

# TRANSCRIPT

## LEGISLATIVE ASSEMBLY ECONOMY AND INFRASTRUCTURE COMMITTEE

### **Inquiry into Victorian universities' investment in skills**

Melbourne—Thursday, 16 June 2022

#### **MEMBERS**

Mr John Eren—Chair

Mr Gary Blackwood—Deputy Chair

Ms Juliana Addison

Ms Christine Couzens

Ms Steph Ryan

Ms Kat Theophanous

Mr Nick Wakeling

#### **WITNESS** *(via videoconference)*

Dr Anita Talberg, Director, Workforce Development, Clean Energy Council.

**The CHAIR:** Welcome to the public hearings for the Legislative Assembly Economy and Infrastructure Committee's Inquiry into Victorian universities' investment in skills. All mobile telephones should now be turned to silent.

All evidence taken by this Committee is protected by parliamentary privilege. Therefore you are protected against any action for what you say here today, but if you repeat the same things outside this hearing, including on social media, those comments may not be protected by this privilege.

All evidence given today is being recorded by Hansard. You will be provided with a proof version of the transcript for you to check. Verified transcripts, PowerPoint presentations and handouts will be placed on the Committee's website as soon as possible. Could I please remind members and witnesses to mute their microphones when not speaking, to minimise interference.

Anita, I invite you to make a brief opening statement, and we will follow that with some questions. Thank you very much for being with us this afternoon.

**Dr TALBERG:** Thanks very much, Chair. Let me please apologise to start with; I have got a flu, so my brain is a little bit fuzzy at the moment. I may have to take some questions on notice, so apologies in advance. I will make a very brief opening statement.

The Clean Energy Council in 2020 ran the first ever comprehensive study of the clean energy workforce in Australia. We found that the workforce was around 25,000 strong—we estimate that now to be around 30,000—and 30 per cent of that workforce is in Victoria. Around a third of that workforce has come from a higher education pathway, so is classified as professional or managerial. Last year we ran a survey of our membership to understand more the demography—so to understand the diversity of our workforce and their social and professional identities—and as part of that survey we asked about educational background. What we found was that the clean energy workforce is highly skilled and highly educated. It has got a higher percentage of bachelors and post-grad work than the general workforce across Australia, and I guess that is not surprising given it is an innovative and technology-driven sector and has high stakes in terms of safety and the importance of this essential service. As I understand it, the point of this Inquiry is really to understand how Victorian universities can better interact with industry to ensure that we have the workforce that we need now and into the next 10, 15 years. Anecdotal conversations with our membership through some of our directorates and working groups suggest that there is a disconnect between what we see coming out of universities and what industries need, particularly at the moment as we are facing this real skills crunch. It is really difficult, particularly for engineers and highly skilled electricians to be found by our employers. That disconnect is not just in the numbers—so the actual numbers of graduates coming out of the system—but also in how they are equipped to enter the workforce, so what skills, education and knowledge they are coming in with. Unsurprising in a tight labour market our employers are more willing to be a little bit broader in how they recruit so they are happy to look at diverse skills and to do some training themselves to ensure that they get the right people. The difficulty is that we have such tight profit margins in this sector that once you start investing heavily in these education frameworks it does obviously lead to higher project costs across electricity.

Some of the solutions that have been investigated across the industry are ones that you would have seen in all of the submissions to this, so things around work-integrated learning, around internships and particularly around strategic graduate programs. Where our members are not able to run graduate programs themselves because they do not have that capacity in house, we potentially as the CEC could facilitate that across the industry, and that is something that we are looking at exploring at the moment, particularly in collaboration with AEMO, the Australian Energy Market Operator. One of the areas where we still see a real skills problem is around grid connection engineers. There is a limited number of them in Australia. We see members poaching them from each other, which is driving up obviously their salaries. But we need a higher supply of them into the system and a lot of those workers will at some stage interact with AEMO, and so it is useful for them to be involved in that solution. I will leave it at that, but please feel free to explore any of those issues.

**The CHAIR:** Thank you very much. Thanks, Anita. I might throw to Gary for the first question. Gary?

**Mr BLACKWOOD:** Thanks, John, and thanks, Anita. In terms of your workforce needs, how well are Victorian universities currently meeting the workforce needs of the clean energy sector?

**Dr TALBERG:** The workforce needs of the clean energy sector cannot be defined by one discipline or one category. Obviously it is an entire ecosystem, an entire business, so we have a lot of engineers and specialised power systems engineers, but we also have experts across legal fields, finance fields and energy trading, environmental scientists, community liaison et cetera—so there are strengths and weaknesses. I think across Australia, this is not just in Victoria, we do have a shortage of those skills needed, so why would you lecture at a university when you can earn a lot more money being a power systems engineer is a perennial issue. There is a need to invest and to re-examine the incentives I suppose for those lecturers to be in the system and to help produce those graduates. Does this go to answering your question?

**Mr BLACKWOOD:** Yes, that is great. Just in terms of the current or anticipated unmet skills needs in your sector, can you just broaden out a bit more in terms of what they may be?

**Dr TALBERG:** Sorry, so you mean the specific shortages that we are facing?

**Mr BLACKWOOD:** Yes. The shortages in the skills that you need.

**Dr TALBERG:** It is very much around those technical skills. I mentioned grid connection engineers, but we are seeing it across power systems engineering and broader engineering so SCADA engineers, reliability engineers. What we see in the data is that whether you graduate as an electrical engineer or a mechanical engineer or a civil engineer, you are just as likely to land in a job in any of those disciplines, so we are not seeing direct pathways from a degree in electrical engineering into a job in electrical engineering. There is more mobility across those disciplines, but we are seeing shortages generally across engineering. I think the generally low number of STEM graduates in Australia is the background to that. So that is a specific area. I know that in transmission we have not built transmission in Victoria for 30 years, so that is an area where we really are looking at needing skills, and particularly as we look to ensure that we have the social licence to build that transmission around those community liaisons—so those people managers that can be out there in communities ensuring that there is strong communication with regional Victorians and the provider of those transmission services.

**Mr BLACKWOOD:** That is great. Thanks, Anita.

**The CHAIR:** Thank you. Chris, did you want to ask a question?

**Ms COUZENS:** Yes. Thanks, Chair. Thanks, Anita, for your time today. We really appreciate your contribution, and particularly because you are not well, so thank you. The Victorian Government has funded the development of a clean economy workforce development strategy. What has been your sector's involvement in developing that strategy, and what are the main outcomes your sector would like to see from the strategy?

**Dr TALBERG:** Our involvement is that I sit on the Clean Economy Skills and Jobs Taskforce and have been an active contributor in that process, engaging with both the Victorian Skills Authority and also the Department of Education and Training in that work. I think it is a really positive development. I am really glad that it is happening. I think what is really important in this instance is to take that statewide view and to have a place-based approach at the same time. So what I mean there is that not every education or training institution can be delivering all the skills. We need to be strategic about the economies of scale, so having cohorts that are big enough to support that business teaching that stream but at the same time ensuring that the education that is being provided actually aligns with what is needed in those places. So what we would like to see from that is, as I just described, a strategic plan for how we are actually going to meet not just the skills that we can see are needed now but as we have emerging technology around electric vehicles, offshore wind and hydrogen to really know that we are going to have the supply. I think what might be missing from that process, which I am seeing across other states as well, is the need to actually talk to the other states. We are talking about a limited resource. We are talking about the same workers working across Queensland, New South Wales and Victoria, so if we do it blindly without looking at what is happening in those other states, we are just going to be stealing talented skills across borders back and forth.

**Ms COUZENS:** Great. Thank you.

**The CHAIR:** Juliana, do you have a question?

**Ms ADDISON:** Yes, I do, Chair. Thank you very much, Anita, for being with us today. A number of submissions that have been made to this Inquiry have called for more internships and work placements to be included in university curricula. To what extent is work-integrated learning currently included as part of the university courses relevant to the clean energy sector, and what opportunities are there for improvement?

**Dr TALBERG:** This is an area that we are keen to explore a lot further. I have expanded my team at the Clean Energy Council to focus exactly on this area because I think it is really important, but it means that I only have a small part of the answer for you at this stage—apologies. Work-integrated learning and internships are key to maintaining that contact between the employer and the education systems, and with that contact obviously you have a better connection between what is coming out of the system and who is being employed. The problem is actually making it work for businesses, because it goes above and beyond what they need to do in their business as usual. We have seen some examples of it working. Particularly in the dual-sector universities, where you do have that VET presence but also university, you can look at pathways between them and you can see a closer connection between actually graduating and going straight into a job, because there is that occupational component to it or that applied component to it. But we do want to do a lot more of this. What we are hoping to instigate through some of the extra work that we want to do in the Clean Energy Council is to try to have these conversations across several universities and across several employers and try to understand the best way that we can do this across the industry. As I noted previously, not every employer has the capacity to offer work-integrated learning or to offer the placements every year, for example. So is there a way that we could coordinate that, particularly as well with our lens on diversity? We are trying to build a more inclusive workforce. Our study last year showed that we could do a lot better in gender balance, we could do a lot better in Indigenous engagement, and actually the youth cohort—so the under-30s—we could do a lot better in. So we will be focusing on those areas and then, where we can use those mechanisms, build a stronger rapport, a stronger connection between industry and the higher education institutions.

**The CHAIR:** Very good. I might finish off with one question. Obviously worldwide there is a real race to have a clean energy sector and industry that leads the way, and we see with President Biden, for example, the super economies of the world are really targeting this. And there is limited opportunity for us, I suppose, as a continent with a small population but lots of natural resources obviously to maximise this. I know that the Victorian Government established the Clean Economy Workforce Capacity Building Fund, creating opportunities for partnerships between the vocational education and training sector and industry to support the economy's decarbonisation. I seek your views on the benefits of the fund and any suggestions for improvement.

**Dr TALBERG:** The fund was a really good contribution and is needed. Obviously we will always say that more money would be good. I think some of the issues might have been around the timing of the fund. I understand that there were some delays in actually getting it through in subsequent budgets, and that may have affected the input that the task force that I sit on actually had into that process. So it would have been nice, potentially, for that to have worked out a bit better. On the vocational side, that is where most of the workforce actually is, so in that construction period—so for a solar farm up to a year, for a wind farm up to, say, a year and a half and as we start looking at offshore wind and the Marinus Link, so large transmission—we are going to be talking about huge numbers of construction workforce, so trades in the electrical, mechanical and civil areas. We need a much stronger injection into those registered training organisations, the TAFEs and private RTOs, that can actually meet that training demand that will be required through VET. So I think the fund is a really good start. I think there is going to be a need for more of that if we are going to be able to supply those workers. I will also note that the Department of Environment, Land, Water and Planning has commissioned some research that I have not seen—it has not been released and it is not yet public, I understand, but I believe it is completed—that actually goes a long way to laying out that workforce need in clean energy specifically over the next 10 years. I think it is clean energy, it may be clean economy. I think part of the solution may be having centres of excellence that specialise in certain areas around Victoria to ensure that we can get those numbers up.

**The CHAIR:** Very good. Thank you for that, Anita. Any further questions?

**Mr BLACKWOOD:** Yes. I have got one about upskilling and reskilling, Anita. I mean, you have emphasised the importance of worker upskilling and reskilling, especially in today's environment. So to what extent is the need to upskill and re-skill workers an issue in your sector?

**Dr TALBERG:** I would also add to upskilling and reskilling cross-skilling. I think that all three are really, really important, and the cross-skilling component comes particularly with that focus on the Gippsland region, where we would really like to see a lot of those skills that exist in that region be utilised in the clean economy. So it is very important on all three of those. What I have been advocating for that would really help in this regard is a system that is already in place in Victoria for transmission. So there is a system called VESI, which is the Victorian Electricity Supply Industry. The transmission and distribution networks have gotten together and put together a matrix of minimum skills needed for different occupations. That allows a worker to upskill, cross-skill or re-skill depending on where they want to move because there is perfect visibility and harmony across those different employers in the sector. If we could look at doing something like that across the broader clean economy, it would empower those registered training organisations to offer the right training at the right time in different regions. It would allow workers to move from one job to another with different employers because there is that consistency, so they can look at a career rather than a year's construction on a solar farm, for example. And it would also allow those employers in the region to put in place safety measures that are industry wide and raise the bar on those safety measures because we are accepting them across the board. So I think in terms of reskilling, upskilling and cross-skilling, if we did a bit of work in that visibility and transparency around the needs, it would actually go a long way to connecting the training to the actual industry demands.

**Mr BLACKWOOD:** How can the Victorian Government support you in that process that you just outlined?

**Dr TALBERG:** I think it is very simply a funding question. It is really being able to bring all of the developers and the EPC—engineering, procurement and construction—entities together at the table and saying, 'Is there appetite to do this? This is what would be required' and to just have very simply a chunk of funding to actually get that work through with buy-in from each of those players. You could focus it, for example, in that Gippsland region and use that as a pilot area to do it. What would be important would be to make sure that all the players that are active in that space—so the Latrobe Valley Authority, all of the job placement bodies in that space—were all contributing and inputting into that so that they were all part of the solution rather than being sidelined by the solution.

**Mr BLACKWOOD:** I am really pleased you are mentioning Gippsland because I am sitting in Gippsland at the moment, Anita. In terms of working with the universities to upskill and re-skill, have you got a direct line with the universities, a direct contact with them to help improve the upskilling, reskilling and cross-skilling?

**Dr TALBERG:** We have to some of the universities who are among our membership. Some of the Victorian universities are members of the Clean Energy Council and some of the dual-sector universities provide the training to our accreditation, the Clean Energy Council's rooftop solar system design accreditation, so we have good connections with those universities. I personally, having come from the University of Melbourne previous to this role, have a number of contacts, but what we are looking to establish at this stage is somewhat of a round table or a conversation that cuts across. In that regard we are very open at this stage to how that would happen—we are just looking at the easiest way. The difficulty that I have found in navigating universities is you never know who the person to speak to is: is it the head of the faculty, is it the head of the school, is it the chancellery, is it the pro VC? It will be different in every university.

**Mr BLACKWOOD:** Okay, thank you very much, Anita.

**The CHAIR:** Thank you, Anita, and I thank your organisation for being a part of this. It was a very valuable contribution that you have made today and through your submission, so again thank you very much on behalf of the Committee.

**Dr TALBERG:** Thanks for having me.

**Committee adjourned.**