think in your submission, in Randwick, you talked about projected impacts of sea level rise across the region over a 100-year time frame. That work has been done. You've noted that the State Government sea level rise data—they don't do that anymore; they have withdrawn from that space. From what you're looking at, have you identified any areas that will become unliveable or uninhabitable in some of your planning?

STELLA AGAGIOTIS: In Randwick, we are fortunate to have a lot of our coastal areas quite high, in terms of it's not the cliff faces, so the only assets which may be affected are the low-lying assets like the surf clubs, which are closer to the water, and in the Botany Bay area, some of the sailing clubs in that area are affected in the longer term. But for most of the LGA, from memory, we're fortunate not to have significant impacts of sea level rise.

The CHAIR: What about flooding? I know it's this notion now with increased rainfall in unpredictable ways, and we're looking at flash flooding and those big impacts. Have you looked at areas that will become perhaps more prone to that pattern of behaviour?

STELLA AGAGIOTIS: Yes, we have. For a very long time, council has been undertaking flood risk studies, and those studies look at the velocities, the depth and the impacts of flooding in certain locations. The issue with those studies is that they take a very long time to complete, and they are resource intensive and quite

complex. Councils need to follow the floodplain management guidelines, and an important part of that is the community's perceptions and experience with flooding in local areas.

Our governance structure for flood planning is to set up committees with residents, and we have specialist consultants who provide the studies. They are put on exhibition and we get further community input and we finalise them. But, as I said, they do take a very long time and they're quite resource intensive. By the time they finish, the modelling and the input and assumptions that are used in those flood studies are then questioned because of changes in the nature of flooding—and rainfall does change over time. So there is a need to streamline that process of flood investigations, and to have readily available dashboards, data, so that councils can use that information to assist with the completion of studies.

PHILIPA VEITCH: I'd like to add to that as well. With these flood studies, it is a very time-consuming and resource-intensive process, and what happens is that you end up with a study that identifies the key risk areas and it ascribes a level of risk to these particular locations, and it then makes recommendations as to what needs to be done to mitigate the risk. Then it says which ones they're going to try to do. The problem is that the cost of addressing the issue is so high that we end up with flood studies that identify all these risks, give recommendations as to what needs to happen, and then nothing can really happen because councils simply do not have the resources to do these massive infrastructure upgrades.

In the last recent years with the La Niña rainfall patterns, particularly in areas such as Kingsford and Kensington, for example, we've had very, very heavy rainfall events that have led to flash floodings. On Christmas Eve we had 20 to 30 flood rescues from local SES crews. Local churches were flooded and many, many properties. We know that we're waiting on Sydney Water, for example, to do some upgrades to certain pieces of Sydney Water infrastructure, which obviously are going to be hugely expensive. So we have council stormwater infrastructure, but obviously, at a certain point, it all leads to a certain point and has to enter the larger Sydney Water infrastructure.

Without those upgrades, whatever council does is not really going to even help, because we need that other level of government to take that action. Without that, we're not only affecting residents and property owners and renters, but we're actually putting our local SES crews at risk because they're really having to deal, on a very physical, personal level, to actually go out and do all this work because of this lack of investment in upgrading our water infrastructure.

The CHAIR: Is your council in dialogue with Sydney Water about what that looks like in terms of any of that infrastructure upgrade or adaptation capacity?

PHILIPA VEITCH: I believe so, yes.

The CHAIR: Because I note that actually Sydney council identified in one of its submissions that one of the things that it got the benefit of was this major upgrade, and I think grant, that Sydney Water provided to assist, so that's an interesting point. Just going back, trying to identify those major impacts—in terms of the heat, and I think you've identified heat as one of those major issues, is your main adaptation planning response to that around the canopy and the tree cover? Is that one of your major correlative mitigation approaches?

PHILIPA VEITCH: Yes, we were fortunate in getting a government grant to do a lot of tree planting, so we've been doing a lot of tree planting in recent years. It is very, very expensive. Each tree costs a lot. It can cost up to \$1,000 to put in a sapling. Again, with the La Niña pattern of the last few years, we've been fortunate to have enough rainfall to ensure that those new trees, which are very, very expensive to plant, are growing and staying alive. But we saw before that, during the drought and those dreadful years around 2017, 2018, 2019 and 2020 where we were getting atrocious heatwaves, they were just literally wiping our newly planted trees. Having those resources to keep those trees alive—we know the pattern will change. We will go back into another period of very hot years.

The CHAIR: When you say you got a grant, how did that work? What was that through?

PHILIPA VEITCH: It was a State Government grant. Do you want to speak to that, Stella?

STELLA AGAGIOTIS: I don't recall the name of the grant.

SUZANNE DUNFORD: It was called "Greening our City". It was a Premier's priority of the previous Government, that greening would be prioritised across all scales. Randwick got a grant; Waverley got a grant. There were a lot of councils who did that. I don't think that grant-funded tree planting is a long-term solution, though, to protecting the ecosystem services and cooling properties that vegetation can provide. Going back to deep soil—deep soil also mitigates localised flooding because it allows for the absorption of water into the catchment, and deep soil also provides, if it's protected on private land, it enables there to be the opportunity for

planting. Any vegetation will provide cooling. Cooling is really important and tree planting is not the only thing, and it shouldn't just be a grant-funded, "Here's some money. Go and plant some trees."

The Hon. ANTHONY D'ADAM: I want to explore this issue a bit further. It seems that the strategy in terms of sustaining the tree canopy is actually predominantly being driven by plantings on public land. How do we incentivise private property owners to actually try to build up the tree canopy?

SUZANNE DUNFORD: Great question. Waverley has just published its Urban Greening and Cooling Strategy. We have a chapter devoted to private land—how are we going to protect trees on private land? We're investigating things such as maybe financial incentives, or maybe incentives around looking after those trees, so maybe some money for a regular arborist to go to houses that are supporting those large, mature trees that are providing ecosystem services and benefits across their neighbourhood, but that owner is bearing that cost.

The Hon. ANTHONY D'ADAM: I was going to ask about that. In my local area, councillors are often getting individual complaints from residents about trees, particularly elderly residents—large trees with branches that are dropping leaves into gutters and creating a potential fire risk. They're too old to get up and clear them on their own. The solution for them is to get rid of the tree, as opposed to having some other creative solution that might be able to enable them to maintain the tree as is with some assistance. How do you fund that? How do you actually make that happen? Do you have an arborist to be able to deliver a service like that?

SUZANNE DUNFORD: Yes, they'll need to be paid. But there's also the potential for community to come together and look at—because trees, like soils, provide benefits across tenures, maybe there is an opportunity for community to come at a sub-local scale and start supporting people to maintain and look after trees and protect them. But we are investigating it.

The Hon. ANTHONY D'ADAM: I wanted to ask about the capacity to use the rating system and discounting in ratings to incentivise those who have higher levels of tree cover on their properties to have some rating benefit. Are there any constraints in terms of your capacity to levy rates in a way that would incentivise—

PHILIPA VEITCH: I would love to comment on that. At Randwick, we have had an environment levy in place for the last 20 years, and we've just applied to IPART to make that permanent. In Victoria, for example, there's a mechanism within the Local Government Act, I believe, to allow councils to apply variable rates. A great thing that they do in Victoria, using that mechanism, is that they are able to provide, I think, pensioners who own their own home to get a zero-interest loan to put on rooftop solar, and they pay that back over 10 years to council with no interest. They end up actually saving money because they are getting such huge savings on their energy bills through the rooftop solar that it is actually cheaper to pay it back. If we had that ability in New South Wales to apply variable rates—because we don't—it would actually lead to many positive benefits across many levels, in terms of perhaps empty home levies and things like that, on a different topic. At the moment, we're not able to do that without applying to IPART.

The Hon. ANTHONY D'ADAM: So it would necessitate some amendment to the Local Government Act, would it?

PHILIPA VEITCH: Yes, it would.

The Hon. SCOTT FARLOW: In the Randwick submission, it states that it's very hard for councils to get ministerial-approved coastal management plans. I'm just wondering what the reasons for that are. Is it a resourcing issue or a methodology issue?

STELLA AGAGIOTIS: I actually think it might be a resourcing issue at the ministerial level, but there was also a three-council project for the coastal management plan, and there was grant funding available through that. But that's no longer—that program has ceased.

SUZANNE DUNFORD: I'll answer, Stella. I worked with Woollahra and Waverley on the Eastern Beaches Coastal Management Program Scoping Study—that's stage one of that process. There are five stages to get a certified CMP—Coastal Management Program. Because of the sand compartment we share on the open coast—because sub-regional planning is really important to manage climate impacts—we worked together and did this scoping study, but then there was no governance mechanism to enable the three councils to take the next step to stage two. At the moment, Woollahra, Waverley and Randwick are—we have this scoping study. It's identified the risks in stage one, but we can't go to stage two together unless there's a formal governance support. This is the same problem that the Sydney Harbour Coastal Management Program is facing, and they have a lot more councils involved. Trying to get that multi-council collaboration and coordination is difficult when there isn't a formal structure to progress it.

The other challenge is that, as we've mentioned before, some of the natural hazard mapping and projections that we need to progress, such as sea-level rise, are not provided by the State, and so we stopped and

had to go and do that mapping while we waited to go to stage two. At the moment, Waverley is de-scoping the three-council study down to just a Waverley study so we can move as a single council onto stage two. I don't think, as the Randwick submission noted—not many councils have actually made it to stage five. It's a very long process. It should be well considered; climate change is in the objects of the Coastal Management Act, but, at the moment, I think more resourcing from the State Government to help councils actually take those steps forward is needed.

The Hon. SCOTT FARLOW: It seems like both in a sense—resourcing and methodology, and that governance structure.

SUZANNE DUNFORD: Yes, it was a first try, but it's not right yet.

The CHAIR: I'm afraid we've run out of time. Are there any final things you'd like to add?

PHILIPA VEITCH: I'll just add probably two things. In relation to the comments about the permeable ground, that's really important in terms of management of flooding and water. Most of our parks and ovals are located on floodplains, and a lot of these are now starting to get covered with synthetic turf fields. I think action at a State Government level to really look at those impacts, apart from the fact there is a huge lot of other environmental impacts from synthetic turf—we do need to retain and expand permeable ground both on public land and in private dwellings. It's really, really important.

The other issue to do with heat—I think heat is really, in all honesty, going to be the main issue that so many of us in our community are facing. We are trying to deal with it through the provision of canopy, but council is also developing a strategy for communities in extreme heat events to provide that safety, particularly residents who are homeless. That can't just be in local shopping centres. Many people don't feel comfortable or are not made to feel comfortable to enter a shopping centre. We need councils to provide people with shelter, places to sleep and to gain access to amenities. It's also an issue for people with disability and people who are on lower incomes who cannot use air conditioning and so on. We're going to have to start planning for that.

SUZANNE DUNFORD: I'd like to just ask if the inquiry could look into clarifying the status of the Local Strategic Planning Statements. When we had the Greater Sydney Commission, which was then expanded to the Greater Cities Commission, there was a strong direction from the State Government around responding to climate change through strategic planning, and that really helped provide an authorising environment for local government to, at a local scale, move forward in this way. At the moment it's pretty unclear to me as to what the status of those documents are. It would be good to find out if you can.

The CHAIR: Thank you very much. The secretariat will contact you in relation to any questions taken on notice. We're very grateful for your time today.

(The witnesses withdrew.)

Cr CLOVER MOORE, Lord Mayor, City of Sydney Council, affirmed and examined

Mr BENJAMIN PECHEY, Executive Manager, Strategic Planning and Urban Design, City of Sydney Council, affirmed and examined

Ms MONICA BARONE, CEO, City of Sydney Council, affirmed and examined

The CHAIR: Welcome, and thank you very much for giving the time today to come and provide evidence before this inquiry. Would you like to start by making an opening statement?

CLOVER MOORE: Yes. Thank you for the opportunity to address you on the City of Sydney's submission to this important inquiry. Climate change is a critical issue that is inextricably linked to the health of our communities and the liveability of our city, the sustainability of the natural and built environments, and our economic prosperity. The Climate Council's 2021 report said that Australia should reduce emissions by 75 per cent below 2005 levels by 2030 and reach net zero emissions by 2035. The New South Wales Government's target is to reduce emissions by 70 per cent by 2030 and for net zero emissions by 2050. The Federal Government's target is to reduce 2005 emissions by 43 per cent by 2030. This falls short of what we need to do to contain warming to even two degrees.

We have brought forward our target for City-wide net zero gas emissions to 2035. It was originally at 2040. This is not just for our own operations; this is for right across the City. Weather events are already impacting Sydney and posing significant risk to the wellbeing of the community, the environment and the operation of the City's services and assets. While councils can increase their own resilience to the impacts of climate change, the New South Wales Government interventions through amendments to planning policies are needed. While the inquiry is focusing on fires, flooding, rising sea-levels, coastal erosion, drought and impacts to biodiversity—all incredibly important—the City's submission also highlights the need to mitigate against heat, which is the primary climate risk facing the City and the leading cause of death by natural disaster. Currently there is a lack of heatwave risk management guidance from the New South Wales Government.

To respond to the impacts of urban heat, the City suggests that the New South Wales Government allow councils to impose higher provisions to improve the thermal performance of buildings, substantially increase cross-ventilation requirements for residential buildings, implement requirements for lighter coloured roofs, external sun shading and glazing requirements, legislate minimum deep soil and canopy cover targets, ensure cabling infrastructure is bundled or placed underground to reduce the impacts to tree canopy, and develop a legislative policy planning framework to mitigate heat. We're balancing the pressures of providing housing while at the same time reducing the exposure of climate hazards on people's lives, homes and environment. We have concern that areas such as Woolloomooloo, Glebe, Alexandra Canal and Garden Island are at risk of sea-level rises.

The City has been advocating for the Independent Pricing and Regulatory Tribunal to enable funding of climate-resilient infrastructure to support much-needed new developments. An example of such infrastructure is the \$140-million trunk stormwater drain for floodwaters that was paid for jointly by the City of Sydney and Sydney Water. I might say that the City of Sydney paid more than Sydney Water, and it took very many years and requests to about seven premiers before that money was produced. This trunk drain was necessary to enable the high-density housing in Green Square. Currently the Government supports councils to manage flood risks. A similar funding program is needed to help councils manage other climate risks such as heat and extreme rainfall.

The lack of up-to-date data and scenario projections is leading councils to complete data of their own, which means wider regional considerations are lost. Councils need the Government to release updated climate projections and climate modelling analysis at a usable resolution for all local government areas. Governments must implement other legislative and regulatory frameworks to complement changes to the planning system if we are to meet our emissions targets. For example, I have long been concerned that embedded networks can act like monopolies that lock renters and strata communities into expensive and polluting energy contracts. They impact on people's abilities to make future changes and responsible decisions.

The City launched a large-scale communications campaign encouraging residents and businesses to switch to green power as part of our campaign to get our emissions down right across the City. We did this by encouraging residents and businesses to shop around using the Energy Made Easy government comparison site, and invest in green power. However, this isn't possible for people locked into embedded networks. It is critical that the New South Wales and Federal governments act to better regulate embedded networks, and implement measures to enable strata communities locked into contracts for dirty power to terminate them early. This would enable people to switch to green power, which for many residents is the only way to be part of the renewable energy transition, and we know a lot of people want to be part of that transition.

Overall, there is a lot that Government can do to address the shortfall and the tools and mechanisms available for councils to implement the Government's own climate change policies. All levels of government need to work together on planning mechanisms and other initiatives that reduce climate risk exposure and impacts so we can protect our communities.

The CHAIR: Thank you very much, and thank you for your very detailed submission. It is incredibly helpful. Can I just ask about the modelling that you have done and the basis upon which you are planning in relation to the impacts—for example, the noting of Woolloomooloo and those areas that you've identified as susceptible to sea-level rise in the long term. What sort of tools and data are you using, and is that data that you have a high degree of certainty around? Is it data that you're working with the State Government around? Is there a consistency or is it data that is going to change?

CLOVER MOORE: I will ask Ben Pechey to respond.

BENJAMIN PECHEY: The City undertook a climate adaptation plan and prepared that in 2015. That was based on the best available data. I think the source was Sydney Coastal Councils at the time, where we sourced the map that is in that plan, and it shows the affected areas. That now lines up very similarly with other more recent publications by the climate risk organisation, which the New South Wales Government points towards. That identified Woolloomooloo as seriously affected, in particular in the instance of the one-in-100 storm surge.

The other part of the question is about the consistency of data. It's not data that is coming from the New South Wales Government, and there's no requirement set to plan for these scenarios that have been published, so we see that there is potential for different approaches to be taken across catchments, and of course there's many councils across Sydney Harbour there. A more consistent dataset and an approach to use that would be beneficial. Nevertheless, we're progressing through on our own work based on the best available data and reinterrogating what was done in 2015 with what's available now to actually look at the Woolloomooloo area.

The CHAIR: I use Woolloomooloo mainly just as an example in terms of that, because it does seem—and we have received quite a lot of submissions. But it does seem that councils have very much been left to their own initiative and devices to try best to plan for whether it's mitigation or adaptation, and identifying those risks. I'm just trying to ascertain whether a single source of truth would be beneficial for our councils and, if so, what would that look like and what would satisfy councils in terms of the voracity of that. Ms Barone, I can see you're jumping out of your skin.

MONICA BARONE: I absolutely am. I spend an awful lot of time dealing with this issue of data and the City of Sydney has put millions of dollars into climate data that we provide for all of Greater Sydney. Let me step back. I think this issue of the data that is required—it is improving. It's definitely improving, but we really need some agreements around what data will be provided, to what level, who is responsible. We need, potentially—I was just speaking with some staff about this the other day—that that is actually legislated for, so that different departments or even Ministers cannot, at a certain point in time, withdraw or stop supporting the collection of a particular dataset, which then leaves us in a position where we don't have complete and ongoing data collection.

To give you some examples, all councils were required to develop strategic planning statements. The previous speakers referred to it. In those strategic planning statements, we were actually required to address the issue of climate change and how we were going to reduce emissions and other matters, without any data. No councils had the data or even the capability to collect that data to do something that the legislation required us to do in the strategic planning statements. The City of Sydney—after the Lord Mayor was elected and we did Sustainable Sydney 2030—developed that data platform that gives us all of our emissions, water, waste data. It now has canopy data, and we're now putting housing affordability data on that. We then rolled that data platform out for the whole of Greater Sydney. The City of Sydney put about \$5 million into that platform so that all of our colleagues in Greater Sydney could be working together in local government off the same database. It literally has been millions of dollars of investment by the Lord Mayor and the City of Sydney to provide that data.

Now, to get that data, we need all the data inputs. Some of those inputs are from the State Government and some inputs are from other organisations. For example, to get the emissions profile of a city, the data that we use is—the city has knowledge because it does a floor space census of every square metre of space. We know how many square metres of space across the whole city and what it's used for. We then entered into confidential agreements with electricity and gas providers, and that enabled us to understand the level of energy use, which enabled us to calculate the emissions profile.

We then, because we know what's in the LEP, know how much the city's going to grow, and because we monitor the rate of growth, we can show how that profile changes over time. That's how you create a dataset which is a place-based emissions profile of a city. We give that to the whole of Greater Sydney, down to suburb level. At a suburb level you can look at Glebe or you could look at Redfern or you could look at Bonnyrigg, and you

can work out what the emissions profile of that suburb is—is it from commercial buildings, is it from cars and so forth. Unless you have that, you can't do good policy work. We are reliant on certain sources of data.

It took us two years to get the agreements with the State Government to get the canopy data for us to be able to put it into the local government platform so that we could show every local government area what their canopy cover was down to suburb level. Then we show them the target, in this case the State Government's canopy target, and they're able to see which suburbs are exceeding it and which suburbs are below so they know where to plant the trees. You can't do good planning without data, and really, someone has to map all the data you need.

As a consequence of no climate modelling, you have situations where people are building places without the adequate stormwater infrastructure because the climate model that tells you how much rain you're going to get and how fast it's going to come didn't exist for the planners to then apply when they conditioned the stormwater infrastructure. Data is key to quick decision-making and to collaboration, but we have to have it. There has to be an agreement and it has to be maintained. If you look at waste data, you don't know what's going on, because there are gaps in years where data hasn't been collected.

The CHAIR: Interesting. I note in your submission, you make a point that the City recognises it has a duty of care to ensure that land use planning decisions don't create the potential for unmanaged exposure to risk. Can you explain that to me?

BENJAMIN PECHEY: I suppose that comment is made in the general sense, but particularly with flood planning, if we make the best efforts on the best available data and follow the flood planning manual, then we're carrying out that duty of care and that flows through to the plans that we put in place in terms of the local environmental plan and the flood planning policies that sit beside that, and then enacted through consents.

MONICA BARONE: Can I just add, Ben, by duty of care we mean, if we knowingly—as was happening in Green Square before the Lord Mayor secured the funding for the drain—and are required to approve the development, we're required to approve the development knowing that that place will flood and your homes will flood and your shops will flood without the drain, then you've got a duty of care to not do that. You've got a duty of care to get the infrastructure in so that homes and businesses don't flood. Before that drain, when it rained in Green Square, cars floated down the road. We've all seen pictures of it.

Now we have an underground library and we've had more rain than ever, and we haven't had a drop of rain enter the underground library or any local flooding because of proper adaptation—the adequate level of infrastructure installed. But it wasn't being installed because it wasn't on the plan. The reason there was no money for the drain was because no-one had done the modelling and therefore put it on the infrastructure plan of Sydney Water and the State Government, and therefore it was not being levied for as the infrastructure should be levied for over time. So there was no money to pay for it.

The CHAIR: Do you think now that we are seeing the catastrophic impacts of not being climate ready in our developments, it's now finally something that we can properly economically factor into our planning, or do you think we've still got some way to go?

CLOVER MOORE: I think it's absolutely essential that you do. It was a real omission that it hadn't happened at Green Square. I literally had to lobby a number of premiers before we could get that money going towards \$140 million for this trunk drain. Now Green Square is a major urban renewal area of Australia. When it's completed, it will—what's the amount Green Square will be when it's completed?

BENJAMIN PECHEY: Sixty to 70,000 people.

CLOVER MOORE: Sixty to 70,000 people, but I'm just—the money.

BENJAMIN PECHEY: The infrastructure cost? It's \$1.8 billion.

CLOVER MOORE: It's \$1.8 billion, but the whole area is what?

MONICA BARONE: Thirteen billion dollars?

CLOVER MOORE: No, that's what we're putting in.

MONICA BARONE: No, we're putting in—

CLOVER MOORE: I'll give you the information. I'll follow up with that information. I guess the point I'm making is that it's been incredibly important in terms of providing housing. Some 40,000 people have moved in already; it'll be 70,000 to 80,000 by the time it's finished in 2036. It wouldn't have been possible to do it in the way it's been done very successfully unless we had taken all the actions we have, which were about forward planning and not doing it in partnership with the State, I've got to say. The State mandated that the south Sydney

industrial area can become the major urban renewal area of Australia, but didn't put moneys to that, so the City has had to fast-forward moneys to do the infrastructure and then recoup it from developer contributions.

The significance of the \$140-million trunk drain can't be underestimated because none of that development would have been able to really go ahead if we hadn't insisted on putting that trunk drain in, but it was incredibly difficult to get government to come to the party. I don't think government has really taken on its responsibilities about climate change for a very long time. Now it's about catch-up, and that is going to be quite a serious economic impact.

MONICA BARONE: Can I just add with the duty of care, if you continue to do that, you are approving homes that will not be insured, so you're transferring the risk. All this eventually transfers all the risk to the private entity, to the home owner, and what we're seeing out in parts of Western Sydney is you're transferring the whole risk to really vulnerable people, to disadvantaged people, because they will pick up the tab or the Government will when you have to mop it all up.

The CHAIR: We're hearing from the Insurance Council of Australia, and they've got some very pointy things to say to government as well really. People just can't afford the premiums and people just aren't insuring.

CLOVER MOORE: They've been saying that to us since about 2008. They have a long-term vision.

The CHAIR: It's about government perhaps getting on board with it, yes.

BENJAMIN PECHEY: The funding arrangements for Green Square are particularly notable because council had to contribute over and above what the infrastructure contributions enabled. There's the typical section 7.11 contributions that developers will pay. Then Green Square also had an additional infrastructure contribution scheme which is fairly unique in the State, so that then provided for some additional infrastructure. But then above that, the council then had to contribute further funding, remembering that this was a precinct where there was an existing community that had existing infrastructure that needed to be augmented. It was an industrial precinct, so all the libraries, a lot of the roads, all the parks needed to be done from scratch. The cost of that is significant. It took council's own contributions as well as an additional infrastructure mechanism under the planning system to be able to actually deliver it.

The Hon. JACQUI MUNRO: Can I just clarify or expand on that additional specific contribution that was designed for that site? What was that? What did that look like?

BENJAMIN PECHEY: There are two elements of that. One is for the town centre, and that was where the upzoning from an industrial to a mixed-use residential zoning was held in deferral until there's an additional infrastructure contribution from the landowner. The City ended up entering into a planning agreement to secure that with Mirvac. Then for the wider Green Square area, we have floor space bonuses where additional floor space can be awarded provided there is a contribution to infrastructure. That is typically basic infrastructure such as land for the streets, for the parks and the drainage.

MONICA BARONE: The overall cost of the infrastructure for Green Square is now at about \$1.8 billion. That's \$1.8 billion of infrastructure—roads, streets, drainage, libraries, school—which we're providing or contributing to, community centres and so forth, an aquatic centre. That's the infrastructure you need for about 60,000 to 70,000 people and 25,000 people working there. That's what you need. That will never be recouped just from the contributions, even when you have a very sophisticated scheme. About 25 per cent came from council general revenue. This is what is different about the City of Sydney and many other councils. They don't necessarily have that 25 per cent to put in.

We did some benchmarking around the world to determine whether we were in the ballpark, and we found the number of major renewal sites around the world of that sort of scale, the local government authority had to put in about 25 per cent to get the right level of infrastructure. The other thing that we had the capacity to do is forward-fund while we recoup from the contribution plan. There's no point if you've got three buildings and this one's being built and this one's being built, but the one in the middle isn't—you don't just build the two bits of road in front of those buildings. You've got to build the whole road so that those two buildings can get home, but this building hasn't been built. You haven't got the money yet.

The cashflow project for Green Square was fascinating. We had to anticipate everybody, when the money came in, when the money would go out, and how much we would have to cashflow it in order for the development to go ahead. What you did get is really a world class urban renewal that is really good practice. If you want the people of Sydney to live in great places and dense places, they have to look like Green Square and they have to operate like Green Square.

The CHAIR: In terms of Green Square, how do you see that in terms of its climate resilience now?

CLOVER MOORE: Well, again, it's setting a high standard because one of our environmental policies was to ensure that the whole of the town centre area, that is, the residential and the commercial buildings, would all have recycled water so that you weren't using drinking water to flush the loo and water the garden. We harvested that water. We stored it, we cleansed it, and now we're supplying it to the town centre area. That's one element of the sustainability. It's also low carbon. Do you want to talk about that, Ben?

BENJAMIN PECHEY: I recall there were additional BASIX targets set for a number of sites across the area, I think particularly the town centre, and so there were over and above improvements on energy and water efficiency for buildings. I suppose also in terms of resilience, there are the parks and the tree planting as well, which is critical. We did a lot of detailed master planning. Initially floor spaces and heights were put in in a very blanket approach and, over time, the City picked out precincts and master-planned them in detail to provide enough space in the streets and in the parks so that we would have room for the trees.

The CHAIR: Can I just interrupt you there, because this is very interesting—just about deep soil. How did that factor into your planning there?

BENJAMIN PECHEY: We have typically used the benchmarks that were in the apartment design guide or the residential flat code prior to that. We've now just put out some draft planning controls to increase them over and above, knowing how much more critical this issue of deep soil for tree planting and canopy is. But I think the focus was a lot on the streets and making space for the trees in the streets. A lot of these sites were old factory industrial sites, so the streets had to be put in. That was the real opportunity to get the planting, as opposed to on top of a basement car park, which doesn't work as well. The focus, particularly in those earlier planned areas, is the setbacks and the streets.

MONICA BARONE: Can I just say, though, the question is the right question. What makes an urban renewal area, a place where people live, resilient? There are a number of elements and it's just straight out of the textbook. The buildings have to be efficient—built with efficiency in mind, energy efficiency, and windows being able to open and so forth. You have to have recycled water, and that means dual reticulation and recycled water plant. These are all the things we did in Green Square. You have to have excellent drainage to deal with stormwater and you have to have lots of soft surfaces. There are even rain gardens and stuff right around Green Square to absorb the water that the stormwater system can't take.

Can I say, it's the drainage system that provides the water to the recycled water plant that then gets used and recycled back through the house. Then there's the canopy cover, so you've got to plan for that and have the targets. Then, of course, there's all the transport, because it's buildings and transport that are two main things that create emissions. Of course, Green Square is walkable, because there's footpaths everywhere. It's designed so everyone can walk to the town centre where all the infrastructure is. It's got cycleways built in, so if you don't want to walk you can ride a bike. We've invested \$40 million in securing the light rail corridor which then connects you with the heavy rail, so nobody needs a car. You've built in the water, the efficiency, the shade, the active transport and the public transport. Then you've created a place that is low impact and high resilience.

The CHAIR: Just finally on that point, what about then equity in terms of affordable housing access, those sorts of things, if we're looking at communities' resilience?

BENJAMIN PECHEY: When Green Square was identified for urban renewal, an affordable housing program was put in place. There is an affordable housing levy there—3 per cent of residential floor space and 1 per cent of commercial floor space is required to be provided by developers and that can be monetised. It can be provided as units, but in almost every instance it is provided as a monetary contribution, which to date has been passed to City West Housing, the community housing provider, who have constructed affordable housing across the council area.

The Hon. ANTHONY D'ADAM: So not in Green Square?

BENJAMIN PECHEY: No, it does have affordable housing in Green Square.

The Hon. SCOTT FARLOW: You're saying all across the council area it can be provided?

BENJAMIN PECHEY: It can be provided.

The Hon. ANTHONY D'ADAM: What was the percentage, though, you said?

CLOVER MOORE: The first housing development that I opened with Brad Hazzard was affordable housing, right in the town centre, which set a very high standard. We've been able to provide, through our collection of levy system, about 5,000 affordable homes up to the present time.

BENJAMIN PECHEY: That's what will be—

CLOVER MOORE: Up to 2036, but it's about 3,000 now. They're across the city. Just on deep soil planting, when I became mayor, any of the new developments—and a lot of them were merited at the time—did not have deep soil planting and the trees failed. One of the things that we've insisted on with all our developments is that there's deep soil planting. This was before we were aware how important the heat island effect was. This was to really improve the environment, improve the air quality and make the city an attractive place for people to want to live—much more sustainable living in the city and travelling less than going out to the suburbs and having all that infrastructure, having to go out there.

Living in the inner area was a much more sustainable thing to do. You have to make that attractive. We have done that through design excellence of our buildings, we've done it through our tree planting. We've done it through creating walkable streets. We've done it through putting in separated bike paths. These are all ways of enabling people to live in the city and for the city to have a good environment. Reducing our emissions has been our top priority since I've been there. We had a target of reaching 70 per cent reduction in our emissions in our own operations by 2030. We achieved that by 2021. Now our ambition is net zero right across the city.

This is why we want to work with residents and businesses. We're already working with businesses to get emissions down. As Monica said, the key areas of emissions in our City are in the commercial buildings. There it's in transport—that's the vehicle emissions—and it's in lighting. We're the first city in Australia to introduce LED lighting. We asked Ausgrid, who own half the Sydney lights, to partner with us and go ahead with that. They refused. We are now paying to in fact transform all the Ausgrid lights into LED as well. We're paying for that because we see the result in terms of a reduction in emissions is worth our while as contributing to get our emissions down. I think it's pretty shocking, though, that we're having to pay for Ausgrid's lights to be improved.

The CHAIR: It sounds like you've achieved a lot in spite of others that could have assisted along the way.

CLOVER MOORE: We have.

The CHAIR: Are you on track for your net zero by 2035, do you think?

CLOVER MOORE: That's the target we've set. We know it's a much tougher one than only in our own operations. Whenever we set a target, we always met it. That's one of the reasons why we have our GreenPower campaign, and one of the reasons why I raised embedded networks as well. We want to work with residents and businesses to achieve that right across the city.

The Hon. SCOTT FARLOW: Mayor Moore, you referred to embedded networks and some of the challenges there. How many of your new strata properties would actually have embedded networks? What sort of percentage are we looking at?

CLOVER MOORE: I don't know the answer to that, but it really worries me. I found out about it accidentally really because someone moved into an apartment and wanted to get Origin to put green power on. They were told that the decision had already been made for them before they moved in and they didn't know, and that they were locked into dirty power provided by Origin. This is something the State could pursue and mandate, really.

The Hon. SCOTT FARLOW: I guess one of the challenges with the embedded networks as well is that—and we heard before how we can incorporate more solar and batteries into apartment buildings. In a sense, that can sometimes be achieved through embedded networks. At times we actually have a position where embedded networks could provide an environmental benefit.

CLOVER MOORE: If they're green powered, they could. But if they're dirty power, they can't, and that's the problem.

The Hon. SCOTT FARLOW: Indeed. Do you see there being a potential where we could strike that right balance, so to speak?

CLOVER MOORE: I see it as something that the State should be doing. We can campaign for it, but we can't do it, which is the problem.

The Hon. JACQUI MUNRO: I was curious about population growth. Obviously the City of Sydney is Australia's biggest city. Do you think that the City has a responsibility, more than any other place, to take more population growth, and how are you responding to that challenge?

CLOVER MOORE: We've had a meeting with the Minister for Planning about the new proposals. We have met our targets that were set by the State—previous governments. In fact, we've exceeded them and we've actually provided housing for the equivalent of our eight councils in our area. We've said to the planning Minister that we would like to work with government if we need to increase even more, even though we are way ahead of

everyone else in terms of provision of housing. We would like to do it in a planned way, identifying areas where we can, in fact, increase housing even further.

The Hon. JACQUI MUNRO: Green Square, for want of a better term, was a bit of a blank slate, and that allowed that design and development to be quite unique, I would say. Are there good examples of areas that have been able to increase density that already have potentially very longstanding communities and infrastructure systems?

CLOVER MOORE: When I became mayor, our policy was that our density increase would be targeted on our former industrial areas, so it was Green Square and it's also the Ashmore Estate. Then we've looked subsequently at infill sites, and there is still potential in Green Square for further increases. We would have to look very carefully because we've already negotiated increases in Pymont/Ultimo and already negotiated increases in the Botany Road corridor, so we do it in master planning and making sure that the accompanying infrastructure goes in with it at the same time. Do you want to add to that, Ben?

BENJAMIN PECHEY: Yes. We have 20-year targets for 56,000 dwellings between 2016 and 2036. At the moment we're about 70 per cent of the way there with 40,000 dwellings either delivered in that time frame or in the pipeline. They have approvals; there's 18,000 dwellings that, as of June 2023, have approval, are lodged and were under assessment or have commenced construction—18,000 waiting to come online. Our 56,000 target is based on capacity. We have that zone capacity in our planning framework. It relies on the proponents lodging applications and building.

In addition to that, since we set those targets, as the Lord Mayor mentioned, we've recently proposed increases in height and floor space for a number of sites in the Pymont peninsula, and that's on the basis of the introduction of the Pymont metro station and government's Pymont Peninsula Place Strategy. Council has approved the draft and we're waiting for government to go ahead to go with the study exhibition. In addition to that, we've also got a draft proposal for providing an incentive for build-to-rent in the city centre, so additional floor space. That's important because typically we've seen a lot of empty investor apartments in the city centre, but the build-to-rent model means that there are people living there for it to be effective. It's lights on, adds to the vibrancy and also directly contributes to the rental crisis that we're facing at the moment.

The Lord Mayor also mentioned Botany Road. That's a corridor, again right near the Waterloo metro station, and we increased densities there for both commercial uses and also affordable housing. Since setting our targets, we have then gone over and above in terms of capacity for even further housing supply.

MONICA BARONE: Can I just say, for places to grow, for the city to grow, it isn't just about zoning or planning for housing. If you're going to build houses, people need facilities and parks. If you're going to build houses, people need transport. You have to have power. If you can't get enough substations in, there's no electricity for those houses. You have to have a guaranteed water supply. You have to have sewerage systems. If you're going to densify areas that are already constrained with their road space and their drainage, you don't knock all the houses down so that you can put the new drain in. What's under the ground and what's connected to the house in terms of water and power is a huge constraint to what you can do, and if that infrastructure can't be augmented or provided, you can't. That's why those urban renewal sites are the opportunity, because you haven't got everything—you can still dig it all up and put the stuff under the ground that you need to be able to then service that population.

CLOVER MOORE: I'd just like to follow up from what Ben said about build-to-rent in the City. This is a new thing for us, and it has been in response to the housing crisis and COVID and the changes in work and home. We're incentivising that for the first time for a period of time, to encourage developers to do that.

The Hon. JACQUI MUNRO: I basically have three questions. One is about how you determined capacity, because my understanding was that there's not a great deal of understanding across the State about the zoned capacity of the State. My second question is whether you have an idea of how many empty dwellings there are that are investment properties and just aren't being used for, say, six, 12 months or more. My final question is about how community buy-in has been generated effectively in areas like Pymont. I know it's three fairly big questions, I would say, but if there are brief answers?

MONICA BARONE: Can I just do a quick answer for the zoned capacity one. I'm not sure how you don't know the zoned capacity when every council has to put in a LEP which zones the capacity. I don't know how they don't have the answer to that because we all have to do it. That's my answer to that one.

The Hon. JACQUI MUNRO: That's fair enough.

BENJAMIN PECHEY: We have a really good dataset, the Floor Space Employment Survey that Monica mentions, which measures the existing building, and then we can understand what the difference is

between that existing building floor space and what is allowed under the planning controls, and that can be aggregated over a block or a precinct, and therefore we understand the capacity for further development. Very briefly, that's it. Empty dwellings—the City doesn't keep a dataset on that. There's the census and the real estate agency institute—I forget the name, sorry—that provides data on vacancies.

CLOVER MOORE: I'll talk about community buy-in. When I first became mayor, and we were taking on Green Square and taking on the Ashmore Estate—the Ashmore Estate impacting on Erskineville, which is quite a dense residential area, terrace houses, and Green Square, where the challenge was huge. You have to provide homes for 60,000 people by 2030. We embarked on this work. There were a lot of public meetings. I really had to take people on the journey and talk up the importance of people living in the inner area with density.

It was really part of the fact that the majority of people in Australia live in cities. We have the highest rate of obesity in the OECD and the highest ecological footprint. I think those two figures are really damning ones for us. If we can provide a good environment in the inner area, we are contributing dramatically to reducing our emissions. Some 70 per cent of emissions are generated by activity in cities. If we can ensure people are living in inner areas and you're not paying all that money to take infrastructure out, and you're not having all those people having to travel on tollways to get in and vice versa—all the scenarios of the conditions the majority of people are living in the suburbs. If you can provide an environment in the city where people want to live, I think you're providing a better social community life—people meeting and mixing in the great parks we've built, people walking and meeting their friends on the street, walking to and from work in the lovely streets we've created—it's just fantastic, a real improvement in the standard of living.

I remember listening to talkback radio once, and someone phoned in and said, "I just moved into the city and I can walk to work. It's like taking on a new lover." That's how enthusiastic it was. I had to take the community on the journey. If we can create a good place for you to live, it's more sustainable, it's better for you, close to the park, close to the schools, close to the work.

The CHAIR: You might even find love.

CLOVER MOORE: You might even find love. I know people who met in the dog park and went off and got married. Having to take people on the journey of, "This is a good way to live if you do it well"—we've really worked hard at trying to do it well, but it doesn't mean you still don't have challenges with people who are living in terrace houses who don't want higher density buildings near them. There's been a general acceptance. I haven't had to go to many packed halls of angry people who haven't wanted to develop in the City. We have made a point of telling you how much we've been able to contribute to the housing in the City by our policies.

The CHAIR: Thank you so much. We've run out of time. I know we could all go on forever. I did hog the show; I've been told off by my colleagues. I'm very sorry. Thank you very much for your evidence. The secretariat will contact you in relation to any questions on notice. We're very grateful for your submission, and your time and evidence today. We will adjourn and take a short break and be back at 10.45 a.m.

(The witnesses withdrew.)

(Short adjournment)

Ms SARAH JOYCE, Executive Officer, Sydney Coastal Councils Group, affirmed and examined

The CHAIR: Welcome back. Thank you for coming today and making time to give evidence. Do you have an opening statement?

SARAH JOYCE: Good morning, Committee. I'm the Executive Officer of the Sydney Coastal Councils Group. Our group is a regional organisation of councils that consists of nine members in the Sydney region. Two of our members, Waverley and Woollahra councils, are giving evidence today. We support our members to better manage their coast and estuaries for the benefit of their communities and the natural environment. One of the key threats to the coastal zone is coastal inundation as a result of the changing climate. Coastal inundation in Sydney is a present-day problem that will only be exacerbated with projected sea level rise. For instance, a one-metre increase in sea level is estimated to increase the number of tidally inundated properties in Sydney almost fourfold. Current predictions are that we may reach one metre by 2100 and that greater inundation will be felt further up the catchments. The year 2050 is not that far away and we need to start planning for that now.

Councils, unfortunately, are at the coalface. Coastal inundation has significant implications for urban planning, asset management, long-term financial management and overall community wellbeing. A key policy lever that our group and its member councils are using to manage coastal hazards is through the development of coastal management programs, or CMPs, under the New South Wales Coastal Management Act. The Coastal Management Act was one of the first pieces of New South Wales legislation to recognise climate change in its objectives. The Act enables councils to obtain funding to develop CMPs, which can then identify coastal inundation areas and build the capacities of their communities to adapt. However, in the Sydney region, the development of the majority of multi-council CMPs has stalled. The key reasons for this are a lack of leadership at the State level, no formalised governance arrangements set up to manage catchments, funding and administrative constraints and a lack of will from State agencies to partner with councils in the development of CMPs.

We also believe that there needs to be greater emphasis on strategic land use planning. As acknowledged by the Federal Government's CoastAdapt, statutory planning systems are not well equipped to deal with coastal inundation. Statutory planning deals only with future development and does little to consider the implications for existing development. Councils are at the epicentre of this problem and therefore need to be a core part of the solution. We urge this Committee to consider our views. Finally, on behalf of the Sydney Coastal Councils Group, I thank you for this important opportunity to speak with you today and look forward to answering any questions you may have.

The CHAIR: Thank you very much.

The Hon. JACQUI MUNRO: Thank you so much for your submission and for coming in today. I'm curious about whether there is a big difference between the needs of the more urban councils that are on the coast and the regional councils that are on the coast. Are there big differences in your approaches to planning?

SARAH JOYCE: Yes. As I mentioned in my introductory speech, the Coastal Management Act has set up this opportunity for coastal inundation and other issues to be dealt with through coastal management programs. In the regions, those coastal areas are usually done by one individual council working on their CMP. In the Sydney region, it requires councils to work together and this is what we call multi-council CMPs, and many of them are trying to be done at a catchment level—for example, the work that the Sydney Coastal Councils Group has been doing for the Greater Sydney Harbour Coastal Management Program. There's also one being done for Cooks River by the Cooks River Alliance and also the George Riverkeeper for the George River. But it is very problematic.

The Act has set up a coastal management framework to support councils, but it doesn't really work where you've got multi-councils working together because there's no governance structure set up for catchments, for example. The catchment management authorities were abolished about 10 years ago so organisations, such as the Sydney Coastal Councils Group, have to try and work with bringing councils together. Councils—some are members, some are not members who want to be part of a coastal management program. So we've got to create a new governance model and get the agencies onboard, and that's really, really challenging.

The Hon. JACQUI MUNRO: Forgive my ignorance, why were the catchment management authorities—obviously, there is going to be a history to this, but are there other ways to improve on what that was, in your view?

SARAH JOYCE: I think it was a Liberal Government decision.

The Hon. JACQUI MUNRO: Yes. I am aware of that. I know that I'm walking into something that I may regret, but I do think it's important to understand.

SARAH JOYCE: Yes. I really appreciate the question because this is something that we find quite unusual in that the CMAs were dropped and the new Government then replaced it with a thing called joint organisation of councils, but only established them in the regional areas. We don't have them in Sydney metropolitan areas so consequently you have groups such as us and other catchment groups trying to fill that void and trying to do regional projects to address threats, such as coastal inundation, water quality—things that require a regional approach without that administrative support from the State.

The Hon. JACQUI MUNRO: I want to pick up on the technical guidance point that you raised in your submission. You state:

... the NSW Coastal Management Manual provides very little specific guidance.

I suppose that there is, ideally, some benefit in that but you don't want to be too prescriptive because different councils and regions need different approaches to management. What do you think is the balance between specificity and general principles that guide action?

SARAH JOYCE: I'll just speak on behalf of our councils and what we think is required for Sydney where you've got multiple councils wanting to work together. We want to avoid a situation where every council has to think about how they map coastal inundation, how they consult with their community. Some may adopt a different level, a different scenario to another council. We want a consistent approach at a catchment scale. Therefore, that guidance and that support for council should come from either the State, the Commonwealth, or even a regional scale like a catchment management authority, or a joint organisation, or a regional organisation of councils so that it can work with those councils and support them.

There's this assumption that councils have this in-built capacity to—even if they were given State benchmarks for climate change, they know what to do with them. This is really scary information to talk to their communities about because there is loss of property. There's also huge impacts on infrastructure that councils manage—the road network, the parks, the sewer systems, the stormwater systems—what that means and how they're going to deal with that. There are varying approaches on how we deal with that information, but what we're saying is we need State leadership or even a regional scale support network for a group of councils so that we have a consistent, collaborative effort to how we can respond and adapt.

The Hon. JACQUI MUNRO: Do you think that there's a risk of overlapping bureaucracy in dividing up different areas depending on the regulation that is required? In terms of a catchment area, for example, you've got a fairly specific policy area that you're looking at and I don't know if they have obvious geographical boundaries, but there are spatial guide rails, I suppose, to that area. If you've got other policy areas that need to be developed to go on top of that—whether it's, I don't know, tree planting or something like that—is there a way to have all of those policy areas combine in one organisation or one representative regional body, or do you have to have lots of different levels to deal with each type of management plan?

SARAH JOYCE: I think what you're asking is, what would be the priorities for a catchment-scale, focused workload. You would identify—

The Hon. ANTHONY D'ADAM: Yes, what does it look like?

The Hon. JACQUI MUNRO: Yes, is the catchment area—

SARAH JOYCE: Defined?

The Hon. JACQUI MUNRO: —as you're referring to it, going to be the ideal way to organise governance of councils?

SARAH JOYCE: We think so. If you're talking about those threats that we think require a catchment approach, catchment management is something that our councils support. What happens in the catchment affects Sydney Harbour, for example, with regard to water quality. Also, sea level rise: We know that it actually is going to get amplified as you move up the catchment. It makes sense to deal with that type of threat at a catchment scale rather than requiring individual councils to deal with that. Councils would have their individual requirements around tree planting and some percentage of their LGA, but when it comes to those issues such as coastal inundation, water quality—marine litter is another example where you would want a collaborative catchment approach to managing those threats.

The Hon. JACQUI MUNRO: Do you think that there are other threats that require—maybe it's not the right question to ask you because you obviously have a specific interest in catchments. But I guess I'm wondering if there are competing interests or competing priorities that councils have where they have to work together in other ways, and where creating lots of different groupings for different issues ends up making layers and layers of organisation and bureaucracy that are possibly competing and do not give an efficient way of managing a range of issues, instead of one particular type of environmental issue?

SARAH JOYCE: What you're saying is, do we want another layer of bureaucracy, of governance between the State and councils? For this particular threat, I think councils are calling out for it. We recently applied for a Commonwealth Disaster Ready Fund grant application to develop a coastal inundation framework. We were able to get 16 councils, two State agencies and three catchment groups wanting to create some sort of capacity-building to deal with coastal inundation across Sydney. A governance entity of some description would help us govern that. At the moment, it is Sydney Coastal Councils Group—stepping outside its membership, bringing in councils and working with the State—who are identifying that sea-level rise information. A stronger governance entity would definitely help in the delivery of that framework.

The Hon. ANTHONY D'ADAM: Is it a coordination problem? I can see the merits if there are overlapping jurisdictions where there is a common problem, but I would have thought most of the problems are going to be consistent across multiple jurisdictions, so a statewide response in terms of the strategy and then individual councils can then—I am still unclear about the nature of the interventions and whether those interventions would fall on individual councils or require some level of collaboration between councils. That kind of situation might create a need for some mid-level coordinating authority. At the moment, I don't really see why you would need another layer to manage the problem.

SARAH JOYCE: I suppose we're talking about coastal inundation and we're asking for greater assistance to develop coastal management programs, which then become a statutory instrument that identifies how councils are going to respond to various threats, including coastal inundation. I will give you the example that we've had with developing the Greater Sydney Harbour Coastal Management Program, which was 21 councils in the Sydney region dealing with the threat of waterway health as well as coastal inundation. We have been working on that for five years. We still are only halfway through delivering that. We've only got six of those members. We're partnering with Parramatta River Catchment Group. We're trying to bring along State agencies, many of them very reluctant to collaborate with us. The reason councils want to get a coastal management program done is that they get statutory immunity for coastal inundation once that's certified by the Minister, but they also get two-for-one funding. It's a real need for them to partner together to apply for that funding. Then there can be actions that actually get implemented.

The Hon. ANTHONY D'ADAM: But what kind of mitigation measures are you talking about?

SARAH JOYCE: It could be capacity-building within their councils to deal with the issues around coastal inundation and how to respond. It could be funding for seawalls. It could be better planning for—in some areas we need to retreat. It could be upgrading stormwater devices that are really low and are going to be inundated by sea-level rise. There are varied actions that local government could then specify that, for its LGA, in alignment with the certified CMP for the catchment, these are the things that they want to get funded. Just on that, it's not just trying to facilitate the development of the CMPs; it's also ensuring that once the CMP is done, who is going to govern that? Who is going to ensure that all those actions are done, that councils continue to work together and that there is monitoring done? You might move to an adaptation pathways approach, where, as new information comes in, there might be changes to those actions. You need a body that governs that. At the moment, we're not seeing that the State is wanting to take on that role.

The Hon. ANTHONY D'ADAM: What would be the natural repository of that governance in the current framework of State administration?

SARAH JOYCE: I think there's a significant opportunity to explore creating joint organisations in Sydney Metro so that they are actually administered and have that statutory support. We are doing it for the regions; we are just not doing it for Sydney.

The Hon. JACQUI MUNRO: How do they interact with something like the regional organisation of councils, like SSROC?

SARAH JOYCE: We're a ROC. ROCs are just established by whichever councils want to be members. I mean, I could lose a member with six months notice. Some councils choose not to be members. It's just a voluntary—

The Hon. JACQUI MUNRO: Gathering, yes.

SARAH JOYCE: —opportunity, whereas a joint organisation of council, yes, councils have to agree to be members but there is more support, administration and formalisation of those organisations. I just think it's a missed opportunity to not have a similar situation established for Sydney, because we have the same threats and governance for something that was identified in the Greater Sydney Harbour CMP scoping study in 2018. We still don't have anything. No-one is managing Sydney Harbour. Transport for NSW owns the bed and bank of Sydney Harbour, but they have no management plan for it. Yet we are saying, "We'll just put another 1½ million people in the catchment, and we won't fund grant programs that actually try to look at coastal inundation and build the

capacity of councils on how to adapt." Our expression of interest was denied, so it didn't go to the Commonwealth. So where are we at? We are having to individually have councils try to deal with this very complex issue, and many of them are really small councils that just don't have the staff to deal with it.

The CHAIR: In your submission you are talking about the frameworks, and you say you've suggested two options to the Government about the framework for pathways planning. Can you be a bit specific about what they are?

SARAH JOYCE: When we put up the idea to our general managers of our councils to say, "Look, Sydney Coastal Councils Group would like to apply to develop a coastal adaptation framework to support our councils in how coastal inundation gets assessed. We know the State is identifying lines on a map. How does council then interpret that and work with their community?" It was very clear from the general managers that they said, "Look, the State should be doing this. We don't feel that council should be doing this on an individual basis. So we need to ask the State whether you would take this on." The State didn't really respond to our question. We gave them the options that, "Either you do it or would you support it being done by us at a regional scale?" We didn't really get a response. Well, we got a response, but it didn't answer those questions.

The CHAIR: I'm just curious about where you see the RA now is fitting into this, the mitigation disaster plan and then this upcoming tranche of the adaptation plans. Where will you and your work fit in, and how do you see that playing out, particularly in the next 18 months framework?

SARAH JOYCE: Yes, good question. We don't know. We have asked the Reconstruction Authority exactly how CMPs, which are halfway done, would fit into disaster adaptation plans. We know that a State disaster adaptation plan has been done, and it identifies coastal inundation as one of the hazards. We don't know what the priorities are for that work. If a CMP identifies coastal hazards, how it would fit into a disaster adaptation plan—we don't know the details of that yet. We also don't know whether they're mandatory or whether there's any funding associated with them. These are things that we are asking the Reconstruction Authority, because I don't think it has been clarified yet.

The CHAIR: The work that the RA has done at this point is quite high level. Is that how you read those documents and interpret those? We are not sure at this point how that is actually going to operationalise on the ground. When I just went through the State mitigation plan, I looked and went, "This is great, but for many people who are a long way down the road—in communities like Lismore, we know a lot of this—now what?" Is that kind of where your council group is wondering where everything will fit in?

SARAH JOYCE: Yes, exactly right. We know that the State disaster adaptation plan has identified certain hazards. Coastal inundation is one. There's tsunami, there's bushfire, there's flooding—there are various others. How that then filters down—and it does provide an opportunity for disaster adaptation plans to be done by JOs or ROCs at a regional scale. There's already one being done for Hawkesbury-Nepean and, obviously, Lismore. The Hawkesbury-Nepean is being led by the State. Now, is that going to be the model used for other hazards, such as coastal inundation, tsunamis? We don't know the details. But there could be opportunities for some of those hazards to be done at a regional or State scale rather than councils having to do their own assessments.

The CHAIR: Can I ask you about seawalls and the nourishment projects? What is your expertise along the many, many years? I am very familiar with some of the work that you mob have done over time. What do you see as both of those options in terms of councils and the State's capacity to really grapple with them in the time that we have, given the threat there would be seeking to abate or mitigate?

SARAH JOYCE: Beach nourishment is something that we regularly talk to our councils about and advocate for. We have a sand management working group that works with our councils who need to build their capacity and also work together to address coastal erosion issues. What we are waiting for is the outcomes of Stockton, really, because one of the big barriers for accessing offshore sand is that there are requirements to have a mineral licence. Now, we are hoping that the Stockton approvals process will be streamlined, because at the moment it is very challenging to get a mineral licence. We know that there is offshore sand that is available; however, it is rather expensive to access. You need international ships with huge pipes to suck the sand off and then bring that to councils. If that, in 10 or 20 years, is identified as the most cost-effective way of bringing sand on to Sydney beaches, then that would require councils to work together, because individual councils would not be able to fund that work. The Gold Coast council, for example, does, but it's a huge council with a huge—

The CHAIR: Budget.

SARAH JOYCE: —rate base and budget, yes, that is right. But you do need that approval first.

The CHAIR: Has there been an economic analysis on the differentiation between walls and beach nourishment? Are they always very different circumstances that you would apply the two, or is there a crossover?

SARAH JOYCE: We haven't done that. I'm not quite sure if there has been a CBA done for that work. Seawalls are often—there is a legacy issue there and the replacement of the seawall has to go through some sort of approvals process within council. The beach nourishment issue is more about trying to replenish the beaches, and they do provide a mitigation to sea level rise and storm surge but to a limit. As you know, with sand, it moves and sand dunes can change shape. Even the beach can pivot, as we saw with El Niño. So it's really a combination of things to build a seawall to protect land, to protect people's dwellings and also to ensure access. But beach nourishment would be something in addition that would help mitigate storm surge and sea level rise.

The CHAIR: Just one more from me about retreat: Is there any identification about what the magnitude of retreat might look like?

SARAH JOYCE: Retreat is one of many options that a council could consider. First of all, we need to know where that option may need to be considered. This is something where we're trying to build the capacity of our councils through a coastal adaptation framework, which I mentioned, so that once you know where those sensitive areas are in the catchment, you can then say, "What are the options that council could consider, in collaboration with their community, to say do we build a seawall in these locations? Do we retreat?" It might be easier if there is a parkland, for example, or a wetland to enable that. Or do you raise people's properties and houses? Then you would need further details in development control plans to identify specifically what height and what kind of building materials you would use. These are the options that councils have and the process that they would need to go through before retreat was something that would be put on the table. Again, that would have to be done in collaboration with their communities.

The Hon. JACQUI MUNRO: I am wondering if councils have done work to calculate the potential loss of dwellings and quantified that across a period of time.

SARAH JOYCE: There has been work done by the State around—and I think I gave some figures—by 2100 there is going to be a fourfold increase. We're waiting for information from the State around that information.

The Hon. JACQUI MUNRO: About how it was calculated?

SARAH JOYCE: Yes. And with the new IPCC information, how that then relates to what sea level rises are expected to be. Then you need to work out which areas are going to be impacted and how councils could plan for that. We talked about retreat, we talked about raising and we talked about building greater seawalls. These are things that you would need to identify. But we also strongly believe that you need an adaptation planning pathway approach. Just because you might strengthen the seawall now, for example, in 20 years time you might need to use a different approach. As new information comes in, greater monitoring might find that we expected that but sea levels are higher for whatever reason. It might be that the science wasn't as robust then as we know now. We need flexibility in the process to be able to do that.

The Hon. JACQUI MUNRO: Are councils considering the approach to potentially increase density if they have less land to house their residents? Is that something that is spoken about in meetings that you're having?

SARAH JOYCE: You just had City of Sydney. They have come on board with our Coastal Management Program because of the threat of coastal inundation. I am familiar that there has been a push, not necessarily from the fact that sea levels are rising—there is an increase in density in the Woollahroo area, which is potentially at threat of coastal inundation. How do they respond to that? What would be the mechanisms that they would put in? For them, it's identifying what the science is saying. That modelling is currently being done by the State. It's how they then interpret that in an approach that they can then support that density.

The Hon. JACQUI MUNRO: As you say, this is looking out to the end of this century. Is there a discussion about the balance between the fact that we're not inundated now, so let's use the land that we have as we can for as long as we can while we adapt and equip other areas in an LGA to house an increase in density or population in 70 or 80 years time? Is that kind of nuance discussed?

SARAH JOYCE: That's an adaptation planning pathway approach. You might say, "We know these areas aren't going to get inundated until 2050 or 2100. Therefore, let's invest in those areas where there is likely to be greater inundation." Once a certain trigger is identified, we might say you no longer can redevelop that land, and we wouldn't support any further renovations to that property once a 50-year time frame has come. That is an adaptation planning pathway approach that you might adopt based on the science that is likely to identify where areas are at threat in 2050 and where areas are at threat in 2100.

The CHAIR: In the modelling and the science that you and your organisations have been looking at, are you factoring in the idea that cyclones are likely to be more possible in this particular region, given the warming of the oceans? Is that something that has been in the scope for some time or is that another new in-feed we'd have to put in the modelling?

SARAH JOYCE: The modelling that I was speaking about that the State is doing, that is really for the Sydney Harbour. There is modelling done across the State around what those levels are. It is recognising that there's a slow rise of sea levels, but then that could go up here as soon as there is a storm surge or you get a high tide like the one that impacted the northern beaches a few years ago, where you've got a king high tide as well as a storm that blows in and causes havoc to the land. Definitely, our coastal councils are aware of that threat. We're waiting for that State information, but then that would need to be interpreted at a local level about what that means—whether you need to strengthen seawalls or put in stronger beach nourishment activities to provide a buffer to that. We have got information that has come in that is showing that the temperatures of the seas are warming so much more quickly now and for longer periods of time, which increases cyclonic activities. These are things that will hopefully be put through the disaster adaptation plans because coastal inundation and cyclones are identified as a hazard. That's something that we could get a consistent approach on across the State in how we deal with that through the disaster adaptation plans.

The CHAIR: This might be controversial, but the CMPs, given the big time frame, are they going to get lost before they get finished?

SARAH JOYCE: We hope not. There has been a significant investment by the State and local government in developing them.

The CHAIR: On that, do you think that they are still the best mechanism to be informing planning outcomes and the inputs into the planning system? Do you think those CMPs still have that important relevance? If they get developed, finished, signed off and they work, do you think their location is the best place in the planning system to deliver good outcomes for climate?

SARAH JOYCE: For coastal inundation and coastal erosion, yes. They enable coastal vulnerabilities and areas to be identified. That then gets put into the planning system and development controls, where a CBA is triggered, for example. In light of not understanding or knowing what the State Government is thinking about the disaster adaptation plans, yes, I think CMPs, at this point in time, are. But the disaster adaptation plans could change things, because they might say that we're going to deal with these issues in a different way or prioritise this work in DAPs over CMPs. We don't know yet.

The CHAIR: Is the work in the CMPs, in the draft, to the extent that we have them, you've got them and they've been developed—

SARAH JOYCE: They haven't been developed; this is the problem.

The CHAIR: Just not at all? Even the underlying materials?

SARAH JOYCE: I can only really speak for the Greater Sydney Harbour Coastal Management Program which we've been developing, and we've just completed stage two and there are five stages in the CMP. We're waiting on the information from the State, which are going to do detailed modelling around coastal inundation for Sydney Harbour, and that would feed into stage three, which we are having to rescope because of administrative constraints around project management fees and various other things.

The CHAIR: If it was to be in the State plans, would we lose the granular degree and the connection with the councils, therefore the community? Is that one of the fears?

SARAH JOYCE: Well, yes, that's one of the fears because at the moment coastal management programs have a funding source, so you can get two-for-one funding for planning as well as implementation. We don't know whether there's any funding source for the DAPs. It might be just a nice thing that councils should do now. With their priorities of all the things that they're doing, it may be bottom of the pile in terms of prioritisation, because at the moment all we have is the State disaster management plan but there's no funding source that has been identified or any sort of requirement that these are mandatory or not mandatory. We don't know.

The CHAIR: We've run out of time. Is there anything you would like to say to conclude?

SARAH JOYCE: No, that's it.

The CHAIR: Thank you very much for making time today for your evidence. The secretariat will be in contact with you regarding any questions you took on notice but I don't think there were any.

(The witness withdrew.)

Mr SAUL DEANE, Urban Sustainability Campaigner, Total Environment Centre, affirmed and examined

The CHAIR: Thank you for coming along today and making time to give evidence. Mr Deane, would you like to make an opening statement?

SAUL DEANE: I might make a brief one. Thank you very much for inviting me. Most of the things I'm going to talk about have briefly been touched on obviously in my submission. I just want to go and touch on a couple of other things just in light of the Planning review that's also happening and also just the pressure on housing that we're also experiencing right now. So I just wanted to say that I'm mindful that planning is a supply-side failure to what is now a demand-driven issue and unprecedented immigration rates. This is important because it underlines two things that we need to take into consideration: a time frame mismatch as the immigration rates change monthly; and housing supply, which is looking at at least a three-year time frame.

The other thing, which is where we're going to be interested in on how it impacts on the climate and also on environment and communities, is that we're seeing a very large impact on Sydney's peri-urban edge, and therefore the impact that this is having on our water supply, flooding issues and obviously things that we're very concerned about, which is the biodiversity habitat of koalas. Sydney's housing planning demand and supply problems are driven by this sort of caving in in respect to major developers. One of the reasons that we can point to that is the only reason that south-west Sydney is actually being developed is that it was the largest area of regional land grants, so it was huge areas; therefore it was incredibly profitable to rezone them and flip them, which is not the same when you're looking at areas around the inner city which are very difficult to acquire and then rezone. There is not the same profit incentive that there is otherwise.

Thus, we're looking at planning via basically whatever has been left that hasn't been developed and was being put aside because of very good planning reasons in the past, which was out at south-western Sydney. So they have become the attractive carrot precisely because they shouldn't have ever been rezoned or they should have been left alone previously, and now therefore they've become open and susceptible to being seized in that way and rezoned. This is going to affect our food supply, water quality, and heritage and koalas because of it. Sydney's footprint is large already by world standards. So we can look at some supply-side fixes. It has been interesting. There is transport-orientated development. We welcome that idea that you're given increased density around transport. I guess what we're keen about in terms of what we put in terms of that blue-green grid frame, which we are talking about, is also a green-orientated development, if you will, and a more unusual acronym of GOD, but there you go.

The Hon. ANTHONY D'ADAM: "GOD developments", is that what you're saying?

The CHAIR: I love it.

SAUL DEANE: This is increasing development where you're increasing green space, so you're getting a benefit off it. We think this is actually another quiver in the bow that should be looked at. The other things that we really want to talk on and we touched on briefly is obligation to landscape. At the moment we have this almost punitive relationship where it's all carrot or it's all stick. If someone has removed all of their trees then they get off lightly because they don't have to accommodate looking after the trees; but if someone has kept the lot, they get penalised for removing them. I think it's really important that we have some baseline that is actually above just a zero so that maybe it's like 10 per cent or something, so therefore you can engage carrot and stick. If someone is below it, they get a punitive relationship; if it's above it, they get a carrot approach and they get bonuses and so on and help from the Government.

We think that the Design and Place SEPP should be reinstated and that that was actually a really important player of making sure that we incorporate green space in the environment. I guess the big-picture idea that Sydney really has to seize on now as we push into the Western Sydney development is this idea of Sydney's great koala two rivers walk and that we basically realise how unusual Sydney is in that we are almost circumnavigated purely by two rivers and that we seize on that in the way that we have with the whale walk along the coastal edge of Sydney, which has been a huge success and has involved many different sides of government in order to bring that about. We would hope that by seeing such a bold idea being incorporated in south-western Sydney that we could get the same attractive drive that would actually bring Western Sydney to a bigger idea.

I just comment on the Planning review very briefly. The blanket rezoning uplift—we see some good points in that. One of them is I think the problems that are plagued with part 3A and State-significant development is that there has always been a perception of corruption because it has only been specific spot rezonings that have occurred. There is something about doing a blanket rezoning that is arbitrary around, say, a transport area, which relieves that perception, and we think that's good. It is also good to see minimum landscape or deep soil requirements in there, though we would like to see them as requirements not guidelines as they're posted in.

Obviously within that process, once you've done that blanket rezoning, the idea of stepping back and creating nuances for particular areas will obviously be very important. This is where south-western Sydney becomes really important in acknowledging because, especially when we're looking at no minimum lot sizes in terms of some of that, it would be disastrous for a lot of south-western Sydney because while this isn't so much of an issue in the inner city—and in fact it encourages the development of small terraces and so on which is something to be applauded—when you're looking at south-western Sydney, we see that large lot sizes have been very beneficial in terms of keeping biodiversity and people in the same landscape. That's been a huge benefit. It also energises the community to be concerned, and our greatest koala advocates live in those communities because they see them in their backyard and want them to stay there.

The other aspect, I think, that we've got to be really careful of in rezoning these large areas is also the uplift in value. Once you have a massive uplift in value in these areas and you're basically giving it all, like you said before, to just one developer, there's a big equity issue. If you have large lot sizes then eventually you're breaking it down slowly so that the new owners, maybe in the future, can then subdivide theirs and so on. But if you go straight from hundreds of acres to 100 square metres or something, which is the sort of figures they might be looking at, then that's very hard to subdivide again. So you're taking out that equity issue and you're also increasing the price. Increasing the price in a one-off situation like that makes it very hard to then acquire land for conservation. It makes it very hard for councils and it makes it very hard for biodiversity conservation trusts and so on to be able to move, because they're stuck, because all the uplift in value has already been taken to a place. They're just a couple of points I wanted to make in addition to my submission.

The CHAIR: The submission is amazing. It's got this kind of spatial governance vision component, and it's got a bunch of incredible history that I wasn't actually aware of. It's really interesting, those concepts going back decades and decades about what we're seeing people striving to achieve at that local level in terms of planning outcomes. We've abandoned things in the past, so thank you for providing that context.

SAUL DEANE: That's okay. I should just note that we've now got a blue-green grid which sort of summarises those ideas. I'll just put that on the table if that's okay.

The CHAIR: Thank you. I have actually seen that document and I was very impressed when I saw it. Something that you touched on and put in your submission, which I've now gone and had a look at, is this idea of the uplift tax or the windfall gain. That is something Victoria has introduced in certain circumstances.

SAUL DEANE: Yes.

The CHAIR: That's precisely what you were referring to in terms of that massive windfall gain from that primary rezoning, upzoning, downzoning or however we refer to it now. That's something that we just have never really been cognisant of. It just goes from the public to the private. Essentially that's what we have done.

SAUL DEANE: Yes. Historically, it's been more of a multi-step process. You'd have large lots and then eventually they get divided up. It's much more equitable, and also it does accommodate a slow change in the landscape, if you will, that still can accommodate plants and biodiversity and stuff that's already there.

The CHAIR: You referred to this idea of corridors and lines in planning, and that we've done that for transport, and waters naturally have their own. You're suggesting that those green spaces are something that we could achieve.

SAUL DEANE: I guess this is from our background and our experience with, in particular, south-western Sydney. At one point all the biodiversity that was left in the landscape was there because of the Water Management Act and vegetated riparian setbacks. They were just put in there in the early '90s to protect riverbanks and stuff so that they wouldn't collapse in, but it's also had the incidental but just as important benefit of actually creating all these wildlife corridors, which are now being used in the landscape and they're moving through. It's just been fantastic to see that. When you see a mechanism that's been working and it's been working well, why not piggyback off that and make that do more work? Because it has been so successful compared to other ones that we've seen, which haven't worked and which have been sometimes more embedded in the planning framework.

What's been really disappointing out at Campbelltown, for example, was that the Campbelltown Koala Plan of Management had a great plan of management and so on, but it just wasn't effective. They just didn't implement it. They identified the major corridors and how wide they needed to be, which was 400 metres. But council never bothered to implement it along Menangle Creek, for example. The only thing that was left that was doing all the work for biodiversity was the Water Management Act in these vegetative riparian zones. If that's the only thing that's working then let's make it work for something else as well, I guess.

The Hon. ANTHONY D'ADAM: I want to ask about this idea around valuing trees. Maybe you could elaborate. You made reference to the Melbourne tree policy and urban tree valuation. Can you elaborate on what's involved there?

SAUL DEANE: The idea is that trees aren't given a zero value because what we do see—and this is more wider, when we're talking about local parks or something—is if someone is putting in a powerline or something, just for ease of putting it in, they might cut down a tree. There needs to be some way of balancing off the fact that the way they've put it in, maybe it saves them \$200 or \$300 or \$1,000—I don't know—but you're cutting down a 100-year-old tree. For them that tree has no value so, therefore, it's a zero thing—just get rid of it. The ability to somehow embed that there is a value, even if it's a rough value—like, it doesn't have to be exact. Let's say that tree, with its girth and its age, would be worth \$20,000. Therefore, the opportunity cost then comes into play. If \$200 or \$300 is all you're saving but you want to knock down a \$20,000 tree, that doesn't make sense, and therefore you do something else. If that costs you \$1,000 then that's the benefit.

The Hon. ANTHONY D'ADAM: Is there an established framework for how you would value trees?

SAUL DEANE: There are ones that are within the department of planning that they're looking at, and also obviously Melbourne, we thought, was a pretty good one as an example. I guess we just want that to be up-front so that when you're looking at a park you can almost give it a value on its trees. The other value is like a dashboard, really, to assemble and assess green spaces because green spaces might be strategically important. That's really often missed in the planning department because planning looks at things in areas, where something like water and transport looks at things like linear relationships. That's often missed. Therefore, I guess we're looking at the idea of a dashboard for green spaces so they can see its strategic importance and then also just give a rough value, and then being able to drill down into specific areas and so on.

The CHAIR: On that point, are you saying that you have looked at the Government's 2023 *Framework for Valuing Green Infrastructure and Public Spaces*? Have you had a look at that one yet? It was introduced late last year. It's a Government document that has looked at some of Treasury's work that's been done recently.

SAUL DEANE: I think this overlapped when I was putting it out at the same time, so I think I might have had a cursory look just as it went out. But I haven't had an in-depth look.

The CHAIR: It has only just come out and, given the work that you've looked at, I'd be very interested if you have a view on where it's up to. But that's a matter for you.

The Hon. JACQUI MUNRO: Thank you for the submission and for coming today. I appreciated the list about incentives and cleaning up processes. In particular, I want to understand more about the public notifications that were removed during COVID for large DAs. How has that worked in practice and why do you think that should be reinstated?

SAUL DEANE: The problem was that it got removed out of local papers. Even though there are not a lot of people that read local papers, there are a few, so there's someone that reads the local paper and then starts to notify everyone else. When the only requirement was for it to be put up on the council website, there's a lot less people that just peruse the council website. Therefore, these big ones can get through and basically no-one knows about it. Then it becomes about, "Do you know someone in council that's going to let you know?", and all that sort of stuff. It just becomes more problematic. Anything that starts to take away transparency in the process is a problem.

It could even become a legal problem later. If there was no way or if the council website went down—sometimes these links on council websites go nowhere. We've had that. We had one with the Gilead DA that went to a *Sydney Morning Herald* article. There are a lot of notification issues. The great thing about having it in a local paper is it's time-stamped, in a way. You know when it went in; you know when it was up there. If it goes up on a council website, who knows? "Did it go up a week ago? I didn't notice it." There's no way of knowing when it did go up.

The Hon. JACQUI MUNRO: If you're lucky enough to live in a suburb that still has a local paper—

The Hon. SCOTT FARLOW: Very few and far between.

The Hon. JACQUI MUNRO: —yes, that's good. But I understand the intent. It's about finding some sort of shared truth in an information source or being able to encourage more transparency and better ways of thinking about notice, essentially?

SAUL DEANE: Yes. Maybe it has to go in a larger paper, *The Sydney Morning Herald* or *The Daily Telegraph* or something. There needs to be some almost objective—especially outside somewhere like council or

the department, where they're the ones that are mainly driving the process themselves. There is a conflict of interest.

The Hon. JACQUI MUNRO: Do you know if notices are ever shared on social media sites?

SAUL DEANE: Yes. Generally, if someone finds something, they will then go and let everyone else know. Especially if that issue is a local hot-fire issue, there are a lot of eyes looking over it.

The Hon. JACQUI MUNRO: But I'm thinking more in terms of advertising, like the department. You may not know, but I'm just wondering if there are additional public notice requirements that push out on digital media at all, if you are aware of that?

SAUL DEANE: No, as far as I know it just then came into council.

The Hon. JACQUI MUNRO: Finally on that, do you have any information that would essentially corroborate that there were fewer people putting in submissions when the newspaper advertising stopped? You may not, but just in case there is an evidence base.

SAUL DEANE: No, I don't know a statistic about that—though I'd be very interested, obviously.

The Hon. JACQUI MUNRO: I would be, too. Thank you. This is possibly more a curiosity: I was interested in where Kai'Mia Way walk got up to. In terms of how you successfully try to implement such an enormous plan, was there any uptake around any of the councils that the plan related to?

SAUL DEANE: The Georges River has been a really interesting one. I haven't been personally involved in the Kai'Mia Way and the uptake, though I was involved with a lot of people who were involved with that. The Georges River has been lucky, especially near the mouth, where it gets to Botany Bay, because it has really involved environmental groups from Sutherland shire, then down to Oatley and so on. They've been very much a part of pulling it together and then finding those spaces and the pieces of government land and working through that process.

Councils have come on board. There is the Georges Riverkeeper. That is basically a council amalgamation working together to look after the Georges River. That is one of those powers about looking at linear things in the landscape and giving them an identity or an entity that I think is really powerful. They would therefore be aware of the Kai'Mia Way and trying to make an action. We're hoping that's part of the process that will be piggybacked off with the Georges River koala national park coming into play. We're looking at a national park that will then run down, basically, the upper Georges River, so the idea that it therefore connects to the Kai'Mia Way. Then we've got, basically, most of the Georges River starting to have a track going through it. That becomes really important across Gilead and Menangle because that is the shortest direct link between the Georges River and the Nepean. Then we do the same process down the Nepean to the Hawkesbury. You won't have to go the Camino trail; you'll be able to do something like that at home.

The Hon. JACQUI MUNRO: I grew up on the Woronora River. It's nice to hear that it's progressing.

SAUL DEANE: The Woronora River is fantastic. In terms of the planning behind that, there was very much a setback. We were really interested in trying to drill back into how that was planned out. But during, I'd suggest, the early '80s, '70s, there were big setbacks across from the river, therefore you have these beautiful natural runs down to the Woronora River. That's exactly the sort of thing that needs to be in place along our major rivers, which are actually even more important, sorry, in terms of leading into Botany Bay and Broken Bay. They're taking massive amounts of water so it's really important that they have a bushland reserve, almost as a filtration system as well.

The CHAIR: On that point, in the submission you talk about the watershed green setbacks. You've also included the Strahler system of riparian first orders et cetera. Is 450 metres the minimum preferred for those watershed green setbacks?

SAUL DEANE: For us it is, because we know then it takes into account biodiversity and koalas; that's the koala requirements. In the Strahler one, it's related to the Water Management Act. No, it only goes up to 40 metres on both sides. It's quite thin.

The CHAIR: Yes, it's quite limited when you think of what the function is. That's why the 450 is to incorporate—and is it fair, perhaps, to say that if we are going to have an adaptation view of the function of these corridors, areas et cetera, that is probably best bang for buck—actually having those where they are, the 450 metres minimum?

SAUL DEANE: Yes, I think so. This is where it comes into conflict with other planning ideas at the moment. A lot of it is like, "Oh, there's a bit of bushland reserve there. We'll save that and we'll save this" and so

on. That's good as far as it goes, but what you end up with is confetti on the landscape. All of those little bits will eventually shrivel up and die because they're not connected to anything. Like everything, it needs a biodiversity connection so that plants and animals can connect and move in between them, just like we do. If we cut off all the roads to a town in the middle of nowhere, it wouldn't last forever. There would be a point where it would start to—and that's the same thing that happens, obviously, in ecological communities, especially with climate change.

With climate change, you've got to be thinking that we've got to be setting forth and making sure that we have everything connected and we have these green veins running through the landscape so that, as places get hotter or cooler or dryer or wetter, plant life and animal life have a means of moving through the landscape to a place that's more accommodating for their needs than what it used to be. Connectivity is the name of the game now. It was as we got larger, in terms of our footprint, but certainly now that we're moving into a different climate world.

The CHAIR: We are running out of time. Do you have anything, Mr Farlow?

The Hon. SCOTT FARLOW: I've just got one. Mr Deane, you talked about your support for the Transport Oriented Development Program. I'm just wondering if you're familiar with the assessment that's been done by Land Eco Consulting for Ku-ring-gai Council with respect to the deep-soil planting requirements? Ku-ring-gai at the moment, which is about 25 per cent of the sites under the program within the Greater Sydney region, has a requirement of 50 per cent deep soil. Under the changes it would move to the apartment design guidelines, which is 7 per cent. Is that something that would be of concern to your organisation?

SAUL DEANE: Yes, it would. We would be looking at this is as, I guess, a minimum—and at the moment they are just guidelines—and then, on top of that, obviously, a nuanced approach, depending on that area, that you actually have to walk back some of these areas. I guess I'm a little bit concerned with the way it's framed. "Transport-oriented development" is really good if you're talking about trains, if the train stops there. It gets confused, I think, in this document because it's also about commercial centres. As soon as you put in commercial centres—frankly, commercial centres should be—

The Hon. SCOTT FARLOW: That's the low- and mid-rise changes, yes.

SAUL DEANE: Yes. They should be oriented around, obviously, transport too. You don't want to have all these commercial centres out in the middle of—that defeats the whole idea of transport-oriented developments. By having those areas, they can almost be anywhere—random. All of a sudden you have these big new influences in places that are probably going to be quite problematic. We certainly see lots of problems with that in south-western Sydney. Ku-ring-gai would be another area where that would just become a major issue.

The CHAIR: A final point from me is your submission is quite critical of some of the conflicts of interest.

The Hon. ANTHONY D'ADAM: He goes further. He says the department has been captured.

The CHAIR: Yes, we've got bureaucrat capture of planning. I think you make quite a good case about people, individuals and positions where you've gone from planning straight to some of these big developer corporations that are then implementing the plans. Is there something you would say about that in terms of what we need to do and what we should be doing, going forward? If we are looking at improving the planning system so that it is climate resilient and focused, and biodiversity resilient and focused, is there something you would say about that in terms of governance?

SAUL DEANE: Yes. It's a huge issue. It's one of those ones that's a little bit unsexy but super important. The best people to talk to that and how to solve that issue would be ICAC and their policies, implementations and so on, about trying to isolate so that the self-interest of the individual doesn't crash into a policy or proper policy development. Certainly we've seen that's been a huge issue in south-west Sydney because south-west Sydney would never be developed if it hadn't been for these conflicts of interest. I think that's self-evident.

On paper, it's a ridiculous place to do planning because you're going into deep heritage areas. You're affecting the water supply, the Upper Georges River and the Nepean River. You're also affecting our food bowl and those sorts of issues around that area. There's no transport and no train line. So they're having to refit all this, and we're paying for all this to make that work. The only reason that is being done is because there were large original land grants and that's attractive for a larger developer. There's no planning involved in that decision. How do you implement that? It has to be done personally because it's a personal relationship thing. We had this review when Michael Cassel then moved over to Walker. The department then reviewed his decisions. It's hard for them to self-review and to then say, "Well, obviously, he's okay. It's fine."

The CHAIR: Is this where your point about merits reviews also comes in? You've reminded me that in 2012 ICAC recommended that, for the New South Wales planning system, we should have merits appeal rights for communities in relation to large subdivisions.

SAUL DEANE: If there's something that is very evidently, prima facie, a conflict of interest, there should be a review of that decision. We should go back to the courts, review it and say, "Well, obviously it looks like it's a conflict of interest, so let's review that decision." Then you would find that you would get very little movement between the larger developers and the department of planning.

The CHAIR: We're out of time. Is there any last thing you'd like to say?

SAUL DEANE: No, just thank you for inviting me and for listening.

The CHAIR: Thank you very much for making the time. The secretariat will be in contact with you in relation to any questions taken on notice.

(The witness withdrew.)

Ms BEV SMILES, Member of Mudgee Coal Alert and Secretary of Wollar Progress Association, before the Committee via videoconference, affirmed and examined

Ms SALLY HUNTER, Representative of Lock the Gate Alliance and People for the Plains, before the Committee via videoconference, affirmed and examined

Mr NIC CLYDE, NSW Coordinator, Lock the Gate Alliance, before the Committee via videoconference, affirmed and examined

The CHAIR: Thank you to all of you on Webex for making time to give evidence. Would any of you like to start by making an opening statement?

NIC CLYDE: I have an opening statement but I will defer to Bev and Sally to go first.

BEV SMILES: I will go first then. Thank you for the opportunity to give evidence in this very important inquiry. I am meeting you from Wiradjuri land and pay my respects to Elders past, present and emerging. My community of Wollar has been simultaneously impacted by climate change and the poor planning process for the coalmining industry. There are three very large coalmines in this region that were the three largest producers of coal in New South Wales in 2023. These are the Glencore Ulan Mine, the Yancoal Moolarben mine and the Peabody Wilpinjong mine that, combined, cover close to 300 square kilometres. Between them they have approval to produce 58 million tonnes of coal up to 2038 and all three are in the process of expanding.

If these three mines and proposed extension projects proceed at the current rate of approved production, they will be responsible for approximately 1.7 billion tonnes of carbon pollution between 2024 to 2038. This is around three times Australia's emissions from all sources. These mines themselves are already threatened by increasing extreme weather events with flooding and bushfires causing mine closure. More intense storm events also impact on production. They are likely to become stranded assets. In October 2023 a bushfire threatened the Orica explosives facility next to the large Yancoal Moolarben mine. Flooding in 2022 caused the open cut mines to fill with water. The solution was to turn off their environmental protection licences and allow untreated mine water to be dumped into the Goulburn River for several months. This exacerbated downstream flooding and polluted the river.

In December 2023 there was a coal train derailment in the district caused by extreme heat buckling of the rail line. The derailment caused a bushfire that spread into the Wollemi National Park. These increasing bushfire events associated with the coal industry are putting additional pressure on the local Rural Fire Service volunteers. Climate change is increasing the threat from and to the coal industry. The Wollar community has been hollowed out by poor planning decisions to enable the adjacent Peabody Wilpinjong mine to continue expanding. Under the Barilaro coal strategy, Peabody was awarded a new large exploration licence over 1,668 hectares of agricultural land within 500 metres of Wollar village. This mine already has caused significant social impacts. The school, two churches and general store have closed down. The American company, Peabody, is now the largest property owner in the district and is demolishing houses in the midst of a major housing crisis. We have no confidence that the department of planning has sufficient staff with social science expertise to adequately assess the social impacts of the coalmining industry and increasing threat from climate change. Thank you.

The CHAIR: Thank you, Ms Miles. Did you want to say something, Ms Hunter?

SALLY HUNTER: Yes, please. I have some opening remarks, thank you. I live 50 kilometres out of Narrabri on Gomerioi country in north-west New South Wales. Within a half-hour drive of my family's farm are five operating coalmines and an approved, but not built, coal seam gas field. These are all products of the New South Wales planning approvals process. I cannot give you an example of a fossil fuel project or modification in my region that has been assessed and not approved by the department of planning. We also have a new exploration coalfield called Gorman North, which is still to be developed, and it is a greenfield coal development area—thanks to John Barilaro's strategic statement on coal. This outdated piece of paper continues to be used as the justification for approving climate impacting projects, even after the establishment of the net zero future Act at the end of last year.

We saw Boggabri coalmine get approval for Modification 8 just a few weeks ago which will pull out new coal and release new emissions. If there was a time that the new Act should be put into play, it was during this assessment. But no, once again, the strategic statement on coal was used as the justification, ignoring the climate impacts of this expansion. I am a farmer, married to a farmer. We are feeling the impacts of climate change on our business and on our personal lives. Today I will briefly share a stark example of the planning system failure and the impacts of climate change on my family. Having not inherited farmland from our families, our operations must have a cash basis. This means we are more susceptible to the impacts of climate and have less of a buffer.

The three years culminating in the 2019 drought were very dry for us. We received 78 per cent of our average rainfall in 2017, 53 per cent the next year and then a punishing 32 per cent the following year. In 2019 we had 10 months where the highest rainfall in any one month was a mere 26 millimetres. For four of those months we had completely zero rainfall. There were dust storms daily. The river and creeks were completely dry. Our groundwater bores were faltering and failing. Our animals were perishing. The long slow grind of months and months without rain watching everything turn to dust leaves a mark on your soul.

During that time we sold down all of our cattle. Our neighbours stopped planting crops, had nothing to harvest and just hunkered down. For us, we still needed an income, so we rented out our house, closed all the gates and moved our dogs, horses and children to Queensland for work. I felt like a climate refugee, and it gave me an inkling of what we will need to deal with in the future. During this time when agricultural production was wound down, in our case to completely zero, coalmining in our region continued unhampered. All the coalmines in our region are approved by the New South Wales planning system with a cut and paste condition that reads:

The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations [onsite] to match its available water supply ...

This is supposed to be the condition that protects our community in dry times. In reality, what we saw during the drought was anything but an adjustment of scale to suit water supply. We saw five deliberate alternative strategies: The proponent purchased two irrigation properties that were never meant to be part of the footprint of the mine, only purchased for their bores and water licences; more agricultural land sterilised by mining, to join the other 80-odd farms that have already been bought out. We saw the proponent trucking water along our bus routes. Then I watched as they dug up the side of the road and laid pipelines. I wrote to the planning department to ask if this was approved and was told it was. But it was not. Some months later the department fined the proponent \$15,000 for these illegal pipelines.

We also saw the proponent outbid farmers to purchase new water licences, paying up to eight times the market price. Unbeknown to me at the time, the proponent was also illegally harvesting billions of litres of water that they had no licence for, and they were eventually convicted and fined for. We repeatedly see that the independent expert Scientific Committee on water, DPI-Water and independent consultants provide a plethora of evidence and advice to the assessment processes for these projects and modifications that point out repeatedly that the modelling does not account for climate change; the modelling is not fit for purpose; that worst case scenarios are not mapped; that insufficient water licences are held; that farm bores will go dry; that increasing natural disasters are not considered—and yet, repeatedly this advice is ignored and these projects are approved time and again.

In 2020 the drought broke for us. In fact, in February and March we had triple our average monthly rainfall and flooding. We returned home and resumed our farming enterprise, but our experience meant we did things differently and have integrated climate adaptation strategies into our business that we hope will make us more resilient in the future. On the back of this experience, within weeks of getting home, I participated in extensive, time-consuming, stressful New South Wales planning processes for the assessment of the Vickery coalmine, the Narrabri Underground Mine Stage 3 expansion and the Narrabri Gas Project—three new projects within a stone's throw of my home. Again, relentlessly we presented evidence and arguments to the planning process, just to see all three approved, advice ignored, water impacted, lives impacted, emissions skyrocketing.

Currently, our local government area is responsible for 1.9 million tonnes of greenhouse gas emissions each year, and 52 per cent of that is coming from fugitive emissions and stationary energy—both commonly attributed to mining. These three new massive fossil fuel projects that are now approved will add a further 3.1 million tonnes per annum. This will take our shire to a massive five million tonnes per annum of greenhouse gases. In the time that we have come to realise the seriousness and urgency of the climate crises, the planning system has more than doubled our emissions. We cannot afford to do this any longer. We need to stop approving new coal and gas mines, stop new exploration areas and stop waving through expansions dressed up as modifications willy-nilly. Now is the time to act. Thank you.

The CHAIR: Thank you very much. Mr Clyde?

NIC CLYDE: Thank you, Chair, yes. I'd like to make a brief statement as well. I have worked for Lock the Gate for about seven or eight years now and I've got about a decade of experience in war with the New South Wales planning system and its failure to respond in a timely and meaningful way to climate change. Our members live in regions that are affected both by coalmining and gas extraction, as Sally and Bev have mentioned, and by the consequences of climate change. The planning system is failing these communities and the New South Wales public more broadly and we urgently need this inquiry, this Parliament and the Government to intervene. Immediate broad and deep changes to the planning system must be made to protect the people and the natural and built environment of New South Wales from catastrophic harm.

Since we made our submission to this inquiry, the Parliament has passed the net zero future Act. We think this is a hugely important law establishing a framework of goals and principles to guide New South Wales' action on climate change. I want to highlight section 3 (2) (b) of the Act:

The Parliament of New South Wales, in enacting this Act, recognises ... action is urgently required to reduce greenhouse gas emissions and to address the adverse impacts of climate change.

This is because New South Wales is currently on a path to reap both the worst costs of climate change and the worst costs of disorderly and delayed transition from fossil fuels. The Hon. Jihad Dib in his second reading speech described the bill as "a strong call to action across government to ensure we are all doing our part to achieve our goals". But this call to action is not being heard across government and certainly not in the planning system. The planning system is instrumental to whole-of-government mobilisation behind the objectives and principles of the net zero future Act. It's the planning system which grants consent to activities that create greenhouse gas emissions and which grants consent to developments that expose people and infrastructure to worsening extreme weather. It's the same planning system that removes crucial corridors of habitat that may be the difference between persistence and extinction for New South Wales species.

As Sally mentioned, a month after that Act came into force, the Boggabri coal expansion was approved. That happened, leaning heavily on the 2020 John Barilaro strategic statement on coal. Right now there are about 16 coal expansion projects in the planning system, including the Hunter Valley Operations Continuation Project, which we believe is the largest single coalmining project ever considered under the Environmental Planning and Assessment Act. So for us, it's baffling, it's frustrating, that the department of planning has missed the memo on averting and adapting to climate change being the highest Government priority. We think intervention is urgently needed to ensure the department is exercising its statutory responsibilities in keeping with the very clear call to action laid out in the net zero future Act. There is no time to spend all year writing regulations and guidelines. We need that strategic statement on coal scrapped now and a directive issued to the department to make the net zero future Act and its objects and principles their highest priority.

The final thing that I want to say is that when the Minns Labor Government came to power, there were about eight coal expansions in the planning system. By leaving Barilaro's coal policy in place, that has encouraged miners to come forth with new projects. That number has doubled; there are now 16. So not only is it a massive problem, it is encouraging and facilitating other companies to come forward with new proposals, years after the IEA said we could not afford a single new project if we are to stay within a safe climate and achieve 1.5 degrees. Thank you very much.

The CHAIR: Thank you. You have placed quite a bit of emphasis on the strategic statement on coal. Can you point to somewhere that would suggest that the department relies on that policy document? Perhaps that's to you, Mr Clyde.

NIC CLYDE: I would be very happy to do that. We have participated in the assessment and determination processes for basically all of the major coal expansion projects for I'm not sure how long—a decade or so now. I've been tracking those very, very closely. The most recent example was with the Boggabri modification. That's the very first decision the Minns Labor Government has made on a coal expansion. The mine expansion was determined after the net zero future Act was legislated. We wrote to the department. We had a very clear to-and-fro, debating the weight that should be given to either the new climate law or the strategic statement on coal.

In the end, the departmental deputy secretary, in consultation with Minister Scully, approved that expansion and quite explicitly and clearly set out in their statement of reasons that, yes, Boggabri would increase emissions, despite the Parliament last year calling for an urgent reduction in emissions, and that they had fulsomely considered climate [audio malfunction] but nevertheless considered that the strategic intent of John Barilaro's coal policy to encourage further expansions outweighed any deliberation to refuse that mine in order to lower greenhouse gas emissions in New South Wales. So we expect the same pattern, unfortunately, to rinse and repeat for the 16 projects in the planning system right now. We are talking gigatonnes of additional greenhouse emissions.

The CHAIR: Mr Clyde, could I ask you to turn your video off but leave your audio on. We're getting you but there is occasionally a lag and a glitch, and for Hansard purposes we'll get a more secure connection if you turn your camera off. But please keep your audio on. Can I ask you to please take on notice to provide to the Committee—unless it is in your submission and I have missed it—that departmental analysis that you've referred to in relation to the Boggabri expansion? Is that something you could provide on notice to the Committee?

NIC CLYDE: Sorry, Chair, are you directing that question to Bev Smiles?

The CHAIR: No, that was to you, Mr Clyde.

NIC CLYDE: Sorry. Yes, I can absolutely do that.

The CHAIR: Thank you very much.

BEV SMILES: Could I also respond a little bit to that question, if you don't mind, Chair?

The CHAIR: Certainly.

BEV SMILES: I'm relatively confident that in the expansion proposals in the Mudgee area, at the Moolarben and Ulan mines and also a scoping report for the expansion to the Wilpinjong mine, there are references to that coal strategy as being the reason for these expansions being in the pipeline.

The CHAIR: Ms Smiles, could you take on notice to provide those documents for those assessments to the Committee?

BEV SMILES: Most certainly.

The CHAIR: Thank you. Given the experience over a long period of time, in terms of the planning system, we've heard very clearly your view that the strategic statement on coal is impacting decisions that might otherwise result in different outcomes. I think you also talked about data, particularly in relation to water—I think this was you, Ms Hunter, and perhaps it was in your submissions—about looking at historic rainfall rather than predictions and modelling. Is that another experience? How else can the planning system look to making better decisions around climate impacts and resilience and adaptation?

SALLY HUNTER: Certainly, having the Independent Expert Scientific Committee on water involved in the assessment processes has been an advantage, and they're the ones that I have noticed have been raising the need for climate impacts to be included in water modelling. That, generally, hasn't been picked up in the actual conditions of consent. As I say, the conditions of consent do actually include some conservative measures on water, but, yes, not to the extent that I think the IESC was recommending. I can provide specific examples in writing, if that's useful?

The CHAIR: Thank you. It would be very helpful. And in terms of your experience in communities, particularly the regional communities, is there an understanding about how your views can be better received by the department or by the various decision-makers?

We've been hearing from other witnesses in this inquiry about what is referred to as the principle of subsidiarity, which is referring to the distribution rather than the centralisation of power, and there is this notion about empowering local communities to get better outcomes. Is there anything that you can speak to about that experience and the local knowledge that neighbours and communities hold and how that is transferred and received by decision-makers?

BEV SMILES: Could I start with that one, if you don't mind? The whole business of the social impact assessment that I referred to in my opening statement is that's where people are supposed to have the opportunity to highlight what the impacts are on them and their community across a range of measures, and the outcome of that process is a social impact management plan that is generally less than useful and then the actual regulation under that plan. The problem with the planning process for big mining projects is that most of the conditions push assessment and consideration into management plans that then aren't documents that have any sort of regulatory power from a legal perspective. The whole system is set up to push issues into the stage after the approval, and the communities feel very disempowered by that.

SALLY HUNTER: Could I add to that as well? I think the other frustration that we've seen—there is good participation by community members in these processes. That's been my experience. I've helped people write their submissions, and they were very keen to have their say because that is the small piece of empowerment that we actually have in this process—the only piece, I would dare to say. What that also means is that if a project receives more than 50 objections, I think it is, or there's some other criteria, then it can be sent to a public hearing in that assessment phase. If that project is sent to a public hearing, it removes the merits appeal rights that a community might have, post-decision, to question the elements of the decision that was made. So that step that was introduced just a few years ago—was it Barilaro, as well? That really created more disempowerment in the community. We have tried to test this theory, because it was supposed to help communities that had lots of opposition to send it to a public hearing, but what we find is that just going to that public hearing is quite stressful, and it actually removes our rights in the end anyway.

BEV SMILES: The Minister for planning actually has a power to make a decision to send the project to the Independent Planning Commission and run a meeting which then maintains the merits appeal rights—if it's a meeting, which is different to a hearing. But what we see time and time again is that the planning Minister's decision is to call a hearing and remove our merits appeal rights.

NIC CLYDE: I just wanted to make an additional point about regional communities having their say. One important thing to point out, particularly with coalmine expansions and extensions, is that half of all of those 16 projects that are in the system right now are being dealt with as modifications, and that means there is no opportunity for that project to go to the Independent Planning Commission with all of the process that entails and the transparency. So on half of those projects communities never get a chance to see the final assessment report from the department of planning. There is no formal opportunity for anyone to comment on the draft recommendation, which is almost always to approve projects, before it goes to a decision. It's basically the department of planning producing a report to advise itself what decision it should make, with zero public accountability and transparency between the moment that final assessment report is produced and the actual decision.

There's no reason at all why all of those projects should not go to the Independent Planning Commission and, indeed, it was a promise, both pre- and post-election, from the New South Wales Labor Government that all new coal projects must be subject to an independent approval process. But that is a broken election promise. Boggabri was not subject to an independent process; it was determined in house, and another seven-odd projects will go the same way. That is an immediate problem with community participation in the process. Ensuring that controversial decisions to continue expanding an industry, in a climate crisis, that's a key cause of the problem that we're facing is obviously an issue of great community concern. It is very disturbing to Lock the Gate Alliance that half of those projects will never even be referred to the Independent Planning Commission.

The CHAIR: Ms Smiles, when you talked about what you had seen in your local environment, you referred to 300 square kilometres of mines across that Mudgee district and you mentioned stranded assets. Could you describe what was happening during that period? I was very concerned that you said that ultimately this water was being released into the Goulburn River because the mine could not comply with its environmental protection licence. Was that something that the department or the EPA just allowed? Why did that happen? I'm just wondering in the context of how we prevent that from happening.

BEV SMILES: Well, it's actually the second time it has occurred in our region with flooding events—that it's an EPA decision to turn off the protection licences. The three mines are intercepting so much water out of the landscape now, including base flows to the river, that the three of them now have reverse osmosis plants where they're supposed to treat the water, and the three of them now have discharge licences. The water impacts on our landscape and on the Goulburn River are highly significant. Back to some of the mention that Sally made around modelling issues, there have been quite significant concerns around the modelling processes for those three mines, including the fact that they do not have enough on-mine storage to hold these extreme weather events, and their open-cut mines just fill up with water. We've had that happen twice now, where the EPA has just turned off those licences. The water doesn't have to go through their reverse osmosis plants and that raw, filthy mine water just gets released into tributaries and to the Goulburn River for up to six months.

The CHAIR: Are you aware if any of that knowledge is being fed into the State Disaster Mitigation Plan that the Reconstruction Authority has just developed? I will have a look, but are you aware whether that is knowledge that is fed up into the system that the Reconstruction Authority is dealing with at the moment?

BEV SMILES: No, I'm not aware of that. I'm not aware much of the whole process, to be quite honest.

The CHAIR: It seems like a very large issue for the region, and I don't think it sounds like it's a well-known issue that that's a practice. The assumption has to be that it will happen more frequently, and in more extreme ways, because that's what the science is telling us. I think it was you, Mr Clyde, who talked about the Climate Change (Net Zero Future) Act. I know that evidence was given at the inquiry into that bill and you referred to that. From what you've experienced in Boggabri, are you seeing that there isn't an adequate connection between that legislation and the planning decisions being made? How would that be rectified? We heard evidence that possibly a SEPP—another State environmental planning policy—would override the strategy. Do you have a view on that?

NIC CLYDE: Yes. Firstly, it's very clear from reading the IPC's decisions and the department of planning decisions about coalmine expansions that the role of the strategic statement on coal is very clear in those decisions. We, in fact, have had meetings with the Independent Planning Commission and have discussed State Government policy with them, and their decisions on these projects. It's very clear that John Barilaro's policy continues to drive approvals of new projects.

In terms of what a remedy would look like, the Government should simply just scrap that statement today. It didn't exist prior to June 2020, and there were still major projects that were being assessed and determined without that policy. The fact is that there's a policy car crash occurring at the moment between the strategic statement on coal and the net zero future Act. One is an Act of Parliament supported by all parties at the end of last year; the other is the deputy leader of the former Government and the head of the National Party introducing

a policy by decree with zero public consultation four years ago. Unfortunately, that is still having an impact, that policy, so it should simply be scrapped.

What we are seeing is that the decision-maker is now trying to grapple with—"okay, on the one hand, I'm being told by the Parliament that it's urgent that we should reduce emissions in line with the Paris agreement. However, on the other hand, here's a clear policy statement that this current Government said last week remains in place, and it's important that it remains in place to provide stability to the coal industry. That policy says not just that we want to encourage existing mines to continue to expand but that we want to continue exploring for brand-new coal deposits." When they're looking at those two, at the moment, in the absence of a clear statement from the Government—a clear statement of intent on climate—there's some timidity, I would say, within Government ranks and in the planning commission. Almost uniformly, the decision is to continue to approve projects that will increase emissions in New South Wales and deliver all of the damage that Sally and Bev are talking about in terms of dust, noise, water impacts et cetera.

The CHAIR: Just finally on that point, in terms of your knowledge of these projects and approvals, and the ones in the pipeline, are we suggesting that we will just mine that amount of coal until 2050 or 2045? Do you have some view on the time that these mines are working towards?

NIC CLYDE: The conditions of consent for the 35- or 40-odd mines operating in New South Wales at the moment enable them to continue operating anywhere from up until June of this year right out till mid-century. But there is no policy statement in that strategic statement on coal about any sunset on new and additional mining. It's a forever policy at the moment. Glencore and Yancoal have come forward with this massive HVO proposal that wants to mine a gigantic amount of coal all the way out to mid-century, but they're egging on companies to explore for brand-new coal deposits and bring forward new projects into the planning system for assessment and determination. Really, that could go on until—who knows? It's obviously completely incompatible with meeting the objectives of the newly legislated net zero future Act.

The CHAIR: Finally, because it's considered that coal is one of the hard-to-abate industries, do you think that the intention is that it would somehow find its way to continue through the use of offsets? Is that something that you've considered?

NIC CLYDE: Sally Hunter mentioned the assessment for the Narrabri underground stage three project. In that assessment, the New South Wales department of planning acknowledged that there is no policy around offsets and how offsets should be treated in conditions of consent and in the conditioning of coalmines. Should there be offsets in New South Wales, in Australia, overseas? Can they offset the entire project? Do these offsets exist? How many offsets for how many tonnes of direct emissions should those companies be required to purchase? None of that framework exists, and what we see is a system that just says, as Bev said, "Let's approve all of these projects, and let's provide this weak and ineffective management plan conditioning that doesn't deliver results."

With the Narrabri underground stage three, the company, Whitehaven, said, "Look, we can abate less than 1 per cent of our very substantial scope one emissions. The department of planning agreed; the IPC agreed with that statement also. So most people in the community think, "Well, obviously they're going to refuse consent, then, if there's no hope of mitigating these gigantic emissions." The opposite happened: It was approve, but make them develop some sort of study further down the track to see if there's another ½ per cent or one per cent of emissions that could be abated. Perhaps there's an offset requirement. None of that architecture exists and projects are being approved anyway.

The CHAIR: I note the time and apologise that we are at the end. Are there any final things that you would like to say?

BEV SMILES: I'd just like to reinforce what I was saying: These extreme weather events are actually impacting the mining industry itself. While the argument for continuing it is for job security, I can't see that happening into the future if we're not doing anything to mitigate the climate change impacts. That is not being taken into account by the department of planning.

NIC CLYDE: If I could make a quick statement to you guys, as a parliamentary Committee and as MPs in the New South Wales Parliament. We were advised last year in the net zero future Act inquiry that New South Wales is in the top 5 per cent of States globally most at risk from the impacts of climate change. The cost of those is already skyrocketing in this State and we all know about that. That expert submission said we have some of the most to gain from rapid action to reduce emissions and some of the most to lose if we fail in that task. We're just not seeing any urgency in the current Government. It's my sincere hope that you guys, as a parliamentary Committee writing your report about these issues and the interaction of the planning system with these issues, will make some strong findings and recommendations to the Government.

The CHAIR: Thank you. No pressure felt here! Thank you all very much for your time and your evidence today. It's very much appreciated. The secretariat will be in contact with you in relation to questions taken on notice.

(The witnesses withdrew.)

Mr MATHEW JONES, General Manager, Public Affairs, Insurance Council of Australia, affirmed and examined

Ms ALIX PEARCE, Senior Manager, Climate and Social Policy, Insurance Council of Australia, affirmed and examined

Mr GEORGE KARAGIANNAKIS, Executive Manager, Government and Industry Affairs, Insurance Australia Group, affirmed and examined

Mr ANDREW DYER, Manager, Land Planning Hazards, Insurance Australia Group, affirmed and examined

The CHAIR: Thank you to all of you for attending today. Would anyone like to make an opening statement?

ALIX PEARCE: Yes, I would. Thank you for the opportunity to appear before the Committee today. My name is Alix Pearce. I manage climate and social policy with the ICA, and I'm joined by my colleague Mathew Jones, who is the general manager for public affairs. I also acknowledge Andrew and George from IAG, who are here today. The Insurance Council is the national body for the general insurance industry in Australia. We represent about 90 per cent of private sector general insurers. Our sector protects 41 million homes, buildings and vehicles against the physical and financial impacts of extreme weather events.

Climate change is driving an increase in both the frequency and intensity of extreme weather events around Australia, including here in New South Wales. Insurers are very much on the front line when it comes to responding to those impacts. Global reinsurer Swiss Re has found that Australia currently ranks eighth in the world in terms of property insurance risks from floods, storms and cyclones. I think what's important to note here is we're ranked eighth not only because of the intensification of extreme weather events, but also because of our economic growth, urbanisation and also the accumulation of our asset values. There are a number of factors at play.

In 2022 our State suffered \$3.3 billion in insured losses, from more than 150,000 claims relating to extreme weather events. The majority of these were from floods in early 2022, and they cost about \$2.87 billion in insured damages across the State. The national flood information database reveals that a considerable number of properties in New South Wales are exposed to flood risk. Of the 15 million properties in that database, approximately 230,000 of them have a one-in-20-year flood risk, which is a high flood risk, and more than half of those properties—that's 123,000—are in New South Wales.

It's really clear that the impact of historical land use planning decisions and also urbanisation is having significant consequences today. Areas that should not have been developed in or should have been developed with appropriate risk mitigation infrastructure in place are generally the areas that are most affected by extreme weather events. That's leading to increased harm. It's leading to increased losses, and it's putting upward pressure on insurance premiums. As this gets worse, as climate change cranks up the intensity and severity of those extreme weather events, we anticipate that disaster costs are also going to continue to climb. That's also going to have flow-on effects for insurance premiums, particularly in vulnerable parts of our State.

Effectively, what we're calling for is to both drive down emissions but also to couple that with changes to what we build and where we build, to reduce the growing risk. You've obviously got our submission, so I won't go into too much detail. Just to underscore the five key areas, the first is that we need to reform land use planning to minimise development in those high-risk areas. The second is to see resilience embedded into our National Construction Code. The third is ongoing investment into resilience infrastructure. The fourth is improving building competence and compliance, and the fifth is to improve the dataset that we use to make these decisions. I also just want to flag that, since the publication of our submission, we've also called for all governments to establish permanent programs for buybacks and home raising to move people out of harm's way before disasters occur. This will reduce recovery costs for government but also for affected communities.

I just want to conclude by saying that we really welcome two key reforms announced by the New South Wales Government, which we've been actively advocating for. The first is the Government's decision not to proceed with proposed residential development in areas of Western Sydney. If allowed, that would have put communities in the Hawkesbury-Nepean basin directly in the line of high flood risk. The second is the Government's decision to improve insurance affordability and availability by abolishing the emergency services levy. We also just want to recognise that New South Wales is playing a leadership role in developing some key principles to think about land use planning, building codes and extreme weather risk. Those, alongside the recently released State disaster mitigation plan, are important steps. Thanks very much. I'm looking forward to taking your questions.

ANDREW DYER: I will just make a brief opening statement, if you don't mind. Thank you for inviting IAG to today's hearing. I'm joined by my colleague George Karagiannakis. My name is Andrew Dyer. Through our brands NRMA Insurance and CGU, IAG insures around one in four Australian homes and almost a million businesses. Our WFI Insurance brand is also Australia's largest rural insurer. Every day we see the profound and enduring impacts of severe weather on our communities. As we work to restore our customers' property, following floods or fires, we also see the strain that these events place on communities—the economic, the mental health burden, the impacts that can't be fixed as easily as property, cars et cetera, unfortunately.

Our dedicated natural perils research team specialise in measuring the natural hazard risk to property to ensure we collect sufficient premium to cover our expected claims costs, both now and in the future. I oversee our modelling for flood risk, for bushfire risk and for coastal hazards, where we see the consequences of past failures of our planning system playing out through the high insurance costs, particularly in our flood plains at the bushland-urban interface and along the coastline. The risk in these areas will, unfortunately, continue to be exacerbated through ongoing climate change. But it doesn't have to be this way. These risks are entirely dependent on where and how we build, as governed by our planning system, and also by how we shape our existing communities in the future.

Over the past two years, at IAG we've leveraged our expertise in risk measurement to publish a series of three reports, as outlined in our submission. The policy recommendations focus on targeted risk mitigation, facilitating planned relocation in extreme-risk areas and through our planning system, and also sensible reforms to integrate disaster risk considerations into our planning system. We welcome the recent release of the State disaster mitigation plan as a sensible first step in addressing the risk to existing communities and look forward to seeing the Committee's recommendations to ensure that our planning system no longer puts new communities in harm's way.

The Hon. JACQUI MUNRO: Thanks all for your submissions and for coming today. I am curious whether, perhaps, Ms Pearce, you've had a chance to look at the ESL levy amendment that the Treasurer brought to the upper House this week.

ALIX PEARCE: I might refer this one to you, Mathew.

MATHEW JONES: Yes, I will take it. We understand the thrust of the bill that was introduced yesterday.

The Hon. JACQUI MUNRO: Are you comfortable with the requests that were made—essentially, that data can be requested and then go into planning for whether the ESL will be changed over the coming years?

MATHEW JONES: Yes, we are broadly comfortable with the approach that the Treasurer has taken, and we've had some engagement with his office on this matter. The CEO of the Insurance Council, Andrew Hall, is on the reference group—the working group that the Treasurer has established to talk through options.

The Hon. JACQUI MUNRO: Is that also the case for either Mr Karagiannakis or Mr Dyer?

GEORGE KARAGIANNAKIS: Yes, we similarly support the Government's initiative. Data is a critical part, of course, of making sure that there's accurate modelling that takes place to understand both the costs and benefits across all New South Wales households that would be impacted by the change.

The Hon. JACQUI MUNRO: Are you also comfortable with the time line that has been set out at this point?

GEORGE KARAGIANNAKIS: The extraction of data is always a difficult process, particularly when we've got competing demands at the Federal level. As an example, we've got APRA requiring data, we've got ASIC and we've got Treasury. We've got various areas within the Federal Government, so this has got to fit in with the demands that are already in train. We will certainly do our utmost to meet the requirements of the New South Wales Government.

The Hon. JACQUI MUNRO: I wanted to ask about the recommendation regarding catchments as a way to plan. I asked this question, possibly inelegantly, earlier to one of the other witnesses. Why is it that that water catchment area is a better space than, for example, koala environments or some social measure of grouping a particular area together? What makes the water catchment the key area?

ALIX PEARCE: We highlighted that in our submission, which looked specifically at flood risk. As you heard from the stats we mentioned earlier, it's because it's such a significant risk in New South Wales. What we've found is that, effectively, flood risk does not follow local government boundaries. It would be nice if it did, but it doesn't. As a result of that, if you're making decisions within LGA catchments both around risk and around resilience investment, that can have unexpected knock-on effects for your other councils. If you're building a levee

in one local government, or a flood wall or something, that can have run-on effects for the neighbouring LGA. For flood risk, we think that following the flood catchment approach makes a lot more sense in terms of thinking about assessing that risk but also guiding how you make decisions around risk mitigation infrastructure.

The Hon. JACQUI MUNRO: So it's essentially because flood risk is considered the most important or most serious risk that you would consider in insurance?

ALIX PEARCE: Yes. My colleagues may have more detailed thoughts on this, but it's also important to think about land-use planning in each extreme weather event—or "perils", as we call them in insurance—differently and uniquely, because the way they behave and the way the risks are managed and mitigated is different. For flood, a catchment base definitely makes sense. But you may want to think through different approaches depending on the kinds of perils you're trying to tackle.

The Hon. JACQUI MUNRO: Are you seeing changes in the way something like heat stress and heat islands are being considered by either members or your customers?

ALIX PEARCE: I'm happy to touch on heat initially. Heat is a bit of a second-order peril in terms of the ones that general insurance looks at specifically. The extreme weather events that drive the highest claims costs for general insurance are things like bushfires, floods, actions of the sea—which is coastal erosion, recession and inundation—and cyclones. Heat is not one that we declare a catastrophe or that we think about as directly. We know that other sectors—for example, life insurance—think about heat a lot more. It's really important to think about when you're thinking about resilient solutions, to consider things like energy efficiency as part of that risk reduction layer. We know that heat drives the highest deaths. It claims the most lives in Australia out of all extreme weather events, so it is certainly important to take a holistic approach. But I would say that the big ones for general insurance are generally those other extreme weather events.

The Hon. JACQUI MUNRO: I presume you've got a similar answer.

ANDREW DYER: Yes. We don't, unfortunately, insure heat stress, so it's probably outside of our area of expertise.

The Hon. JACQUI MUNRO: And then I asked about the balance of near- and far-term projections in terms of risk and the difference between how you're thinking about 20 years from now and 100 years from now and how to regulate for that, effectively, even in terms of something like the ESL legislation.

ALIX PEARCE: I'm not quite sure exactly what the question is.

The Hon. JACQUI MUNRO: Are your members thinking about costings for the future in terms of relative risk in a shorter and near-term balance?

ALIX PEARCE: Yes. I think you need to think about the solutions that can mitigate risk immediately and can have a near-term effect on risk reduction, as well as those longer term solutions. An example of this would be the policy levers that we advocate for that we think will alleviate risk more rapidly. They're things like the buybacks and the retrofits and home-raising solutions. In the submission, we talked about longer term solutions. For example, we don't want to continue baking in this level of risk to the system. How do we do that? We need to think about reforming land-use planning so that we don't continue to build in high-risk areas of the flood plain, but we also need to think about reforms to our National Construction Code.

The Insurance Council has done some analysis with the Centre for International Economics to say, "If we bake resilience into our National Construction Code, what will be the bang for buck in the results, or the long-term cost benefits as a result of lifting the resilience of what we're building into the future?" The stats we have from that analysis—let me see if I can find them. What we found is that, currently, home owners are paying considerable amounts annually to repair and rebuild their homes following bushfires, cyclones and floods. That cost is currently about \$4 billion a year. To tackle that, it's a pretty big win if you can then put resilience into the National Construction Code so that you're then avoiding those costs in the future. Absolutely, it's about that balance of policy measures.

The Hon. JACQUI MUNRO: Is there an understanding of how much baking those things into the National Construction Code will cost? You have obviously got the \$4 billion cost at the consumer end at the moment. Is there an anticipated cost for construction over time?

ALIX PEARCE: Our analysis looked at both the costs and benefits. I don't have that exact stat in front of me. I'd be happy to take that on notice and provide the full report. But it did look at what would be the additional costs of using more resilient materials, for example, and found that the financial and economic benefits were considerable and far outweighed those up-front costs.

The Hon. SCOTT FARLOW: I might pick up on that cost equation as well. In the IAG's submission, you had reference to your FORTIS home, I think, and that suggestion. I had a look at it; it looks nice. What are we looking at in terms of cost differential for something like that compared to a traditional build?

ANDREW DYER: The FORTIS home, developed by the Bushfire Building Council of Australia—now the Resilient Building Council—with IAG's support, was a co-designed initiative with the Shoalhaven community. The intention was that it's a resilient home. It's essentially bombproof, bushfire proof, flood proof—everything proof. The RBC are partnering, I understand, with a construction partner at the moment. They don't yet have a firm idea of costs, I understand, although it was developed in conjunction with an architect and a cost engineer to deliver it in an affordable way. It's essentially a pre-built, pre-packaged home built offsite in a factory and delivered to site. It's an efficient building methodology.

The Hon. SCOTT FARLOW: So it's modular design, in a sense, is it?

ANDREW DYER: In a sense, yes. But we have to consider that the alternative here is a traditional build. A traditional build occurring in an area with high bushfire exposure, for example, incurs additional costs to comply with the BAL-rated construction code in the Australian standards. It's not as though we're building a FORTIS home or a normal home; it's a FORTIS home or a very high bushfire-rated—

The Hon. SCOTT FARLOW: Or a traditional home with higher standards. Thank you for that. If you have any information that you could provide in terms of that equation, that'd be helpful in being able to look at that.

ANDREW DYER: Sure. We might take that one on notice.

The Hon. SCOTT FARLOW: Also, looking at some of your suggestions in terms of coming up with, effectively, the flood standards—similar to the bushfire standards—when we come to building, how do you think that could be worked? What is the gradient, so to speak, in terms of levels of risk compared to levels of increased code application?

ANDREW DYER: I think the best reference for this is probably a report we recently partnered with the Committee for Sydney on. It's called "Strengthening Sydney" or something like that. I can find that reference for you. We did look at five complying new builds across the Sydney Basin and what would be the associated insurance premium. How do we measure the risks associated with a complying new build across Sydney? We found a vast disparity in resulting risks. With the vast majority of homes built around the fringes of flood plains, there are quite acceptable levels of risk—200, 300, 400 or 500 bucks a year. They're insurance premiums that are uncomfortable but manageable. We did find that in some areas of Sydney where the flood risk is extreme, for example, the flood risk is quite deep or quite rapid, the resulting risk from a complying new build was of the order of \$2,000, \$3,000 or \$4,000 a year of expected claims costs for us, which we then pass on through an insurance cost similar.

What we've done then is to say, "What would be the uplift that you'd require in the planning standards in these extreme-risk areas to result in the similar sort of level of flood risk that you get elsewhere with a complying new build?" We are talking about lifting the planning standard in these extreme-risk areas from maybe the one-in-100 design flood event to maybe the one-in-200 design flood event or maybe the one-in-500 flood event—maybe just applying an additional freeboard. Rather than building 50 centimetres above the 100-year, maybe you're building a metre above the 100-year. It is not a one size fits all, unfortunately, which is why we recommend development of a risk tolerance guideline—a statement of what is an acceptable residual risk to be saddling the community with as a result of a complying new build.

The Hon. SCOTT FARLOW: This question is to the entire panel. One of the themes that has come out of this inquiry so far has come down to data. You, of course, are reliant on data in terms of the models that you create. You also create your own data, I imagine, to underpin it. How can we better integrate the government data at all levels—Federal, State and local—along with your data? I imagine there is so much overlay and duplication that, in many ways, we can probably rationalise a lot of these datasets and maybe even have some efficiencies and produce better data as well.

ALIX PEARCE: It is an issue close to my heart, which is why I am smiling. It is interesting to take the example of flood-risk data. We know that's very varied—the quality and availability of flood mapping across Australia. Some councils don't do detailed mapping or do not make mapping available. Some have mapping that's out-of-date, and some have high-quality and publicly available flood mapping, so it is a real jigsaw of data and information. We are partnering with the Federal Government through the Hazards Insurance Partnership. It is an enduring partnership between the industry and government that has been running for about 12 months now.

It's specifically looking at exactly that challenge. What datasets can industry provide and what datasets can government provide, and how do we pull it all together to create a really clear and consistent national baseline of current and future hazard risk across multiple perils. Part of that we're exploring is the national flood information database, which is the database I mentioned earlier that has those statistics around the number of homes exposed to flood risk. That database effectively just pulls together the existing local government flood maps to give you that picture of flood risk. That's an example of how we could potentially explore, with government, making that database available and plugged into government datasets as well. So the work is underway.

The Hon. SCOTT FARLOW: That would be really helpful because, interestingly, when we were speaking to planning in the first session and asking the question in terms of the number of properties that are actually susceptible to risk, that wasn't data that was held by the department because of local councils being responsible, which, I have to say, floored me in a sense if that was the case.

ALIX PEARCE: Yes, and we think having this detailed data baseline is going to be really useful so the decision-makers, the Australian public and all tiers of government can access it and have a clear, consistent understanding of the risk. That, in turn, can flow in to consistently inform both land use planning decisions and things like resilience investment.

The CHAIR: I notice there was a statement today—I think it was it was Swiss Re talking about how one in eight homes are now uninsurable, which was up compared to two years ago when it was one in 10. That is a fairly alarming reality. You think, "It would be great if everyone could be insured," but when your focus is on don't build on flood plains anymore, the reality is in New South Wales we are. We are still building today, tomorrow and yesterday. I can point to west Yamba right now, and we are literally rolling out hundreds of houses. At what point don't you insure? Is there a point where you just say, "No, we're not insuring that," or is it always insurable but the premiums are prohibitive?

MATHEW JONES: I might start on that one. I did see that story this morning about Swiss Re. There are different ways of looking at it. I point you to the Actuaries Institute report from last year which talked about climate risk and vulnerability and the level of insurance unaffordability, essentially, in Australian households. But in terms of the insurability of homes, you're right: There are developments that are being rolled out in New South Wales now which we believe, from an insurance point of view, are in the wrong place. And some of those—I personally have gone online and tried to get an insurance policy for an address at one of those developments, and flood cover is not available. You can get cover for other risks, but the insurer that I've tried to get a fake insurance policy—it's not available. It's right at the beginning of process, and these are new homes that don't have owners yet.

The CHAIR: I am just trying to think how we deal with that. I am saying this because, honestly, I went to a local council meeting where there were hundreds of people in the gallery saying to the council decision-makers, "Please, don't let this happen. Here's all the evidence. Here's all the material." And the councillors said, "Oh well, we've got to do it. We've just got to approve it." I think that what we are suggesting is, the policy announcement—there has to actually be a legal onflow, that is, there is now a prohibition on those developments, and the reason is that they are cruel developments because you cannot insure them, you cannot guarantee safety in them, and they just should not be there. Is it your view that a legal prohibition is probably the only way that we would actually get that implementation?

ALIX PEARCE: I think the way to think about this issue is: How are we tackling the risk of those homes that are already in high-risk areas, and how do we stop then baking in that risk? One sort of policy lever that we talk to is this idea of setting housing targets. We're recommending that, to accommodate new dwellings in the State, before you set those housing targets and hand them down to local governments, which is then where you see local governments very much under pressure to approve—before those targets are set you need to actually look at what are the high-risk areas in the State based on extreme weather data, which you have just spoken to. What does that mean for actual availability of areas where you can safely build? That is a really key mechanism.

The other thing that we recommend in our submission is a tiered risk approach in the State. In New South Wales, for example, using that data baseline to say, "What are the areas of the State that are very high-risk?" In those high-risk areas, you should not have developments. You even need to look at what resilience solutions need to be targeted in those areas where the risk can't be mitigated. That is where we go to the buyback programs as a recommendation or the resilience solutions for homes to retrofit them and make them capable of withstanding the climate impacts. Then there is that medium tier of risk where we know it is not as high as some of those other parts of the State, but you're probably going to need stronger building codes and standards or you're going to need to look at some appropriate resilience infrastructure to mitigate those risks. Then the areas of the State that are

low-risk—those are areas that you prioritise for development. That is the framework that we are thinking through and recommending in our submission to tackle that challenge.

The CHAIR: When you mentioned earlier about flooding and projections et cetera, wouldn't it be prudent for insurance modelling to be based on PMFs—as in the highest possible flood—and then work back from that? Or does it not work that way?

ANDREW DYER: I can perhaps give some insight into how we price. We collect data, which is a challenge because a lot of the data available is only around where the planning controls are. We're not interested in where the planning controls are. We want to know where the risk is, which goes well beyond the planning controls. It goes all the way up to the probable maximum flood, as we mentioned. As insurers, at each address we look at the potential consequence and likelihood of the full spectrum of flood events, from the extremely frequent up to the extremely rare, the probable maximum flood. A property which is only inundated in the probable maximum flood is not going to get that big a flood insurance premium. As you work up the frequency bands to the high-frequency homes, the premiums step up.

The CHAIR: Can I interrupt there? Does it not assume that a PMF event, say, would smash the house? You would wipe it off. You would make it unliveable. How does that factor into the frequency? Sorry to interrupt.

ANDREW DYER: That's okay. It's a complex topic. We build in a vulnerability function that looks at how deep we expect the floodwater to be. Is the floodwater three metres deep through the house, in which case it's going to suffer a catastrophic structural failure and, "See you later, house"? Or is the probable maximum flood only going to result in a bit of water through the front yard, in which case that's only, maybe, a couple-of-thousand-dollar claim with a very, very low likelihood? That might only be a \$1 premium impact versus the PMF being quite a severe impact, and that's potentially a larger premium. So there is a severity and a frequency element.

The CHAIR: I see. Thank you. Of course, this is all very difficult when you don't have good flood mapping and data. So in your financial analysis of what risk we are insuring against going forward, are you having to use surrogate data almost in lieu of good modelling? Or have we caught up and we do have reliable enough modelling, would you suggest?

ANDREW DYER: Speaking on behalf of IAG, just one insurer amongst many ICA members—and I know other insurers have similar approaches—where we have reliable data that we are able to source from a local government, IAG prefer to use that because it aligns with the community view of risk. So if a community then goes out and spends a lot of money on risk mitigation, builds a new levee, for example, we can then update the data in line with the council's new data and pass on any benefits that we see in terms of risk reduction.

Unfortunately that data is not always available. Sometimes it exists but it's not available due to licensing concerns or a council just doesn't want to share it, for whatever reason. Sometimes it doesn't exist because you've got a low-rate base, council hasn't prioritised it—whatever reason. There are many legitimate reasons and so, insurers, we have to take a prudent risk management approach. We have to have a view of risk and so we will source other information. There are various standards of quality. We commission our own hydraulic modelling. There are products off the shelf from international vendors that other insurers may purchase to inform their view of risk. But it is—I think it was referred to as a patchwork before—a patchwork of data quality and availability.

The Hon. ANTHONY D'ADAM: From a commercial perspective, each insurer sourcing its own data potentially gives one insurer a competitive advantage over another, doesn't it?

The CHAIR: Mr D'Adam, into your microphone, for Hansard.

The Hon. ANTHONY D'ADAM: Sorry. Doesn't it give a competitive advantage if you can source your own data, your competitor doesn't have access to that information and then you're able to price risk better than your competitor? That question, how does that get reconciled within—I suppose this is not an Insurance Council of Australia question, given you're arguing that you want to establish a level playing field. Effectively, that may advantage or disadvantage some insurers.

ALIX PEARCE: There are two different questions here, right? How do insurers go about pricing and understanding risk? And then there is also a question around what role for government is there in uplifting those data standards? I think, just to answer the latter from an Insurance Council perspective, there is a really clear role for government here, both in terms of uplifting that data quality of flood risk—so for example, support for local governments to be able to do detailed, gold-standard hydrological flood mapping—but there is also another data gap that we've identified and that's around things like the floor heights of buildings. That data is really, really helpful to fully understand how flood risk will impact a building. We are engaging, for example, with the Federal Government to say, "Hey, Geoscience Australia, could you fund, for example, floor height mapping and a more

consistent database of building characteristics?", because we all benefit when it comes to then making those land use planning or resilience investment decisions if we can make the right decisions and then reduce that risk. In terms of how individual insurers operate, it is probably more the purview of IAG or—Mat, I'm not sure if you had any reflections?

MATHEW JONES: I just add that—and IAG, I'm sure, will want to add to this—even with that data uplift, it is in insurers' interests to have as detailed data as possible so that they have a really strong understanding of the risk, and the more detailed data that they have, the better they can price the risk and they can probably be more competitive. It's just how the market operates.

GEORGE KARAGIANNAKIS: Can I just make a comment before I hand over to Andrew for more technical? It is not only the data, it is also the risk tolerance that an individual insurer will have, and that depends on their capacity to either buy reinsurance—as you know, we as an insurer buy reinsurance to protect ourselves—and also the capital that they have access to. So that's an important part of the equation; irrespective of having the data, it's the tolerance of actually insuring a particular property or a particular area. Andrew, did you want to add anything?

ANDREW DYER: I would say that as an industry we're not coming from nothing. We have the National Flood Information Database which was an industry-wide project many years ago, and it's ongoing to collate that data on behalf of industry and make it available to all industry players. That is a common starting place. But you're absolutely spot on that the well-resourced insurers may go a bit above and beyond in understanding their risk.

The Hon. ANTHONY D'ADAM: I suppose what I'm getting at is, if you have high quality information, there is a disincentive to share that across the industry, I would have thought. That gives you a competitive advantage.

The Hon. JACQUI MUNRO: That's why you don't want a race to the bottom of data quality. That's where government steps in.

The CHAIR: Should there be regulation of data? Rather than cooperative mechanisms, should there actually be regulation in relation to the collection, storage, holding and delivery of data?

ANDREW DYER: For new flood studies completed in New South Wales, there is a standard brief and a standard consultancy agreement that makes those datasets available under an open data framework, through the NSW Flood Data Portal. In practice, things are a little bit more murky. Some of that data does eventually make its way to the New South Wales open data portal.

The CHAIR: It's not regulated though, is it? There are no penalties or infringements if you don't comply or you don't do the right thing. I know there is goodwill and there is intention, particularly around—

ANDREW DYER: I believe the grant funding application is tied to the data being laid open—

The CHAIR: Right. To compliance, yes.

ANDREW DYER: —for new datasets; not for the old stuff that a lot of communities still rely on.

The Hon. JACQUI MUNRO: Does having less detailed data make companies less responsible for decisions that don't anticipate risk effectively? When you are talking about reinsurance, how does that relate to the data quality that you have?

GEORGE KARAGIANNAKIS: The reinsurers require us to have good data in order for them to be able to adequately price their reinsurance premium to us, so you're quite right. But coming back to the point that Alix made—

The Hon. JACQUI MUNRO: Sorry. Just quickly, that reinsurance level, is there a standard, I suppose, that reinsurance—

The CHAIR: Does it impact your premiums to reinsure?

GEORGE KARAGIANNAKIS: I'm not an expert on reinsurance. I can't answer. We can take that on notice and provide you some information.

The Hon. JACQUI MUNRO: Is there an extra level of standard? That is interesting to consider.

The Hon. ANTHONY D'ADAM: Can I ask just one other question? On the issue of properties that can't be insured, what would be your view about some type of mandate on builders and developers to provide some guarantee that the property can be insured? That would, arguably, provide them an incentive to make sure that they can obtain insurance for the property and, therefore, create a disincentive for them to build in high-risk areas.

MATHEW JONES: One of the things that we are advocating for is for better data at a household level. In other jurisdictions, that data is made available at the point of sale. In fact, in other parts of Australia, I understand that there is better data made available at the point of the property sale. But the other area where the market will come to bear on these types of examples is with banks. If you take out a mortgage, insurance is a requirement of your mortgage, and if you can't get insurance then you can't get a mortgage. There is a kind of market mechanism built into it.

The CHAIR: It is very late in the chain, isn't it, if it's at that point and the property is already built, and the environment is already impacted, and that property is having an impact on somebody else's flood liability. Hence why you're here advocating land-use planning is improved, so that we don't get into those positions. We heard earlier that notion of data at that granular level in terms of floor space, not just floor heights, is so important in terms of collecting evidence around energy efficiency, canopy cover—all those sort of things—in terms of land-use planning. It sounds like Sydney City has some fantastic tools at their disposal, but they've really gone it alone in that sense in the world of land-use planning data, from what I can gather. I'm just curious about whether you have looked at the Government's framework for valuing green infrastructure and public spaces and whether that's something that you're using in your modelling in terms of impacts on resilience at the property scale because we've heard a lot about canopy deep soil et cetera being one of the ways of combating heat and those "high-risk"—perils. I've learnt a lot today.

ALIX PEARCE: No, don't start using "perils".

The CHAIR: I don't think I can. Is that something that you look at? Are you at that level yet in terms of ensuring against those kinds of hazards and risks at the property level?

ALIX PEARCE: Andrew might be able to talk specifically to an individual insurer approach. I haven't looked at that specific framework that you've mentioned but happy to take that one on notice. Again, I'd probably emphasise that we don't look specifically at heat, and that's sort of where that canopy piece really comes into play. It's a lot more about the fire, cyclone and flood piece at the moment. Having said that, we've done some really detailed analysis that basically took a whole bunch of claims data from insurers and then used that analysis to establish: Are the kind of individual standards and requirements for how we build our homes up to scratch so that the homes that we build can withstand those extreme weather events that we're experiencing? The analysis was a resounding no. It was very clear, based on that data, that we're not building homes to standards that will weather the kind of extreme events that we're already experiencing, let alone what will be experienced into the future.

We talked about the National Construction Code, which is obviously set at the Federal level but then has a steer for the respective State building Ministers. That's a really important lever. The other one when it comes to buildings is thinking about Australian standards, which sounds a bit sleepy but it's actually very important. It's setting a lot of really key requirements for even how this room is built, for example. We just need an opportunity to uplift the standards for buildings as well. An example of that would be when a cyclone hits a home. We know that the wind speeds are a key issue, but the other killer is water ingress, when you get that sideways rain that hits the window and flows into the building. That drives a lot of claims damage. A standard to improve how those windows are built in those high-risk zones would go a long way to actually reducing the damage to a property. I just think that's probably how insurers think about it in terms of data and building standards: It is around both the code and also the Australian standards.

ANDREW DYER: I could probably talk to a more specific example. Rather than looking at the green building standards and data around that, we might look back to the Government's initiative post the floods of two years ago with a lot of retrofitting of homes to be flood compatible, house raising. These are things that are strongly impactful to how we measure risk. Unfortunately, there is no sort of centralised data collection on where that has occurred and where that's happened. A property owner may purchase a new home unaware that that work has gone on, and so they may be unable to communicate that with their insurer. They may be unaware that they've got a resilient home. They may experience some flood damage and gone and ripped everything out without realising that they can just hose it down. That's the sort of data that we've asked for as an enduring asset.

The CHAIR: I'm from Lismore. We saw that.

The Hon. ANTHONY D'ADAM: On a bit of a different topic, we've had some early discussion in the Committee about trees. Obviously tree branches in storms are a risk to powerlines and to buildings. I wonder whether perhaps now or on notice you might give some consideration to what role the insurance industry might have in terms of incentivising tree retention or tree protection because, in trying to minimise risk, local governments and individual property holders are chopping down trees to reduce that kind of exposure because they don't want that kind of damage. But perhaps there might be an innovative perspective from the insurance industry that might be able to be added to the mix in terms of how we might incentivise people to try to preserve trees rather than chop them down or see them as a risk.

ANDREW DYER: I think we could probably take that one on notice, but I can give two brief perspectives. The first is from the bushfire risk angle. There we're not talking about individual trees on properties; we're talking about large-scale vegetation. But the other angle would be from the more day-to-day storm damage that we see—trees down, leaning on roofs, gutters filling up with branches and overflowing. I would just make a comment that that type of storm damage related to trees does not drive the kind of affordability stresses that we see in the other perils which are more intimately tied to land-use planning like flood, bushfire, coastal hazards and tropical cyclones.

The CHAIR: That's a bit of a relief.

ALIX PEARCE: I would add, though, that kind of thinking around solutions that have co-benefits is a really welcome one and something that the insurance industry is at the leading edge of. For example, insurers think about what materials will make a home more resilient but also make it more efficient, which is to reduce energy bills for the consumer? I think that sort of co-benefit space is a really important one.

The CHAIR: Great. Thank you. We've run out of time. Do you have anything you would like to add, finally?

MATHEW JONES: There was just one thing, if I might. Obviously the focus of the Committee is on the planning system and that necessarily looks forward, but we've got millions of homes in the State—more than 100,000 of them, as Alix mentioned—facing a one-in-20-year flood risk. In our recent submission to the Federal Government ahead of the Federal budget we put forward a plan for ongoing buyback programs. The buyback programs that we saw in New South Wales and Queensland have been successful, notwithstanding they were the first of their kind and they did have some initial teething problems. But we think an ongoing program of home buybacks for those homes that can't be mitigated any other way is good policy. It's good for the people who live in those homes. It's for the communities and it's good, essentially, for governments as well because they're not having to bear the cost and the residents aren't having to bear the trauma of those homes being destroyed in a flood, as you saw in Lismore a couple of years ago.

The CHAIR: Just on that then, would it be possible for you to provide on notice a copy of that submission to this inquiry?

MATHEW JONES: Absolutely.

The CHAIR: That would be great. Thank you.

GEORGE KARAGIANNAKIS: Chair, I'd like to just come back to a point you made earlier about Swiss Re and their study. Swiss Re are a very reputable global reinsurer, but I do question the premise of their calculation. One in eight homes—16 per cent—being uninsurable is a huge number. The studies that the ICA has commissioned over many years, and we have indicated, the number of homes that aren't insured ranges between 5 to 10 per cent. But that is not because insurance companies do not offer insurance. I think this is the distinction that needs to be made. Companies like us will offer insurance just about everywhere on mainland Australia.

There are some islands that have difficulty in obtaining insurance because of logistics and risks related to those, but on the mainland and Tasmania, insurance for homes is generally available. There may be specific instances that—I think Mat mentioned—where a particular house is subject to constant and frequent events and claims, insurers may be reluctant to provide insurance for that home, but generally insurers like us do not red line. That's a term that's used where there's a blanket prohibition to not insure. That doesn't generally exist amongst Australian insurers. There is an issue of affordability, which could be the confusion between uninsured—

The CHAIR: Yes, I wonder if that's what has fed into their analysis.

GEORGE KARAGIANNAKIS: We would price for the risk, as we've been talking about for flood. But in New South Wales, if people are in a flood area, we'll also allow them to opt out from flood if it's too expensive and they can't afford it. Usually, if they are in a high flood-risk area, they will opt out and still obtain affordable cover for other perils.

ALIX PEARCE: I did skim that report on the bus on the way in and can say that it is the distinction between affordability challenges, not uninsurability. That's a bit of a key difference.

The Hon. SCOTT FARLOW: I have one quick question, Mr Karagiannakis, on that. In terms of opting out of flood—and back to the point from before about mortgages and the like—if you opted out of flood, you wouldn't be able to insure it to satisfy for a mortgage, would you?

GEORGE KARAGIANNAKIS: It's a good question, Mr Farlow. It really depends on how diligent the banks are in determining that they have taken out the insurance cover and whether that insurance cover does cover them for flood. It's not a question that I can answer on behalf of the banks.

The Hon. SCOTT FARLOW: It's one for the banks. Fair enough.

ANDREW DYER: Something that was called out in the APRA climate vulnerability assessment into banks last year was that, basically, the risk for them around climate risk is insurability. I would suggest that you will see more rigorous checking.

The CHAIR: We saw that in the difference between the 2017 flood in Lismore and the 2022 flood. After the 2017 flood, banks weren't refinancing mortgages without flood insurance. It was a very canny period, or a difficult period, which is now over and superseded. Thank you for your evidence today. The secretariat will be in contact with you in time in relation to questions taken on notice. Thank you for your time.

(The witnesses withdrew.)

The Committee adjourned at 13:42.