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Clean Energy Capacity Study Team  
Jobs and Skills Australia

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## RE: Clean Energy Capacity Study Discussion Paper

The Electrical Trades Union of Australia ('the ETU')<sup>1</sup> is the principal union for electrical and electrotechnology tradespeople and apprentices in Australia, representing well over sixty-thousand workers around the country.

The electrical workers we represent will form the backbone of Australia's clean energy workforce across all sectors and stages of the transition. The ETU acknowledges the significant task ahead of building up a skilled workforce capable of delivering Australia's clean energy revolution, noting that there already exists a shortage of electrical tradespeople in every State and Territory across the country<sup>2</sup>. This challenge is made more complex when considering the necessary balancing act between recruiting and training new skilled workers, including ensuring they successfully complete their training and ensuring that existing workers with transferable skills in declining fossil fuel industries are provided the opportunity for a just transition into secure jobs in the clean energy sector.

Our Union is supportive of Jobs and Skills Australia's efforts to map workforce capacity as a means of better informing skills development and workforce planning efforts across the clean economy. We hope that an ongoing assessment of clean energy workforce capacity can contribute towards ensuring a rapid transition to a renewable economy that provides abundant safe, secure, and well-paid jobs for skilled tradespeople for decades to come.

### Definitions and Terminology

The proposed conceptual definition is suitably specific for targeting workers currently engaged in creating or enabling the use of clean energy and determining the workforce demand of the clean energy transition. We believe, however, that the capacity study needs to consider both the critical workers that will enable the transition to progress at the rate required and those workers in unrelated industries with the capacity to transition easily into the clean energy sector. There are 3 key subsets of workers missing from the current definition that should be included for consideration:

1. **Manufacturing workers** – Supporting the expansion of the clean economy will require a complementary expansion of domestic supply chains for manufacturing key inputs. Consideration of these workers in workforce planning exercises will help enable developers to meet domestic local content requirements and negate the impact of large-scale subsidies and incentives in larger economies like the US and EU which run the risk of crowding out Australian market participants.
2. **Educators** – The VET sector in Australia is facing major workforce shortages that may place a handbrake on our ability to train the skilled workers needed for the transition. Consideration

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<sup>1</sup> Being a division of the CEPU, a trade union registered under the Fair Work (Registered Organisations) Act 2009 (Cth).

<sup>2</sup> National Skills Commission, 2022 Skills Priority List

of this essential pillar of building a clean energy workforce needs to be made when setting parameters for this study.

3. **Workers with transferable skills** – As counterintuitive as considering fossil fuel workers in a clean energy capacity study may sound, many of these workers carry qualifications, skills, and experience that will allow them to transition almost seamlessly into the clean energy sector as their current roles are phased out. Building a comprehensive picture of the capacity of our domestic labour force to build a clean economy should consider all workers with relevant transferable skills, especially those in declining industries like coal-fired power.

The ETU would like to dispel the notion perpetuated in the Discussion Paper that clean energy jobs are somehow an entirely separate subset of the workforce made up of new clean energy-specific jobs requiring unique skills and training programs. Portable and transferable skills already exist and are held by thousands of workers already employed in established industries, supported by existing training packages that detail training in nearly all of the skills needed by new workers who may be interested in entering the clean energy workforce. There is no need to reinvent the wheel to provide a suitably trained workforce for a clean energy future. Instead, skill development for trade occupations should prioritise a combination of supporting employers to offer best-practice gap training, inductions, and equipment familiarisation opportunities to workers with transferable skills, and supporting VET providers to offer existing clean energy units and electives more broadly where currently they do not. There is only a very limited need for new electives in very specific circumstances.

### **What We Already Know**

There are several key barriers to employers recruiting and retaining skilled workers for the energy transition requiring industry leadership, targeted government assistance, and thorough consultation with workers and their unions in order to be addressed. There is an undeniable need for future in-depth qualitative studies to consider the effects these barriers have had on growing the clean energy workforce to date, and how we might remove them to unlock the workforce potential of a rapid transition.

- **Inadequate investment in training new apprentices to enter the industry** - Participants in the transition cannot expect to access a sufficient pool of skilled workers without significantly contributing themselves to addressing the shortages that currently exist. Acknowledging the often short-term and transient nature of work in the clean energy space, particularly in the more labour-intensive construction stages of creating new generation and storage infrastructure, collaborative efforts should be made across the entire industry to ensure that apprentices are able to be engaged in the sector during their training with a particular emphasis in the final two years of their apprenticeships. The incoming Australian Skills Guarantee should be expanded to capture renewable energy projects receiving government funding, finance, or incentives to raise training rate across the sector, while targeted prevocational programs, especially for disadvantaged or underrepresented cohorts like First Nations, women, and remote apprentices should be made more widely accessible to grow the supply of available apprentices for the sector to bring onboard.
- **Poorer wages and conditions** – significant work is needed to uplift the wages, benefits, job security, and safety conditions for work in clean energy industries as they currently lag significantly behind those offered for comparable work in established industries. Industry collaboration is needed to prevent a race to the bottom and uplift standards across the board to attract more skilled workers to the sector. To date, the sector has been marred with examples of poor safety standards, unlicensed electrical work, migrant worker exploitation, lack of investment in training and avoidance of standard employment

conditions<sup>3</sup> that have long been established in the construction sector and which provide some semblance of certainty in an otherwise precarious sector.

- **VET offerings** – Almost no VET providers in Australia, private or public, are equipped or willing to offer renewable energy electives to electrical apprentices undergoing Cert III training. Providing support for VET providers to offer these low volume, capital-intensive units in every state and territory will increase the local pool of capable and interested workers for employers to select from and ensure apprenticeship outcomes are reshaped to target the changing nature of the industry sector.
- **Industry culture** – Underrepresented priority cohorts like women and First Nations remain consistently let down by collective failures to address pervasive cultural issues, inadequate provision of appropriate facilities and PPE for women, and a failure to offer tailored support and mentoring to apprentices and trainees from underrepresented groups. A re-evaluation of the current Australian Apprenticeship Support Network system is needed to create a more supportive and culturally sensitive environment for these cohorts, and consideration of providing gender-appropriate facilities and PPE should be included in WHS standards. Direct engagement with groups such as the First Nations Clean Energy Network and First Nations networks within the ACTU and relevant unions covering workers in the sector is also needed to ensure that the unique issues and opportunities facing First Nations workers and communities in the transition are addressed properly.
- **Educator support** – Many employers are reluctant to offer flexible integration of VET educators into the workforce on a rotational basis to enable them to maintain the skill proficiency and familiarity with the latest technologies that allow them to be the best teachers possible. Standard practice needs to be developed and applied across the sector to enable more workers to easily transition into teaching roles while maintaining a close connection with the industry that they're training the next generation of workers to enter.
- **Demographic issues** – Insufficient data currently exists to demonstrate long-term age demographic trends or future hurdles in the energy industry. An assessment of the workforce needs of the clean energy transition over a 30 year period must consider how much of the current workforce will be retired by then to properly calibrate the escalation in training capacity required.

### **Analytical Approach**

We believe that the study needs to offer clarity and transparency around the assumptions used to build transition scenarios and determine their workforce needs. Further, the electrification of households and businesses will potentially present the most significant workforce challenge of the transition and should be modelled individually at varying paces as well as within the overarching model.

The transition to clean energy will not progress without electrical workers, the study ultimately must be clear in stating how many electrical workers are currently employed in clean energy, and how many will need to be employed to meet our ambitions. Industry and government need to have a clear picture of the task ahead if they are to take the right steps now and ensure that we train enough electrical workers to deliver a net zero future as soon as possible.

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<sup>3</sup> ACTU 2020, *Sharing the benefits with workers: A decent jobs agenda for the renewable energy industry*, ACTU D. No 61/2020