

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Decommissioning Oil and Gas Infrastructure

Melbourne – Friday 6 March 2026

MEMBERS

Ryan Batchelor – Chair

David Ettershank – Deputy Chair

Melina Bath

Gaelle Broad

Jacinta Ermacora

Wendy Lovell

Sarah Mansfield

Rikkie-Lee Tyrrell

Sheena Watt

**Necessary corrections to be notified to
executive officer of committee**

WITNESSES

Aarin Moon, Assistant Secretary, and

Angie Moore, Policy Analyst, Oil and Gas Decommissioning, Maritime Union of Australia, Victoria Branch;
and

Danae Bosler, Assistant Secretary, Victorian Trades Hall Council.

The CHAIR: Welcome, everybody. I declare open today's meeting of the Legislative Council Environment and Planning Committee's Inquiry into Decommissioning Oil and Gas Infrastructure here in Victoria. The Environment and Planning Committee is an-all party committee of the Legislative Council looking into the decommissioning of Victoria's oil and gas infrastructure, and we will be providing a report to the Parliament, including recommendations. Can everyone who is here today just ensure their mobile phones are switched to silent and minimise background noise, because we are recording and broadcasting.

I will begin by acknowledging that the hearing today is taking place on the lands of the Wurundjeri people, and I pay my respects to elders past and present and welcome any Aboriginal or Torres Strait Islander community members who are joining us today. I welcome members of the public who may be participating in the proceedings by observing in the gallery or watching online and remind anyone in the public gallery today to please be respectful of proceedings at all times.

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

As you can tell, all evidence is being recorded. You will be provided with a proof version of the transcript following the hearings, and those transcripts will ultimately be made public and presented on the committee website.

Now that I have said all that, welcome. My name is Ryan Batchelor. I am the Chair of the Environment and Planning Committee and a Member for the Southern Metropolitan Region. I might ask my colleagues to introduce themselves, going down the line this way.

Sheena WATT: Sheena Watt, Member for Northern Metropolitan Region.

Tom McINTOSH: Tom McIntosh, Member for Eastern Victoria Region.

Sarah MANSFIELD: Sarah Mansfield, Member for Western Victoria Region.

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

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

Wendy LOVELL: Wendy Lovell, Member for Northern Victoria Region.

The CHAIR: And online we have –

David ETTERS HANK: David Ettershank, Western Metropolitan Region.

The CHAIR: Wonderful. I will ask each of the witnesses if you could just introduce yourself and the name of the organisation you are appearing on behalf of for the Hansard record.

Danae BOSLER: Danae Bosler, Assistant Secretary of Victorian Trades Hall Council.

Aarin MOON: Aarin Moon, the Assistant Secretary of the Victorian branch of the Maritime Union of Australia.

Angie MOORE: Angie Moore, Maritime Union of Australia, offshore oil and gas decommissioning policy.

The CHAIR: Wonderful. This is pretty straightforward. We are going to invite you to make an opening statement, then we will ask you questions. Over to you.

Danae BOSLER: Thank you so much for inviting us to appear. We recognise the hard work that inquiries go through and the amount of time and effort it takes for all members of Parliament, so we thank you in advance for the enormous amount of work you do for us, particularly in this year, which is going to be a busy year.

I am just going to speak very, very briefly and then hand over to my friends here from the MUA. MUA is not the only union that is involved. There are a number of unions that are involved in our mighty oil and gas sector as well, and we are really excited to work across the board with them. There are so many jobs in this industry, and we are really excited about the possibility as well. The MUA is joined in the audience by two of its members, who are a diver and a seafarer. The engagement from the membership really is second to none, which we are really excited about as well.

I will take our submission as read of course and our recommendations all as read. The main thing I just want to say is we see this not just as an obligation but as an opportunity. It is union members that built some of Australia's first oil and gas infrastructure off the coast of Victoria. It has been there over 50 years. It is mighty union members that are doing the work every day out on those platforms, and it should be those workers who have that experience already, who are out there every day, who are best placed with the knowledge, the information and the expertise to work on the decommissioning as well. We see this as a huge opportunity and a job opportunity for Victoria. CSIRO gave numbers, which I am sure you have seen in many reports, of about 3500 across Australia. We think Victoria has got a good claim to take a fair chunk of those. We are boldly claiming that about a thousand of those jobs should come to Victoria if we have a proper decommissioning industry here on our coastline as well. The opportunities for the circular economy and for green steel are second to none as well, and we would like to see as much as possible those jobs stay here in Victoria and to keep this sector going in Victoria, because it has been a mighty sector over many years and we want it to do more.

Our other recommendations, just really quickly: of course the role that you play intersecting with the feds is a really important one as well, so to continue to advocate that we have the best possible – but I would say also clearest possible – legislation about the expectations and the obligations here for the full removal of any infrastructure at these sites too, making sure that it is not the taxpayers that might possibly pick up the bill at any point. For us it is part obligation, but out of obligation comes opportunity, and we would love to talk about the many, many jobs that are in this sector. Thank you so much. I will pass over to Aarin.

Aarin MOON: Thank you, Danae. At the risk of repeating what Danae has just said, there are a number of Victorian seafarers who built and constructed the offshore oil and gas infrastructure in the Bass Strait. Since then we have serviced it, and now we have the skills readily available to remove it and bring it ashore and recycle it here in Victoria, creating further opportunity for jobs in the state. Those seafarers would otherwise be out of work until such time as offshore wind or another industry may pick up, and so, in the interest of keeping our members employed but also doing what is the right thing for both the environment and the state both environmentally and economically, it is a great opportunity for Victoria to maintain those skills and further develop those skills as we move into a time when we are expecting seafaring skills to be at a shortage and the industry to boom. We have a number of recommendations in our submission that I will hand over to my colleague Angie to speak to. Thank you.

Angie MOORE: Thanks, Aarin and Danae. This is a very exciting moment for me because for the past four or five years I have been thinking about not much else than decommissioning. I also used to work in the industry. I was a seafarer for 20 years. I have worked in the Bass Strait and Gippsland, laying umbilicals, doing seismic surveys and also drilling exploratory wells, so I am well versed in this industry. For me, this point in time is certainly not the end of anything; it is a midpoint at best. From here we have got a complete downstream industry, and I would be probably even a bit bolder than Danae to say 'How many jobs are in this?' because despite a raft of reviews and studies, there has not been a complete economic modelling of exactly how many

jobs are in this for the regions and we are actually hoping to have something commissioned soon to help fill that gap.

However, I am just going to read out a little bit about the regulatory framework just to cover that off for everyone. How the government approaches this phase of its offshore energy cycle and the decisions being made now will shape how infrastructure is removed, where it is processed and who ultimately benefits from the economic activity associated with it. Victoria holds critical responsibilities for decom, including its role in the joint authority for offshore titles. The regulation of onshore facilities is, of course, with you as well, and ultimately how it is processed. So from our perspective, the central challenge is ensuring that these responsibilities are exercised in a coordinated and transparent way as the decommissioning activity increases.

There is a pressure point jurisdictionally. With the *Offshore Petroleum and Greenhouse Gas Storage Act*, there is decisive leverage for the Victorian Parliament over decommissioning. That means that you both have a direct voice in how this next phase unfolds. The regional development and economic opportunities or forgone opportunities will affect Victorian workers, ports and regional industries now and for generations. The first and I think most important thing that you can do is advocate strongly, using the joint authority powers, to the Commonwealth for policy settings that ensure Australia captures this value, and that includes clear expectations around full removal, domestic processing of materials and the development of local capability, and you can directly guide that through policy signalling. Second, it is planning for the onshore component of the decommissioning supply chain. This is where the real value lies for Victoria. Most of the economic activity associated with decommissioning occurs once the infrastructure reaches the shore, dismantling, recycling materials, handling and processing. And of course, the MUA will be happily representing those members in those fields as well. Thirdly, it is supporting the development of the industries that can grow out of this work. If managed, the large volumes of high-quality recovered resources could contribute to emerging circular industries and feed into Victoria's low-emissions metals sector.

We do need to determine a framework. Counterparts in Western Australia have decommissioning guidance and a policy framework. They have positioned themselves in a very intentional way to signal to the markets and investors that they are ready to get this done, remove everything, do it properly and monitor in perpetuity. I will leave it there and hand back to you, Chair.

The CHAIR: We will go to questions. I will start. You talked about the importance and the value of full removal of assets. What do you think the biggest barriers to achieving that are?

Angie MOORE: The law has said for a long time, both internationally and domestically, that full removal is the base case. There have been some loopholes and derogations open up, which we see as just not beneficial to the environment, to the workers and to future generations. What we are calling for are determined policy settings which hold to that base case. It is in five different pieces of law, so sticking to that should not be too hard. But I must say it is a battleground, not just on the Victorian coast but Australia wide. There is a preoccupation by industry to see how much can be left in the ocean.

The CHAIR: Where else in Australia is having this argument today?

Angie MOORE: Most jurisdictions, because, again, Australia is relatively new to the decommissioning world. It should not be. The North Sea in the UK started doing this about 15 years ago, intentionally scaling up their capability and removing everything. However, it was regulated in a less than ideal way in Australia. You will hear from NOPSEMA later today, and they will probably tell you that they did not even have any dedicated people working on decommissioning until prior to around 2018 and the *Northern Endeavour* debacle – which some of you are probably familiar with now – into this inquiry. So Australia has come kicking and screaming into the decommissioning industry, and I do not think that all levels of industry and government actually realise the opportunity that is here for us. It is seen as a cost minimising exercise. However, if we look at the multiplying effects – the community benefits, the economic stimulus, the regional development – it is all there for us to grab hold of, but we need to do it now, and there are a couple of reasons for that. The feds have a very ambitious decommissioning reform agenda – 26 and 27. On top of that, a vast amount of equipment needs to come out yesterday. Things are corroding to the point that they may not be able to be removed, and that is addressed in legislation too. However, there is a sense of urgency, Chair.

The CHAIR: For Victoria, is there a risk that if we do not get our domestic policy settings right the potential economic upside downstream from the decommissioning could go to another jurisdiction?

Angie MOORE: At the moment a lot of the scrap steel is being exported, so we cannot afford to let it go. The Australian Steel Institute are calling for a moratorium on all scrap exports, because our Australian ambitions for green steel are there and ready to go, but we need this scrap feedstock, and it is all sitting around our coasts. It is there ready to be taken, used and turned into green commodities. So yes, the opportunity is there, and yes, we can lose it if we do not act now.

The CHAIR: Just quickly, you mentioned modelling. You are about to do some modelling. Has anyone else done any economic modelling that you are aware of?

Angie MOORE: Yes, there has been. The literature review so far is quite extensive. KPMG did a study in 2023, and CSIRO have looked into it, and that is where we get the 3500 figure from. Also, there is a recent study by Xodus – that was a financial liability study just giving a bit of an update. The Department of Industry, Science and Resources commissioned that. However, there were a lot of baked-in assumptions which did not look at the big picture. What I am explaining here is that despite the raft of knowledge that we have on this, there is a huge gap. I have got on my laptop a draft UK study where it is quite comprehensive, exhaustive, and we are hoping to replicate that here in Australia. If you want to help with that, Chair, that would be great.

The CHAIR: We can see. I might just pause here. Dr Mansfield, do you want to ask a question?

Sarah MANSFIELD: Sure. Thanks so much for your submission and for appearing today. You have said a few times now that full removal should be the baseline and we should be aiming for that. We have had some discussions and information that suggest that some of the main companies – Esso, Woodside – are trying to make an argument that they need to do some environmental studies to see whether it is actually better from an environmental perspective to leave this infrastructure in. You get nice videos of fish and coral growing off undersea pipelines to help make the case. What is the problem with this approach from industry?

Angie MOORE: It would be great if the fish and the sea life did actually enjoy it and thrived, but I do not think the companies are doing this out of pure altruism, and they certainly did not set off in the industry to create better habitats for fish, I think that is fair to say. What we see is a lot of money being invested by these companies to go and do some environmental studies. However, only one side of the picture is being looked at. How much toxin and poisons can we possibly leave in the ocean? That is what is being studied at the moment, and you will hear more about that today, I believe. So when the law states that everything should come out and when we stand to benefit economically and socially from removing everything, it is just a very straightforward proposition.

Sarah MANSFIELD: In terms of fully removing it, you said that there is not necessarily the financial incentive to do it. In your submission you have pointed out the need for perhaps stronger regulation or stronger settings around the financial obligations of these companies with respect to decommissioning. Can you explain what you would like to see there?

Angie MOORE: The federal law – and the state also – does provide for financial assurances. It has not been regulated that way. NOPSEMA, for example, require pretty good financial assurances for spills, so unplanned liabilities. However, they do not have the same stringent test for planned liabilities such as decommissioning. Actually, there is a case on foot at the moment regarding that, so we will have some clarity soon. However, the law provides for it. It is not being regulated that way. So that is a huge risk for the public purse, really, and future liabilities. Whatever is left there is an ongoing liability; it is not a set-and-forget. These things need to be monitored indeed to see if they are leaching into the receiving environment, and then they have to be cleaned up. And once that title is handed back, it is then the taxpayer, the government, the public purse that has to fork out for that. There is a principle around ‘The polluter should pay.’ We firmly believe that. As far as the settings go and the policy framework, the joint authority can actually say, ‘We’re not going to have that title surrendered back to the state until everything’s cleaned up and remediated.’ So that is a very straightforward and simple thing that can happen. It is also going to provide confidence. Again, it is a market signal for the investors to say, ‘We’ve got this huge feedstock coming ashore, so we’re going to invest in the workforce. We’re going to raise capabilities and invest in processing.’ So it is all there.

Visual presentation.

Angie MOORE: On the screen, committee, is the *Northern Endeavour*. It is certainly not on the Bass Strait; it was in the Timor Sea. However, the company that brought you this hot mess is the same company that has a lot of assets in the Bass Strait – and that is Woodside. Woodside and Esso have a joint venture in the vast majority of the assets that need to be cleaned up in the Bass Strait. This is why we need those financial assurances locked in, so assets cannot be sold to the cheapest bidder. I see some nods here, so I think many of you are across that.

The CHAIR: Ms Bath, did you want to –

Melina BATH: Thank you very much. This is fascinating. Being close to Port Anthony and Barry Beach, this is a really important topic for me and I appreciate it. I have got a hundred questions, but if I can start with jobs, jobs, jobs and jobs, could you go through some of the opportunities that are there? Also, we are making recommendations to state government. What are our recommendations to state government to support those jobs? What does that look like?

Angie MOORE: I can speak to that, but –

Aarin MOON: I think Danae should –

Danae BOSLER: I will go first really, really quickly just to say – I think it is on the second-last page of our report – we have listed out a whole plethora of jobs from engineers through to logistics and shipping. What I would suggest that the state government has the capacity to influence there is actively putting through a recommendation that Victoria actually looks to setting up a decommissioning hub. We put in place state policy, legislation and guidance practices to help with setting up a decommissioning hub and what they look like. And the second component of that, which I think we have a critical role to play here in supporting the industry, is skills and training. Skills and training are absolutely the remit of the state government, so you would have a huge lever that you can pull there around skills and training as well too. I would say that the workers in the sector already are incredibly skilled and trained and just need a little bit of fine-tuning around the edges. But also we want this to be an ongoing industry. Many of them have worked on the oil and gas rigs for 35-plus years, so we want to make sure that is not a generational loss of knowledge, so we are bringing in the next generation of workers to the sector as well too. But I will pass back over. I cannot compete with Angie.

Aarin MOON: Thank you.

Melina BATH: You did a very good job there.

Aarin MOON: From the MUA's perspective, the ongoing training and development of seafaring skills – there is an opportunity for the state government to utilise these projects to get the experience we need to maintain those skills into the future. So it is a skills and training issue from the state government.

Melina BATH: Where is that done now? I know there is a bit in East Gippsland, but where is it done well now?

Aarin MOON: Tasmania.

Melina BATH: So we need to look at courses here.

Aarin MOON: We need to develop that pipeline here in Victoria, which is something that should be a recommendation to the state government from this committee.

Melina BATH: Thank you. Sorry, Angie, can I direct another question, noting my short time: recycling is music to my ears; circular economy is music to my ears. You have spoken about, and a decommissioning hub I think would have influence in there as well. What do we need – government policies, government regulations? Talk more about that recycling component.

Angie MOORE: I think it is fair to say that what is happening right now in practice is that material is coming ashore. It is more expensive to process it than it is to dump it on a barge and send it to Bangladesh or India, and that is a real shame. So what we should do here is process it locally, transport it locally, send it to Laverton electric arc furnace, turn it into a green commodity – reo bar – and go and use it again. The multiplying factor on that is huge, and this is where we are going to see the real benefits.

Melina BATH: You said amend the *Circular Economy (Waste Reduction and Recycling) Act*. That is a component of that to facilitate that? I am not familiar with that to a great degree. Have you got a snapshot on what could be done in that space?

Angie MOORE: That is a reference to federal waste and recycling. Nowhere in that legislation is any mention of industrial-scale decommissioning of oil and gas infrastructure. It is mostly domestic businesses and household waste. What a missed opportunity.

Melina BATH: Expand.

Angie MOORE: Yes.

Melina BATH: So this being a federal government Act, we need to make recommendations to government – to the feds – from this inquiry.

Angie MOORE: Absolutely. You have huge power and a voice to advocate for this, so I think standing back and being I guess a bystander in this – it is not an option. Actually being involved, leaning into it, coming to the table and speaking up for your constituents and the future of the state – you have got everything to gain, and you can show real leadership in this space.

The CHAIR: Thanks. Mr McIntosh.

Tom McINTOSH: Thank you. I just want to flow on from the comments. It is 50 years this investment has gone into Gippsland and Victoria. I just want to start off on the community side of things. We see there has been investment in community infrastructure, leaving aside the infrastructure in the ocean, but through those jobs, through well-paying jobs, and for the families around Gippsland – I hear a lot regularly about what that has meant. As we have heard in evidence so far, there is a decline in oil and gas is on the decline – so those job losses. So how important is this to the local economy and to those local towns, all the way from Sale, Yarram, Toora, Foster, Leongatha? And then the recycling component: if that some of that recycling goes into the valley, how important do you think that is for those local communities?

Danae BOSLER: I am happy to take that. We have got someone in the chamber who lives down there as well, who is one of the union members as well. We can and we know that we need to be distributing our industrial capital, like large warehouses and factories and that, into regional areas as well, because there is a huge amount of experience and knowledge in those areas. In Gippsland, I would say, hundreds of union members have lived down there and have delivered power to our entire city, power to our entire state as well. We have an obligation down there to keep jobs there and return jobs there. But not just that, I actually think and we are always arguing that we need more jobs there. We need to be building industries for the future for the next 50 years down in Gippsland as well to make sure that we have got a pipeline of jobs down there. It is a community that is crying out for it. It is a community that already has that experience as well, and we need to make sure that we absolutely do not abandon Gippsland in any kind of transition. The broader conversation about a just transition is making sure that we keep the jobs down there because there is already the knowledge and the experience in Gippsland, and we owe it to Gippsland. They have powered our state for many, many, many decades.

Tom McINTOSH: Has there been any work done around – we have seen in recent decades when, whether it is government or private industry stepping away from training the next generation, we all pay for it down the track when there is a shortage of skilled workforce. Again, coming back to this potential gap and maintaining this workforce through this period, what is the potential economic cost to Victoria in allowing this gap to occur in all these different trades and skilled areas and having even a five-year gap in workforce? Because once you lose them, particularly to the region, with offshore wind coming – that is why I started with this community element. People have homes, there are families. It is a whole workforce and community ecosystem, and once you pull that out, it is very hard to bring it back in. I just wonder if you could elaborate on that.

Danae BOSLER: The other thing I was going to add – and I will go to you guys if there is anything more to add – is the tripartite model needs to be brought back. When it operates well, it just delivers great outcomes. So government, industry, workforce – that tripartite model of doing the skills and knowledge assessment of the knowledge gap. But, as you said, workers are not going to wait round for a job in five years, even if it is a guaranteed job in five years. Workers cannot do that. Workers are not going to wait around, and the seafarers

already are pretty used to a transient life and moving around too, so workers in this industry will absolutely go to wherever the jobs are next. Once you lose workers out of a regional area, it is incredibly challenging to bring them back to the sector as well, and it just creates the cut-off that I was referring to beforehand between the knowledge and the skills. They just leave the sector, and it does not pass down through to the next generation, because these are generational workers as well, as we know.

Tom McINTOSH: Yes, okay. Thanks, Chair.

The CHAIR: There you go. Mr Ettershank.

David ETTERS HANK: Firstly, thank you very much for your submissions. I think we hear lots of people with problems and often not people with answers, let alone really well thought through tick-so-many-boxes-type approaches. So my congratulations to Trades Hall and the MUA on that. It is fantastic. Could I pick up perhaps a side issue first briefly. In terms of Woodside and the decommissioning, is there a default setting, for want of a better term, for foreign flag vessels and crews?

Aarin MOON: The vessels are often foreign flagged, but for the most part we have got a number of Australian members on those vessels. We try and ensure that any vessel that is going to be in our waters for an extended period of time certainly has an Australian complement. The vessel remains flagged in an alternate state, though.

Angie MOORE: Would you like me to supplement that?

Aarin MOON: Yes. Ange might supplement.

Angie MOORE: Yes, that is right, Aarin. Once these ships and vessels are working on the coast, generally there is a large percentage of the crew who have to be Australian. We have a skilled worker shortage, and historically companies in oil and gas do not tend to reinvest in that training pipeline. We see them draw a lot from the workforce but not return. So that is something that we are keeping a close eye on as well and would like to see develop a bit further in that tripartism and goodwill come into it. So we are going to see an influx of workers. We want them to be Australian or live in Australia, and we are willing to do it. We are chomping at the bit to do it, so the opportunity is there.

David ETTERS HANK: Right. Can I ask: in terms of the big ongoing and emerging offshore wind power industry, could you elaborate a little bit for the committee on the symmetries between this project and the establishment, servicing and ongoing work associated with wind power?

Angie MOORE: That is a great point, and I was hoping to bring it up, so thank you for that segue. The overlap with these two industries – the magnitude is huge. We need the same lay-down areas, the same port facilities, the same workforce and mostly the same vessels. Actually we were hoping that Esso and Woodside would crack the whip a little bit and get on with this a bit earlier, because what we are going to see now is a bit of a clash for resources. They are only finite and it is all happening at once, and so more coordination and consideration are needed around here to get it done properly, safely and cleanly. But the overlap is significant.

David ETTERS HANK: I guess from the committee's point of view, if we are moving forward with these sorts of concepts – and I think clearly you have excited everyone with the scope of the vision here – apart from the fact that we will obviously report and make recommendations, I am interested to know what you would see as the key thread to try and pull this together at a state level that the committee should be contemplating.

Angie MOORE: What needs to happen is concerted coordination and acknowledgement of the scale and understanding what needs to happen so you can concentrate the efforts, even if it is a taskforce within government that takes this forward and acts as a coordinating body, because decommissioning is a whole-of-government activity. It is across many portfolios – the skills, the environment, the resources. We need to act in a coordinated, concerted way, and so that would be my hot tip to get moving for the committee.

Danae BOSLER: The only thing I would add there, Mr Ettershank, and I think I referenced it in my response to Ms Bath: I am really going to bang on – it is also a love of mine – about recycling and the circular economy. The opportunities for tripling the size of our circular economy in Victoria and the potential really are huge, and a decommissioning hub in a regional area would just be an absolute driver for that as well. The

Victorian government has levers over that in so many ways, and skills and training are a secondary lever as well. But there is the opportunity for you guys to use the levers that you have to influence industry support. There are going to be levers that need to be pulled at a federal level to meet obligations, but the opportunity levers around supporting industry to establish a decommissioning hub are where the Victorian government – I would almost say you guys have even the nicer part. You have got the funner bit, which is supporting industry to set up a sector down here as well. We have put it into previous submissions, and I will be so bold as to say it here, that the government actually consider establishing their own, or working with local government or having some kind of publicly owned recycling sector to get the sector going. We are not opposed to that. I think we have put that into a different submission in the past.

David ETTERS HANK: The committee always loves having the fun bits. Thank you. Thank you, Chair.

The CHAIR: Thanks, Mr Ettershank. Ms Lovell.

Wendy LOVELL: Thanks very much. It was very interesting, your submission. Nobody likes to have costs, whether it is big companies, whether it is government or whether it is individuals. We are getting a lot of the rhetoric around ‘We’d leave some there; it creates reefs’ et cetera. But also there is rhetoric around OH&S issues. At what point does it become an OH&S issue to pursue full decommissioning?

Angie MOORE: The *Offshore Petroleum and Greenhouse Gas Storage Act* actually stipulates that monitoring and maintaining these assets must be undertaken so as not to preclude decommissioning. It is law, and so if companies are indeed running down assets deliberately, not running these maintenance campaigns, then they are in contravention of that law. What we do see, though – and anyone here can go onto the publicly available NOPSEMA site – are all of the general directions, all of the safety alerts and all of the prohibition notices. It is an absolute litany, and it actually terrifies me. What we do know is that decommissioning is one of the most dangerous, hazardous things that you can do, full stop. That does not mean it cannot be done safely. It just may take a little bit more time, consideration, effort and sometimes money, but it is a cost of actually operating an offshore oil and gas facility. Companies actually had to have a plan in their head and have some finances put aside to get approval to start in the first place, so we cannot accept the complaints of ‘It’s too hard and it’s too costly’, because there was never an occasion for that.

Aarin MOON: I think it is important to note that there was an OH&S risk to assemble the facilities and the projects, and that was managed and done by having highly trained seafarers and other workers complete that. As long as we maintain the skills and experience that our seafarers have, it can be disassembled and decommissioned in a safe way that should not be prohibitive.

Wendy LOVELL: When you talk about full decommissioning, do you mean absolutely everything or only to a depth?

Angie MOORE: To the sea floor.

Wendy LOVELL: To the sea floor, so not anything beyond that.

Angie MOORE: Yes. There is a point where it can actually be more detrimental. I am not qualified to comment on where that point is, but the legislation certainly does stipulate to the sea floor.

Wendy LOVELL: Just one last thing: poor old Gippsland has had its fair share of knocks with the closure of the coal-fired energy plants, the closure of the forestry industry and now the loss of the offshore drilling jobs beyond decommissioning. Where do you see people who are skilled in this area working?

Angie MOORE: Offshore wind.

Wendy LOVELL: You mentioned that before, yes.

Angie MOORE: I think it is a natural overlap. But also in maritime more generally. There is a lot we can be doing in this space. The coastal trading Act is being overhauled at the moment, so hopefully we are going to see more sovereign capability in this space, and MUA members are there ready to go.

Wendy LOVELL: Thank you.

The CHAIR: Thank you. Ms Watt.

Sheena WATT: Thank you for appearing today and for your very thoughtful and considered submission. I want to go to a couple of points about the financial assurances that you spoke to earlier – I believe it was you, Angie – because your submission urged that the government consider ensuring that operators provide adequate financial assurance for decommissioning costs, because only the unexpected costs are currently covered.

Angie MOORE: That is right.

Sheena WATT: Do you consider the current arrangements really sufficient for the scale of infrastructure that we are talking about? I see some of the photos that you have presented here show just how significant the scale of the infrastructure is.

Angie MOORE: Thank you for your question. No, it is evidenced not to be sufficient. Companies have accounting standards and reporting to their shareholders, and what we are seeing time and time again – Woodside, for example – is their assumptions are not fitting the actual bill. It is a recurring theme throughout. It does not matter which company it is really, but we are seeing it time and time again. Really the only fair way to counter that is to have a bonding regime and have those financial assurances in a form that is accessible to government and ready when you need it. Those are some of the things that we have been recommending. Obviously we are not economists, but we do listen to the experts in this field.

Sheena WATT: We certainly recently discovered that in our legislation around mining, mines, trailing liability schemes and others. We are very much interested in making sure that ultimately the state does not foot the bill for the decommissioning, so any recommendations around that are certainly appreciated.

Angie MOORE: Absolutely. To that point, as a little case study, we looked at the Northern Territory onshore orphan wells. They are doing some things right, but one of the things they found was records are hard to keep. They could not find some wells, and of course the financial assurances were not there. So take that and then submerge it 80 metres underwater, because that is what we are dealing with here.

Sheena WATT: That is what I was going to go to, that question about data collection. What do you see in some of the gaps in data collection? What can we do? Who is doing it really well, and where should we be looking? Because if onshore are not getting it right here in Australia on the mainland, it is fair to assume that perhaps offshore is similarly inclined.

Angie MOORE: Absolutely. It is a little bit more complicated when it is underwater. A really good example is in the North Sea. The North Sea Transition Authority have an interface, if you would, where anyone in the public can look up where a project is at and if they have financial assurances, and that speaks to accountability as well. Companies are more likely to do the right thing when they are being watched. That is just how it is.

Also we have been having discussions with the federal decommissioning directorate to that point, and they are very keen on looking into that further. From the Centre of Decommissioning Australia, Francis Norman came and spoke to you at an earlier hearing. They have actually gathered a huge, like, dashboard of all of this. It is publicly available information. However, for the layperson it is impossible to find. It is even difficult for me to go and look at some of this data. So just translating that into a form that is more accessible I think will be a win-win for everyone.

Sheena WATT: Thank you. That is my time, Chair.

The CHAIR: Ms Tyrrell.

Rikkie-Lee TYRRELL: Okay. Thank you. Early in your delivery there you were going on about doing, or undergoing, a complete economic modelling. I am really curious: how much does that cost?

Angie MOORE: We are still waiting on the quote. However, I can tell you what the UK version cost: it was \$150,000 Australian. A lot of the data exists already, so I do not assume that it would be that much. However, that is a benchmark.

Rikkie-Lee TYRRELL: It is really good to hear.

Angie MOORE: It is not that much, is it? It is right on the scale. I mean, I do not have it in my pocket. However, we stand to gain once we have that information; it is sorely needed. Hopefully we can get a few other stakeholders to chip in, such as maybe the Victorian Parliament.

Rikkie-Lee TYRRELL: Beautiful. Speaking of the UK, do you think Australia or even Victoria has paid enough attention, and do you think we should liaise with the UK on getting a lot more advice?

Angie MOORE: The good thing here is that the feds are doing that already. They have an MOU. I think that diligence needs to be taken and a level of wariness. We want the good things. We want to cherrypick the good things, right? Not so much the –

Rikkie-Lee TYRRELL: It is also to learn from their mistakes as well –

Angie MOORE: Yes. Absolutely.

Rikkie-Lee TYRRELL: so we do not make them.

Angie MOORE: It is happening, but we can always have more of it.

Rikkie-Lee TYRRELL: Okay. Beautiful. My final question – sorry, I am flying through these real quick. With the emerging circular industries that you mentioned – we have touched on a couple – are there any more that you would like to elaborate on so we can potentially learn that we need to nurture them?

Angie MOORE: Well, look, I think the main one that needs attention is the green steel – making sure we capture the value and keep the steel here instead of exporting it. Okay, in the short term, until we reach economies of scale, it might be more of a cost to actually break things down here. However, if we can step back and look at the bigger picture – let us invest in the skills and the people to do it. You know, let us do it safely and properly. So yes, to answer your question, that is just the most straightforward, easiest, biggest way that we can capture that value in a circular economy. The steel pile jackets that are out there can come ashore, get processed, turned into a green commodity and become part of the building materials for the future.

Rikkie-Lee TYRRELL: That is it. Thank you. Melina may have a question –

The CHAIR: We are running late, but I will give you a minute.

Melina BATH: Just on that, it is a conundrum, because you can send it off overseas. Labour is cheaper overseas – well, potentially; who knows about energy? But the input costs can be less. So we have got to get to a point where the state – the government – and industry are wearing a burden for a short period of time, however long that is. I did a quick bit of a read – I think in your submission potentially – about some of the inputs that you need for recycling into green steel. Hydrogen is one. Electricity – we are going to cut things up, and we need a lot of energy to do that. There is that tension, isn't there? Has Trades Hall or the maritime union done some thinking around this? I would be really interested to understand that further.

Angie MOORE: There are pros and cons. It is a more efficient way to produce steel than from scratch, so it is less emissions-intensive. Yes, there will be transport costs, actual processing costs and carbon emissions from that. However, what does it take to ship that to Bangladesh?

Melina BATH: The overall balance potentially will weigh in favour.

Angie MOORE: Can I just go back to the *Northern Endeavour*? That is on its way to Denmark at the moment. I think that even Victoria stands to capture some of that processing from WA. Do not tell the WA counterparts I said that, but you are here. It is all set up, so why not? Why can't Victoria process WA's scrap offshore oil and gas decommissioned steel? It is a lot closer than Bangladesh or Denmark.

The CHAIR: Last comment.

Danae BOSLER: Sorry, Chair. I will be really quick. The only comment I was going to make is it is not like Woodside and Esso are local small businesses. I think any associated cost burden is one that they can bear. But I just want to add to the point you made that Victoria was the manufacturing hub of Australia, and it was in part because of our outstanding electricity prices. It was Gippsland that powered the manufacturing powerhouse that

we were. Trades Hall will bang on till the cows come home about making sure that we have safe, cheap – I might even use that word, not just affordable – electricity in this state. We absolutely need to be pushing gangbusters for large-scale renewable sites as much as we can. We need to plan the energy transition, which is what we are doing right now, so that manufacturing has access to affordable electricity. It is critical.

The CHAIR: We have reached the end of this session. Thank you, Angie, Aarin and Danae, for coming in today. You will be provided with a draft copy of the transcript to review in the next week.

With that we will take a short break and reset for the next witness.

Witnesses withdrew.