

Clean Energy Workforce Secretariat
Jobs and Skills Australia
Department of Employment and Workplace Relations
GPO Box 9828
Canberra ACT 2601

Via email

16 January 2023

To whom it may concern,

Re: Clean Energy Capacity Study draft Terms of Reference

The Energy Efficiency Council (EEC) welcomes Jobs and Skills Australia's (JSA) invitation for feedback on the draft Terms of Reference for the Clean Energy Capacity Study (the 'Capacity Study'). The EEC, as Australia's industry association for energy management, energy efficiency and demand response, is committed to ensuring that energy upgrades are implemented with excellence and accountability.

In pursuit of this, the EEC co-lead on the development of the [RACE for 2030 Cooperative Research Centre's Developing the future energy workforce opportunity assessment](#). The report was developed with wide stakeholder input from across industry and government, and described a pathway to understanding the present and future energy workforce in Australia by laying out a research pathway to mapping the energy sector workforce, skills and training landscape, and innovation pathways.

Since the report's release in 2021, the EEC has worked closely on:

- The development of the Australian Energy Employment Report (AEER), which was recommended in the *Developing the future energy workforce* report, with the Department of Climate Change, Energy, the Environment and Water (DCCEEW);
- Mapping the roles, skills and associated professional development pathways for individuals involved in implementing energy upgrades in commercial and residential buildings, with the NSW Office of Energy and Climate Change (OECC) and Boundless Earth respectively; and
- Developing and launching [EEC Professional Certifications](#),¹ which includes three certifications to support energy upgrades in industrial, commercial and residential settings, with industry, DCCEEW, the ACT Environment, Planning and Sustainable Development Directorate (EPSDD), NSW OECC, and the Victorian Department of Energy, Environment and Climate Action (DEECA) – then the Department of Environment, Land, Water and Planning (DELWP).

¹ EEC Professional Certifications is an umbrella certification framework that exists to help develop Australia's future energy workforce, ensuring that we have the right people, in the right places, at the right time to deliver the energy upgrades necessary for a prosperous, net zero Australia.

Noting this, the EEC is keenly invested in the work of JSA as it pertains to the Capacity Study, and looks forward to also supporting JSA in future workforce development initiatives that are focused on ensuring that we have an appropriately skilled and sized energy workforce. Given this, the EEC would like to provide the following feedback on the draft terms of reference:

General feedback

The terms of reference are broadly appropriate and overwhelmingly support the purpose of the Capacity Study. However, the EEC recommends that they highlight that the Capacity Study is a preliminary study that will help inform – or, if appropriate, be – the Government’s strategy for workforce planning as it pertains to delivering the energy transition and the transformation to a net zero economy.

The EEC wishes to highlight that much of the requisite quantitative data will not be able to be collected in the timelines and within the budget of the Capacity Study. As stipulated in the draft Terms of Reference, JSA can and should aggregate existing data sets from recent studies – including the *Developing the future energy workforce* report and supporting *Measuring the Energy Workforce in Australia - Pilot Survey* report. However, this aggregation of existing datasets will only go some of the way to achieving the requisite data needed to paint an accurate picture of Australia’s energy – and clean energy – workforce. A baseline dataset could be developed through an AEER workforce survey that is equivalent to the [United States Energy and Employment Report \(USEER\)](#).

Without this, we will not be able to accurately forecast clean energy jobs as we won’t have statistically significant data from which to build the forecasts. This baseline data is crucial to workforce planning, policy development and program design, and the EEC strongly encourages JSA to consider this in the terms of reference, and in the Capacity Study more broadly.

Specific feedback

Note: recommended changes to the wording in the draft Terms of Reference are underlined in the corresponding text below.

1. Develop an appropriate definition of the Australian clean energy workforce.

The EEC suggests that this be expanded to:

Develop an appropriate definition of the Australian clean energy workforce that includes clean energy roles on both the supply and demand side.

This is suggested as the demand side – including energy management, energy efficiency and demand response – is regularly overlooked in energy policy and programs, despite energy efficiency and electrification providing 25% and 20%, respectively, of the global emissions reductions necessary to achieve net zero.²

Notably, energy efficiency has broad industry support as being part of the clean energy sector and related workforce, as noted by the industry backing of the AEER.³

² International Renewable Energy Agency (IRENA) 2022, [World energy transitions outlook 2022: 1.5°C pathway](#), p. 16.

³ Joint statement 2021, [Industry backs in new effort to count all Aussie energy jobs](#).

2. Establish the current state of the clean energy workforce – including a demographic overview, numbers of employers, job vacancies, and reliance on international specialists.

The EEC welcomes the reference to the AEER in the 'complimentary policy settings' attachment to the draft terms of reference, but would welcome a more explicit reference within this item in the scope.

Specifically, the EEC recommends that this item be reframed as:

Establish a high-level overview of the current state of the clean energy workforce – including a demographic overview, numbers of employers, job vacancies, and reliance on international specialists, and support the establishment of ongoing data gathering exercises like the AEER.

This is suggested as, as mentioned above, the requisite data will not be able to be collected within the timelines and budget of the Capacity Study. Section 4 of including the *Developing the future energy workforce* report goes into more detail as to why an AEER based on the USEER is essential to accurately capturing jobs and market sizing data.

3. Analyse future demand (at the national, state and regional level) for clean energy roles over the next 30 years in the context of Australia's transition plans, alongside the impact on demand for employment in high-emitting sectors undergoing transition.

No comment; this is a necessary and appropriately worded item in the scope.

4. Analyse the potential supply (at the national, state and regional level) of clean energy workers over the next 30 years by:

- a. identifying the skills required by job roles in the clean energy workforce.**
- b. assessing the extent to which the required skills can be met by existing workers, particularly from transitioning sectors, and explore skills mobility and skills transferability between the different renewable energy sources.**
- c. examine the training pathways that will support workers entering the clean energy workforce, including new entrants, workers from transitioning industries and migrants, and assess the adequacy of their scope and scale.**
- d. consider international supply factors, such as the impact of targeted migration programs including regional labour mobility programs which would also build clean energy skills within our region (particularly the Pacific).**

The EEC suggests that this be reframed as:

Analyse the potential supply (at the national, state and regional level) of clean energy workers – on both the supply and demand side – over the next 30 years by:

- a. identifying the skills required by job roles in the clean energy workforce.*
- b. assessing the extent to which the required skills can be met by existing workers, particularly from transitioning sectors, and explore skills mobility and skills transferability between different roles and sectors.*
- c. examine the training and professional development pathways that will support workers entering the clean energy workforce, including new*

entrants, workers from transitioning industries and migrants, and assess the adequacy of their scope and scale.

- d. *consider international supply factors, such as the impact of targeted migration programs including regional labour mobility programs which would also build clean energy skills within our region (particularly the Pacific).*

These changes are suggested to support the inclusion of energy efficiency and demand side roles within the definition of clean energy workers. As mentioned above, this viewpoint is widely accepted by industry.

5. Explore sector specific barriers faced by small, medium, and large employers in employing and retaining a skilled, diverse workforce in the clean energy sector.

No comment; this is a necessary and appropriately worded item in the scope.

6. Explore opportunities for, and barriers to, full participation in the clean energy sector for priority cohorts, including women, First Nations Australians, people with a disability and culturally and linguistically diverse Australians.

No comment; this is a necessary and appropriately worded item in the scope.

7. Consider the experiences of the transition to clean energy in other countries, especially those that have also traditionally relied on high-emissions forms of energy generation and analyse the impact of international initiatives on the global skilled workforce.

No comment; this is a necessary and appropriately worded item in the scope.

Lastly, the EEC would like to assist JSA with developing the Capacity Study by becoming a member of the Project Steering Group. The EEC's Sector Development Manager, Toby Lawrenson, and Head of Projects, Holly Taylor, from whom you're receiving this letter, have been active participants of the AEER Stakeholder Reference Group, and its expert sub-group.

The project management, including the stakeholder engagement with a wider cross-section of government, industry, professional and training organisations, of the *Developing the future energy workforce* report was led by the EEC. This led to mutually beneficial relationships with key national and international stakeholders, including the International Energy Agency (IEA). For example, the EEC's expertise in clean energy jobs and skills was recently demonstrated by providing input into the development of the IEA's [World Employment Report](#).

The EEC is well placed to support the development of the Capacity Study, and looks forward to working with JSA on its development.

Yours sincerely,

Holly Taylor
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Energy Efficiency Council