



Feedback by VETASSESS

CLEAN ENERGY CAPACITY STUDY Discussion Paper

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Prepared for the Assessing Authority Policy
and Assurance Unit, Jobs and Skills Australia
by VETASSESS

FOREWORD

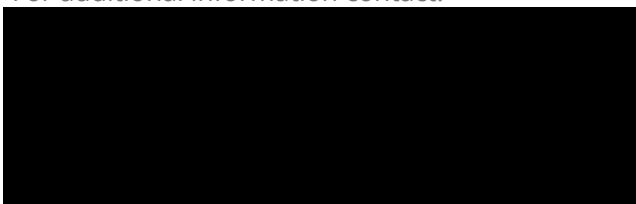
VETASSESS is Australia's largest skills assessment provider, authorised by the Australian Government. We are recognised for our expertise in assessments built up over two decades assessing the credentials and work experience of prospective migrants, and supporting individuals' applications for employment, course entry and industry membership. We assess more than 350 professional occupations and 32 trade occupations from a cross-section of industries.

These occupations include general professional occupations, trade occupations, and occupations assessed as part of Designated Area Migration Agreements (DAMAs) and Industry Labour Agreements (ILAs).

VETASSESS is therefore pleased to share brief insights for the Clean Energy Capacity Study.



For additional information contact:



Broader context

These are unprecedented times. Skill shortages are at an historical high. Population ageing and slow productivity growth mean that, in the absence of action, this situation will go from bad to worse. Jobs are changing at rates never seen before and that we are unlikely to ever see again. Government debt, if not paid off, will create a burden for future generations. And, it may not be 'just' Government finances that are left in disarray, but potentially the planet. Climate disasters are already displacing people in our regional neighbourhood. The economic growth potential of some of Australia's other regional neighbours is large, challenging Australia to think geo-strategically about how it can share in their prosperity. The Australian Government's vision to become a green energy superpower is at once commendable and necessary. We are a smart country but there is a clear and present risk that we do not, and will not, have the skills to meet the task before us.

Unemployed per vacancy never been as low

If there was ever any thought that the media and employers are overplaying the skills shortage, Figure 1 can leave you in no doubt. Captured is the number of persons unemployed per job vacancy. Over the period of more than 40 years shown, this ratio has never been as low as it is currently: there is a mere one person unemployed per vacancy. And the trend is down. This is obviously problematic if persons unemployed do not have the skills that match what employers are looking for.

Figure 1 Unemployed per job vacancy historical low (ergo skills shortage hits an historical high)



Sources: Derived using Australian Bureau of Statistics (ABS) (2022) Labour Force, Australia, October and ABS (2022) Job Vacancies, Australia, September.

Note: The break in the chart reflects a suspension on the ABS's job vacancy survey between May 2008 and November 2009.

Study is timely and aligns well

The challenge is to grow locally and access globally the skills that Australia needs for its clean energy workforce.

The Clean Energy Capacity Study is timely as Australia's migration policy is being redesigned. The Minister for Skills and Training recently told the Australian Vocational Education and Training Research Association 2023 Conference that for Australia to meet its 43% emissions target it will require an army of skilled workers.

Similarly, the Minister for Home Affairs has said the single biggest problem facing our migration system today is that it is not giving our country the skills that we need. She noted Australia is *"the nation with the most to gain from the transition to a net-zero economy. But we need the skills to help us do it."* (National Press Club 27/4/23). While interrupted by a global pandemic, if Australia embraces the opportunity to get right its migration policies and settings for skilling to support clean energy innovation, the alignment will drive future productivity and economic growth.

Failure to act now to quickly build Australia's productive capacity means that Australia is facing the risk of recession. This is because other means of building capacity, such as supporting greater labour force participation of important cohorts, such as women, developing local talent, or otherwise lifting productivity through technology and other innovations, while vital, take time. They are not quick fixes. The only remaining policy lever that can be quickly pulled is monetary policy. By slowing the economy monetary policy measures can rein in inflation as there would no longer be too much money chasing too few goods. But overcook it, then a slowdown can turn into a downturn.

STEM and Agriculture sectors significantly impacted

The move towards clean energy impacts the STEM and Agriculture sectors significantly in terms of resourcing the transition. Notwithstanding, the work force itself is by nature adaptive and should be agile and equipped with transferable skillsets. To assess migrants' capabilities in the clean energy sector VETASSESS can conduct skills gaps assessments such as it already does with the Subclass 407 Training visa – especially those in the environmental and natural resources workforces. This visa allows migrants to participate in workplace-based occupational training activities to improve their job skills, tertiary study, field of expertise or in a professional development training program in Australia.

Farming and intensive agriculture are crucial industries in the future of clean energy and are large consumers of our water table and natural resources. Despite its technical adaptability, the counterfactual is the industry struggles to maintain skilled workers and suffers from wage stagnation making it a vulnerability in the clean energy sector.

Skills not available in some countries, and competition...

With regards to migration for tradespeople, VETASSESS's main source countries are:

- Philippines
- India
- South Africa, and

- Zimbabwe.

Australia's transition to a clean energy economy will require skills that might not be available in these countries. Electric vehicle mechanics/technicians are not skills widely available from these major sources of tradespeople with which VETASSESS deals. Indeed, Australia will likely be competing with India for skilled workers because India aims to reach net zero emissions by 2070 and to meet fifty percent of its electricity requirements from renewable energy sources by 2030 ([International Energy Agency 2022](#)). Australia's clean energy industry should consider cost effective and timely pathways to train and upskill migrants as well as reskilling Australians working in high-emitting sectors to transition to new jobs in the new clean energy economy.

Extend Active Skills Assessment Pilots to Technical Skills

We should include in the notion of Australia's reskilling also those migrants who have arrived under one occupation but maybe needing to then transition to another. For example, a motor mechanic who migrated 18 months back may need to be reskilled to become an Electric Vehicle mechanic. VETASSESS has few data on post-migration pathways to inform this premise, however it is understood JSA may be collecting data of a deeper time depth and VETASSESS commends this initiative.

We note the Australian Government is supporting stronger economic growth through pilot (temporary) programs to increase workforce participation for skilled migrants and address critical skills shortages in Australia. VETASSESS is involved in Pilot 3 on employability (soft skills) assessment. DEWR could consider extending the [Active Skills Assessment Pilots](#) to a pilot relating to technical skills that migrants could train in to move across occupations into areas like clean energy. Anecdotally, participants in Pilot 3 have mentioned to VETASSESS a need for training outside soft skills.

Labour agreements in consultation with identified industries

One approach to encouraging and securing skilled migrants in the clean energy sector is labour agreements in consultation with identified industries that make up large proportions of the clean energy workforce. Industry Labour Agreements are for Australian employers who are considering sponsoring skilled and semi-skilled overseas workers under an industry-specific labour agreement. This could help address labour shortages and sponsor skilled and semi-skilled overseas professionals where appropriately qualified local workers are unavailable.

Some information on Industry Labour Agreements from the Department of Home Affairs website- <https://immi.homeaffairs.gov.au/visas/employing-and-sponsoring-someone/sponsoring-workers/nominating-a-position/labour-agreements/industry-labour-agreements>

VETASSESS is the approved Assessing Authority for a number of occupations under industry labour agreements with the Horticulture Industry and the Restaurant Industry.

More information on our website- <https://www.vetassess.com.au/skills-assessment-for-migration/industry-labour-agreement>

Designated Area Coordinators know the capacity of the local industries

If not yet done so, VETASSESS suggests JSA engage with the Designated Area Coordinators for designated area migration agreement (DAMA) regions. In VETASSESS's experience, the organisations are grassroots and local councils lead initiatives to administer the DAMA program for the particular region. The councils will know the capacity of the local industries and townspeople to incorporate clean energy technology.

Jobs (and industries) on VETASSESS books engaged in the clean energy workforce

Relevant occupations assessed by VETASSESS include:

Construction

133111 Construction Project Manager (in specific contexts)
511112 Program or Project Administrator
511111 Contract Administrator
312199 Architectural, Building and Surveying Technicians nec

Mining and Exploration

234411 Geologist
234412 Geophysicist
234912 Metallurgist
133513 Production Manager (Mining)
312912 Metallurgical or Materials Technician
312913 Mine Deputy

Environmental Management

234312 Environmental Consultant
234313 Environmental Research Scientist
234399 Environmental Scientists nec
234999 Natural and Physical Science Professionals nec
251311 Environmental Health Officer
251312 Occupational Health and Safety Adviser

Automotive and transport

411111 Ambulance Officer
411112 Intensive Care Ambulance Paramedic (Aus) / Ambulance Paramedic (NZ)
733111 Truck Driver (General)

Production

133511 Production Manager (Forestry)
234212 Food Technologist
133512 Production Manager (Manufacturing)

Spatial Sciences

232213 Cartographer
232214 Other Spatial Scientist
312116 Surveying or Spatial Science Technician

Miscellaneous

234911 Conservator

Current occupations transferable to Clean Energy sector

Across mining, environmental management, production and manufacturing and spatial sciences, VETASSESS foresees the adaptability and transition of these professions to the clean energy sector. For example, mining in Australia already harnesses lithium for use in batteries which house electricity generated from solar panels. The production of these batteries would require the specialisations of mining (including spatial science), metallurgical and manufacturing professionals.

VETASSESS supports project management and construction professionals who are responsible for the coordination and delivery of environmental related projects such solar farms and other clean energy infrastructure initiatives under the occupations Construction Project Manager and Program or Project Administrator. Architectural Building Surveying Technicians nec covers Energy Assessors for building projects.

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