# T R A N S C R I P T

## LEGISLATIVE ASSEMBLY ENVIRONMENT AND PLANNING COMMITTEE

**Inquiry into Apartment Design Standards** 

Melbourne—Tuesday, 15 February 2022

#### **MEMBERS**

Ms Sarah Connolly—Chair Mr David Morris—Deputy Chair Mr Will Fowles Ms Danielle Green Mr Paul Hamer Mr Tim McCurdy Ms Cindy McLeish WITNESSES (via videoconference)

Ms Alesha Printz, General Manager, Victorian Division,

Mr Baoying Tong, Senior Manager, Building Reform and Projects, and

Mr Adam Lee, Project Manager, Building Reform and Projects, Engineers Australia.

**The CHAIR**: I advise that the sessions today are being broadcast live on the Parliament's website and rebroadcast of the hearing is only permitted in accordance with Legislative Assembly standing order 234. Thank you very much for taking time this afternoon to join us at this public hearing for the Inquiry into Apartment Design Standards.

On behalf of the committee I acknowledge the traditional Aboriginal owners of this land, and we pay our respects to them, their culture, their elders past, present and future and elders from other communities who may be joining us today. I also welcome back any members of the public and media who may be watching.

This is one of several public hearings that the Environment and Planning Committee is conducting to inform itself about the issues relevant to the inquiry. Before we begin there are a couple of things I need to point out to the three of you. All evidence taken today will be recorded by Hansard and is protected by parliamentary privilege. This means that you can speak freely without fear of legal action in relation to the evidence that you give. However, it is very important to remember that parliamentary privilege does not apply to comments made outside the hearing, even if you are just simply restating what you said here in front of us today.

You will receive a draft transcript of your evidence in the next week or so to check and approve, and corrected transcripts are published on the committee's website and may be quoted from in our final report.

Welcome. Thanks for joining us this afternoon. I will just remind witnesses: if you can keep your microphones on mute when not speaking in order to minimise any electronic interference and for the live broadcast.

Alesha, I am going to throw to you to introduce the team. If you can state their full name and position, and then the committee will introduce itself.

**Ms PRINTZ**: Hello, and thank you to the committee for the opportunity to join you today. My name is Alesha Printz. I am the General Manager, Victoria, at Engineers Australia. I am joined by Baoying Tong, who is a Senior Manager of Building Reform and Projects, and also by Adam Lee, who is a Project Manager in Building Reform and Projects.

**The CHAIR**: Thanks, Alesha. I am Sarah Connolly, the Chair of the Environment and Planning Committee. I am also the Member for Tarneit.

Mr MORRIS: I am David Morris, the Member for Mornington and Deputy Chair of the committee.

Mr HAMER: I am Paul Hamer. I am the Member for Box Hill.

Ms GREEN: I am Danielle Green. I am the Member for Yan Yean and the Parliamentary Secretary for Regional Victoria and for sport.

The CHAIR: Alesha, I am going to hand over to you at your end. If you have a 5-minute opening statement or presentation, we would love to hear that, and then I know the committee has some questions to ask you.

**Ms PRINTZ**: Thank you very much. I will start with a short introduction to Engineers Australia and let you know a little bit about our work. We are the peak body of the engineering profession in Australia. We are a professional association with over 107 000 individual members. Established in 1919, Engineers Australia is a not-for-profit organisation constituted by a royal charter to advance the science and practice of engineering for the benefit of the community. Engineers Australia is heavily involved in building reform processes around the country, making countless submissions, contributing to many government reform working groups in all jurisdictions and producing practice guides to help the profession raise and maintain standards. In 2015 we created the voluntary registration scheme to raise the bar for all engineers working in any industry, called the National Engineering Register. More recently Engineers Australia collaborated very closely with the Victorian

and other governments to create statutory registration schemes for engineers. These are now in force in Queensland, New South Wales and Victoria and in development in the ACT and Western Australia.

My role is General Manager for the Victorian Division. Baoying Tong leads our engagement with governments, industry and members on building reform, and Adam Lee supports that work and wrote the submission for the inquiry that we are here to discuss today. Engineers Australia welcomes the Victorian government's commitment to work collaboratively with industry to deliver high-quality, livable apartment communities for the growing population. However, there are complex issues that must be addressed in order to achieve this goal. Over recent years many issues have arisen in Australian apartment buildings, highlighting that the regulation of apartment construction has not kept up with the rapid pace of industry growth. In particular, issues have arisen in relation to structural defects and failures, waterproofing, fire safety and external cladding as well as a failure to maintain essential services. The causes of defects can include poor engineering design and specification, poor construction techniques, poor construction management and site supervision, and lack of sufficient inspections and proper commissioning.

Improvements are needed, and the current review of Victoria's building system alongside this inquiry provides opportunity. As an outcome we need strengthened accountability across all construction processes, improved practitioner and industry performance and strengthened regulatory functions. We support the recommendations of the Shergold and Weir Building Confidence report. In particular the introduction of professional engineers registration in Victoria is welcomed. We urge the government to continue work to implement all recommendations as early as possible. We recommend that a government-led review into apartment design, construction and maintenance in Victoria should, firstly, consider the whole life cycle of an apartment building, including new builds and retrofitting of existing buildings to meet emerging requirements, secondly, involve consultation with experts to take a systematic approach to resolving the specific issues we have identified in this submission-the specific issues are wind action, waterproofing, ventilation, fire safety systems and electrification-and, thirdly, involve collection of data on livability and exposure to undetectable but serious structural and other back-of-house deficiencies within buildings and then analysis of the data to make data-driven decisions, and information for and education of stakeholders of the associated impacts. Collaboration is essential, and Engineers Australia is committed to continuing to work with the Victorian government through the provision of expert advice, promotion of reforms and sharing of lessons and best practice with industry to improve engineering and construction in Victoria and across the nation.

Thank you for your time today, and we look forward to answering your questions regarding our submission.

The CHAIR: Thanks, Alesha. I will kick things off. In your submission you noted that the regulation of apartment design should consider the whole life cycle of an apartment building. In your view, do you think current standards address this life cycle, and how could the standards be improved to address this issue, keeping in mind that with the BADS that are currently in place we have not really had long enough to work out the impact of them on the market?

Ms PRINTZ: Baoying, would you like to jump in with an answer to this particular question?

**Mr TONG**: Sure. I will make a start, and probably I will invite Adam to provide some comments around the specifics in Victoria. So what we see here regarding the life cycle of a building project—there has always been a disconnection between what the design and construction team are producing and also what the end owners are actually getting. The links to connect both parts include the as-built drawings and those in the building manual. However, across Australia what we have noticed is that the quality of the building manual actually has been very poor, and also a lot of the information that is included in the building manual is quite technical and a lot of owners actually do not have the knowledge to interpret the building manual as such. And what we see is once the building has been handed over, a lot of times in fact the as-built drawings and the building manuals are not getting updated across the life cycle of a building, and that means that the future owners just lose information along the life cycle of the project. I will stop here and pass to Adam to add a few more comments.

**Mr** LEE: Specifically in response to your comment there, Sarah, like you said, there has not been enough time with the BADS to see the whole of life cycle for many of the buildings, but what we are finding is specifically with fire safety systems there is a disconnect between the design and the whole-of-life operation of a fire safety system. The system is designed, but how it is installed is poorly managed. Also, as the life of the

building goes on, how often it is maintained and how often it is inspected also are poorly defined and what the minimum requirement is.

The CHAIR: Thank you. I am going to throw to you, David.

**Mr MORRIS**: Thanks, Sarah. First of all, good afternoon. Thanks for taking the time to appear. Earlier in the day we heard evidence along the lines of: 'Well, there's probably a minimal place for regulation, but if there is to be regulation'—this is the witness speaking, not me—'we believe it should be regulation in the context of the building approvals process, and regulation should not be included in the planning approvals process'. The witness did not go so far as to say clause 58 should be removed from the VPPs, but the strong suggestion was it should be part of the building process. Does Engineers Australia have a view on that proposition?

**Mr TONG**: I will address the question here. From our perspective, we agree with what Shergold and Weir report in their *Building Confidence* report, and that is there is the need to really strengthen the regulation and auditing process, and whether or not this has got planning approval or building approval, equally we think there need to be more strengthened requirements around the feasibility of buildings and also during constructions what is the quality of the product eventually being delivered.

Mr MORRIS: But you do that as part of the building code.

Mr TONG: When you say 'building code', you mean like, say, actually during the actual design and construction process?

Mr MORRIS: Thank you. Thanks, Sarah.

The CHAIR: Thanks, David. Paul.

**Mr HAMER**: Thanks, everyone. Good to see you again, Alesha. I hope you have been well. My question was actually very similar to David's, and I am just wondering as a follow-up to that whether from an Engineers Australia point of view you had any view on the planning regulations in terms of how they may be improved. Obviously what is written in your submission and what you have presented is focused particularly on the building regulations and the prevention of defects, and as David indicated, most of the witnesses today have really focused on that up-front planning stage. I would be interested in getting your perspective on whether there is any element of that planning stage that could potentially be improved one way or the other.

**Mr LEE**: I think I will field that one. There are certainly a few points that we go over in the submission that we think warrant a further look into, especially from a regulation standpoint: specifically, wind action, so the effect of the wind on a building and the acceleration that people experience living in the building when there are windy conditions; the planning for water ingress and waterproofing, specifically in car parks, where it is not necessary to completely waterproof a car park—however, this can lead to some issues with consumers, who want their things in their car park to be protected from water damage; and the other thing we think really could do with a lot of planning up-front is the fire safety systems within buildings. Obviously New South Wales have also had significant issues with their fire safety systems within apartment buildings, and we believe that there are many things that could be improved up-front that could really improve the life of a building.

**Mr HAMER**: Thanks, Adam. If I could just tease out some of the wind action. We have heard from one of the witnesses about whether a more global approach should be taken rather than looking at an individual building-by-building assessment, because obviously there is an interaction between each of the buildings, and where you have more buildings in a particular built-up area that will affect the wind pattern differently to if you just have a single building. It all depends on, I guess, the timing of their construction. You have got some very specific comments about the assessment of the wind action, which is more on the building and the, I guess, structural movement, but on that planning element, when buildings are proposed, do you have any comments or feedback on the benefit of applying that more broadly over a larger area—say, over an activity area—that might be designated for development?

**Mr LEE**: Absolutely. With the wind action—I think we have gone over it extensively in our submission we want to mandate maximum acceleration and maximum deflection within buildings. These should try not to be affected by new developments, and I think that any new development should be built with how it affects surrounding buildings in mind. Obviously this is a difficult thing to regulate for, but it is essential to make sure that if you have a crop of buildings in a certain area they are not all being affected by each other and increasing those wind loads and therefore the discomfort that residents would feel.

**Mr HAMER**: How would you propose that that could be managed? Obviously there is a lot of speculation in terms of if you are trying to predict what future development might look like, but how might that be able to be considered through the development stage in terms of the impact on what is there currently and what might be there in the future? Do you have a view on that?

**Mr LEE**: Yes. When they design a building there should be wind modelling done to determine what the wind forces acting on a building are. It would not be a necessarily far step to go and model how it would affect surrounding buildings that already exist. Obviously you cannot design for buildings that have not been planned or have not been created yet, or built, but you should be able to model what the effect is on current existing buildings and whether that exceeds what was modelled in the original building's design.

**Ms PRINTZ**: To just add to what Adam has said as well, consideration should be given to that wind loading across the full project life, so a building should be designed and built for a current load as well as for the potential future loads that it may experience, which would take into consideration, in those new developments, other buildings that would be introduced into the area.

Mr HAMER: Right. Thank you.

The CHAIR: Do you have any other questions, Paul?

Mr HAMER: Not at the moment.

The CHAIR: I am just going to sneak in with a question there. I am interested to hear your opinion whether you think the big end of town is doing a really great job when it comes to apartment design and meeting community expectations, or do you think that perhaps the issue is those developers or builders who are not part of the industry bodies and advocacy groups and involved in, for example, the setting of the guidelines and things reflected within the BADS? Do you think it is those lower denominator builders/developers that are not meeting industry expectations and then leading to change as policy changers within the industry. Do you have an opinion about that from what you see?

**Mr TONG**: I will go first, I guess. It really depends. There is no guarantee, say, if you engage a tier 1 builder that your building will be free of defects. Adam knows this: we have recently been doing a joint guide with owners corporations and strata management associations, and one of the members is actually from a building with a lot of defects and that building was configured by a tier 1 builder. And the same applies with the smaller builders—those smaller builders are not always delivering projects of bad quality. What I think would be really beneficial is what is happening in New South Wales with the new rating tool. What the government is doing now is producing this rating tool to reward and hence also punish the bad builders who cannot deliver a good job. What we see here is having this rating tool really gives some transparency to the whole process and also helps owners to pick out who they want to buy apartments from.

**Ms PRINTZ**: I wanted to touch on the fact that the quality of the people who are involved in the design and construction is key. Obviously we have a focus on engineers, and this is why engineering registration is so important. It is really important that the tier 1, the mid tiers and the lower tiers have professional engineering work undertaken by professionally registered engineers who do meet the qualification requirement, who have the experience under their belt and have been assessed to be competent and experienced and qualified and who maintain their currency through continuing professional development, and if they are found to not be meeting the standards and not delivering work at the required standards, they can actually be removed from the sector.

**The CHAIR**: Alesha, in your experience, is that happening? Is that one of the reasons why we are seeing things like defects—leaking of windows, not great ventilation, not great design?

**Ms PRINTZ**: Look, the registration scheme has existed in Victoria for the building sector only and for some categories of engineers. So I think it is worth noting that this sector has not been unregulated. The new scheme does introduce a strengthening. One big difference is that the engineers are required to meet the continuing professional development requirements to maintain their registration, which means they need to keep abreast of what is going on in the industry. We would be looking at how we ensure, working closely with regulators and

with the Victorian Building Authority, to communicate some of the issues out to practitioners so that they are aware and they can improve their practices and get on top of some of these issues. This also highlights why data is really important to the process.

The CHAIR: In collecting the data?

**Ms PRINTZ**: Collecting the data and being able to share it so that people know where those issues are arising in the sector. It is no good if you are a practitioner and you do not get the feedback or you do not collectively see the industry feedback. To be able to collect the data and share that with practitioners and make sure that they understand what best practice is is really important. We would consider that organisations such as ours have a role to play, and this is where the collaborative piece is really important.

The CHAIR: Thank you. It is really interesting. David and Danielle, any questions for Alesha?

Mr MORRIS: I am good, thanks, Chair.

**Ms GREEN**: Yes, I have got one. You talked about the whole life cycle of an apartment building, including new builds and retrofitting. I understand that there has been some compulsory acquisition in New South Wales. How do you think that would work here, and could it actually come about through tweaking, say, our build-to-rent reforms if we sort of said it was retrofitting to rent? Because I am sort of not sure how we are going to do it otherwise with a multiplicity of owners in a body corporate in a large building.

Mr TONG: Can I clarify: when you say the mandatory acquisitions, what are you referring to?

**Ms GREEN**: Well, in terms of if there are buildings—sorry, I should have introduced my question—that are no longer compliant with current standards: maybe they are not fitted with disability access, they do not have light, maybe they have got environmental issues. You have talked about that whole of life, and I am thinking, 'Well, okay, how will that work?'. You can do that at the front, but how do you do it with buildings that are quite old, aside from just demolishing them and starting again?

**Mr TONG**: I see. For that question it also makes me think about what happened with the Miami Surfside building crash last year. That is why what we do now with owners corporations and strata management associations is quite important—that is, how to engage engineers to help owners and also strata managers to better manage their asset through the life cycle of a project. Because what we see here is sometimes the owners, for example, do not have a good knowledge of the construction industry and hence they may not be aware of what their obligations are as owners to fix things up. What this may result in, as a situation, is you have got a problem that is getting bigger and bigger, and eventually owners may think, 'Oh gee, this is too hard for me to manage. I'm going to sell my property', and they move away from it. That is definitely not a desirable situation, because that is not fair to the subsequent owners.

What we think, I guess, coming from an engineer's perspective is that one way to help owners and strata managers in this situation is to engage engineers and provide up-front inspection services and analysis services, not just when there are issues—for example, there is water leaking in the basement—but rather be up-front and make sure that you engage an engineer to do the right work. So that engineer can let you know what other things need your attention from a life cycle perspective and what are the key situations you should take with your peer owners for the same strata. Adam, do you have anything else to add on this?

**Mr LEE**: Just to reiterate your point, Baoying, it is important to engage engineers, as they will be able to inform owners of upcoming rectifications to standards and things that owners might need to retroactively update. Engaging an engineer is the best way to sort of make that rectification and put in place some things, such as for your disability, or in our case—I will keep harping on about it—the fire safety systems which need a lot of retroactive updating.

Ms GREEN: I am a CFA volunteer so I hear you on that. I will get on your bandwagon.

**Ms PRINTZ**: I think, just also to add, that taking a risk-based approach here is really important. Again, data can help inform a risk-based approach, but standards do change all the time and building stock will not meet current standards because of those changes. But it is about focusing on what are the high-risk changes that need retrofitting, because some of those changes may not present as high a risk to owners and they may be

considered to be acceptable. Probably the cladding audit program is a really good example of something that was considered high risk by the government and then had to be further actioned. So we do need to be really clear that we cannot expect some of those older buildings to be brought up to every element of current standards, but we do need to make sure that we are focusing on the stuff that is important, and particularly the items that present safety risks to people and wellbeing, such as some of those structural issues that we have seen, particularly in New South Wales, and some of the fire safety issues that we have seen in Victoria.

**Ms GREEN**: A final one, Sarah: do you think that body corporate managers and owner corporation managers do enough in terms of making their tenants and individual owners aware of risks and what they ought to be doing? And would you think there is anything that government ought to do by legislation or regulation to improve body corporate managers and owners corporations?

**Ms PRINTZ**: I might jump in first and then hand over to Baoying. A lot of these body corporate managers are not engineers, so they will not necessarily have the same understanding. They might have a very good understanding, but they will not have the same in-depth knowledge that an engineer would have and we would not expect them to be across all of these issues. So I do think there is a really important education piece here as well to make sure that the sector is informed of what some of those high-risk items are and then supported through the correct practitioners, whether it be an engineer or another, to help them figure out what the solution needs to look like.

The CHAIR: Thanks, Danielle. Paul has got one last question.

**Mr HAMER**: Thanks, Sarah. I guess in summarising your submission in terms of some of the causes for the defects you identify it could be poor design, poor construction techniques, poor construction management or insufficient inspections. Now, I think that, as you have raised, a lot of the registration process and particularly the continuing professional development is intended to particularly lift the standard amongst the profession and everybody who is working in all of those different disciplines, but I guess I would like your thoughts in terms of some of those other actions and responses. Is more regulation required? Is it through, say, better standards, or is it more an issue of compliance and enforcement? Obviously compared to several years ago the occupancy permit and the building inspection regime have changed, so where should the focus be in terms of making sure that a higher level of standard is met throughout the build life cycle?

**Ms PRINTZ**: Thanks, Paul. I think it does come back to the *Building Confidence* report and the recommendations that are in that report and looking at the implementation of those. It is certainly not simply based on improving standards of engineering, because, I mean, as a generalisation we would say that the standard is pretty good. But there need to be some changes as well in the system—for example, inspections. Engineers, particularly fire safety engineers, are undertaking designs. They are competently undertaking their designs, but they are never getting on site to ensure that the inspections are actually made, and that is about procurement and the scope of work that the engineers are actually engaged to undertake. So they are doing the function that they have been engaged to do, but a builder has no requirement to follow through, and there is that complexity between the building surveyors and the engineers and ensuring that the whole system is built as it was intended during its design. Baoying or Adam, would you like to add anything to that?

**Mr TONG**: I will just jump in here. So enforcement is only one element of the Shergold and Weir report, and there are also other elements I guess the government needs to think about, which come into the building approval, design and construction process. As Alesha said, for engineers, we are designers, and it is quite important for us to be on site and make sure that we do inspections—and also that we are getting paid to do the inspections and also checking all those key elements from the design process and making sure they are implemented through the construction process.

What is also important is to get engineers to do independent third-party reviews. Recently what we saw in the Northern Territory government is that they actually adopted what the BCR suggested, which is the independent third-party review of structural design. On a high level what the government decided to do was to follow what ABCB suggested as a part of their BCR, *Building Confidence* report, investigation and consultation process and apply a risk-based approach to decide what buildings are to be peer reviewed. And that will really give engineers and also the end clients a confidence that if things go wrong with this one engineer then that will be picked up by a second engineer through this review process.

### Mr HAMER: Thanks, guys. That is really interesting.

The CHAIR: Okay. Thank you very much for coming along this afternoon. That was really interesting. It was a really good submission.

#### Committee adjourned.