Powering Skills Organisation Ltd

JSC Jobs and Skills Council Energy, Gas and Renewables An Australian Government Initiative

A Bright Future

Growing the First Nations Clean Energy Workforce

Research Brief
March 2025

Acknowledgement of Country

Powering Skills Organisation (PSO) acknowledges the Traditional Custodians of country throughout Australia, and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to First Nations people today.

A Note on Language

When referring to Aboriginal and Torres Strait Islander peoples, this research brief uses the term 'First Nations people'. When referring to people who are not Aboriginal or Torres Strait Islander, we use the term 'non-Indigenous'.

Contents

Executive Summary 4

Introduction 5

Putting First Nations people at the heart of the clean energy transition 5

Growing the First Nations clean energy workforce 5

Several workforce fundamentals are already in place 6

First Nations energy employment to date – successes and challenges 7

Generating some baseline indicators for the First Nations clean energy workforce 8

Indicator #1. First Nations participation in the energy sector is growing 8

Indicator #2. Three quarters of First Nations people in energy are in technician and trade roles 9

Indicator #3. Energy has amongst the highest rate of skilled First Nations workers 10

Indicator #4. Most First Nations people in energy already work in regional Australia 11

Indicator #5. Energy has high rates of full-time employment and earnings for First Nations people 12

Identifying challenges to developing the First Nations clean energy workforce 13

Challenge #1. The employment gap for First Nations people remains unchanged 13

Challenge #2. First Nations employment and training programs have had mixed outcomes 14

Challenge #3. First Nations people face unique difficulties seeking training and employment 15

Challenge #4. Existing energy qualifications for First Nations communities not being used 16

Challenge #5. Industry engagement with First Nations on clean energy is in its infancy 17

Training the next generation has already begun – but has room to grow 18

A record number of First Nations people are doing energy apprenticeships 18

Completion rates still lag behind non-Indigenous apprentices 19

Executive Summary

This research brief provides an analysis of the current state of First Nations participation in Australia's energy sector. It also outlines the potential of First Nations people to participate in Australia's clean energy sector in future.

Positive Indicators

- First Nations participation in the energy sector has been growing – with an estimated 3,300 working in the sector (tripling over the past 15 years)
- Three-quarters of First Nations people in the energy sector are in technician and trade roles, with 50% being qualified Electricians
- The energy sector has among the highest rates of skilled First Nations workers, with over 80% at skill levels 1 to 3 (as measured by the ANZSCO occupational skill rating)
- Most First Nations people in energy (54%) already work in regional Australia, aligning well with the projected distribution of future clean energy jobs
- The energy sector offers high rates of full-time employment and earnings for First Nations people compared to other sectors
- First Nations representation in Renewable Energy Zones (REZs) is higher than the national average – especially in New South Wales, Queensland, South Australia and Tasmania.

Challenges

- The employment gap between First Nations and non-Indigenous Australians remains unchanged over the last three decades
- Past First Nations employment and training programs have had mixed outcomes, often resulting in short-term, low-skill jobs
- First Nations people face unique difficulties in seeking training and employment, including limited job opportunities in their local area and transport issues
- Existing energy qualifications designed for remote First Nations communities are not being fully utilised
- Industry engagement with First Nations on clean energy projects is still in its infancy, with industry struggling with issues like appropriate cultural awareness.

Future Prospects

- A record number of First Nations people (over 2,100) were in training for energy apprenticeships in 2024, a 66% increase from 2020
- The Certificate III in Electrotechnology is now the second most common apprentice qualification among First Nations people.

Introduction

Putting First Nations people at the heart of the clean energy transition

- In June 2024, the First Nations Clean Energy Network released their landmark report Powering First Nations Jobs in Clean Energy which articulated the opportunities for First Nations communities to participate in the clean energy transition.
- This informed the federal government's recent release of the inaugural First Nations Clean Energy Strategy 2024-2030 (the Strategy), which was created with further input from First Nations communities.
- These reports indicate Australia is on the brink of a historic transformation, as the nation moves toward clean, renewable energy sources.
- Their collective message is that First Nations people are at the heart of this transition and must have direct opportunities to lead and benefit from it.
- To help achieve this the Strategy offers a national framework for clean energy, designed for governments, industries, and First Nations communities.

Growing the First Nations clean energy workforce

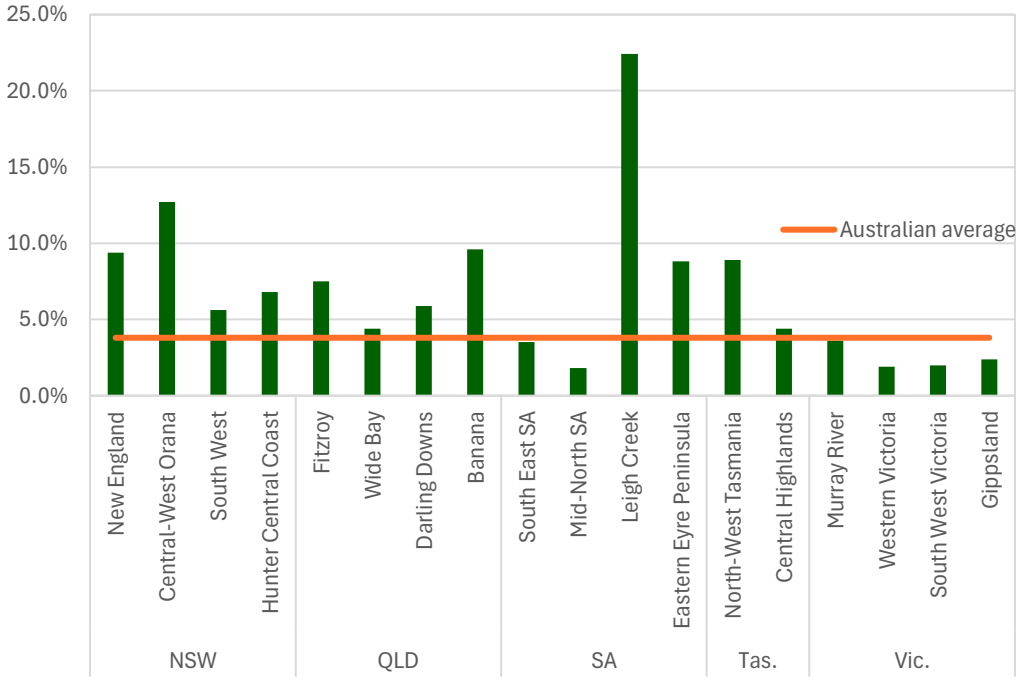
- The goal to 'Grow the First Nations clean energy workforce' is a key part of the Strategy.
- A First Nations workforce could be essential to help meet the unique pattern of demand generated by the clean energy transition, which includes:
  - A 30% increase in the clean energy workforce by 2030, including 32,000 to 42,500 more Electricians.[1]
  - Around 70% of renewable energy jobs may be based in regional and remote areas of Australia, driven in a large part by the creation of Renewable Energy Zones (REZs) outside of capital cities.[2]
  - The demand for energy trades workers in regional and remote areas is expected to grow at a faster rate than in capital cities through to 2030 and beyond.[3]
  - Approximately half of the clean energy infrastructure needed to reach net zero by 2050 will be developed on First Nations land (and clean energy projects are spread over a wider area than fossil fuel equivalents to produce a given amount of energy).[4]

[1] Jobs and Skills Australia (2023). The Clean Energy Generation. Workforce needs for a net zero economy.
[2] Clean Energy Council (2020). Clean Energy at Work.
[3] PSO analysis of customised data produced by Deloitte Access Economics for Jobs and Skills Australia (2023) Clean Energy Capacity Study.
[4] UNSW (2024). After 65,000 years caring for this land, First Nations peoples are now key to Australia's clean energy revolution.

Several workforce fundamentals are already in place

- First Nations populations are uniquely positioned to join the clean energy workforce for a number of reasons:
  - The First Nations population in Australia is forecast to grow over the next decade – up from 983,700 people in 2021 to between 1,171,700 and 1,193,600 people by 2031. This growth is spread across major city areas and regional and remote parts of Australia.[5]
  - Almost 60% of First Nations people live in regional and remote parts of Australia, compared to only 26% of non-Indigenous people.[6]
  - Work being conducted by organisations such as the First Nations Clean Energy Network highlight the specific and significant opportunity to increase First Nations employment in REZs.
    - On average, the share of population that identifies as First Nations in REZs is 6% which is significantly higher than the national population share (at 3.8%) – this is even higher in certain REZs located in New South Wales, Queensland, South Australia and Tasmania (see Figure 1).[7]
    - First Nations residents in the REZs are typically much younger – just over half are aged 19 years or under compared to approximately one-quarter of the REZ population – which highlight potential for future careers in clean energy.[7]

Figure 1: Proportion of First Nations residents by REZ, 20215



Source: First Nations Clean Energy Network (2024). Powering First Nations Jobs in Clean Energy.

[5] Australian Bureau of Statistics (2024). Estimates and Projections, Aboriginal and Torres Strait Islander Australians.
[6] Australian Bureau of Statistics (2021). Census of Population and Housing.
[7] First Nations Clean Energy Network (2024). Powering First Nations Jobs in Clean Energy.

First Nations energy employment to date – successes and challenges

- The rest of this research brief examines the First Nations workforce in the energy sector to date[8], including those engaged in energy apprenticeships. Unless otherwise specified it does not distinguish between renewables and non-renewables related roles or sectors.
- The paper is split into two main areas:
  - The first area aims to generate several positive baseline indicators of this workforce. It highlights that a degree of growth has already occurred for First Nations people working in the energy sector, including in high skilled, full-time and well-paid roles (like Electricians).
  - The second area aims to review some of the challenges regarding First Nations inclusion in the labour market, including in the energy sector. These include consistently higher unemployment rates, and mixed outcomes from past employment and training programs. It also looks at specific challenges related to energy qualification uptake and suitability, and industry engagement with First Nations communities on clean energy projects.

[8] By 'energy sector' in this paper we refer to the ANZSIC codes assigned here for Energy, Gas and Renewables. https://www.dewr.gov.au/download/15000/jobs-and-skills-councils-stage-one-outcomes/31866/document/pdf

Generating some baseline indicators for the First Nations clean energy workforce

Indicator #1. First Nations participation in the energy sector is growing

- The First Nations clean energy workforce can leverage an existing pool of tradespeople that has been growing for some time – and already has reasonable geographic representation.
- There are an estimated 3,300 First Nations people currently working in the energy sector. This has tripled over the last 15 years, up from around 1,000 back in 2006. (see Figure 2a).[9]
  - More recent analysis shows that there has been particularly strong growth for older First Nations Electricians in capital city areas.[10]
- This cohort of First Nations workers has been growing at a faster rate than the non-Indigenous energy workforce over the last 15 years (at 3% vs 1% per annum respectively).
  - These First Nations workers are operating in every jurisdiction, and the number has grown in each state and territory over the last decade – with New South Wales and Queensland having the highest number in the country (see Figure 2b).
- The proportion of First Nations people employed in the energy sector has also been growing over this period – indicating growth in numbers has not simply been due to an expanding population base but is driven by a higher share of First Nations people operating in the energy sector per head of workforce (see Figure 2a).
- While impressive, the current proportion of First Nations workers in the energy sector (at 1.7%) is below the average First Nations representation across all sectors at 2.0% (and below the population level of 3.8%).

Figure 2a: Number and proportion of First Nations workers, energy sector

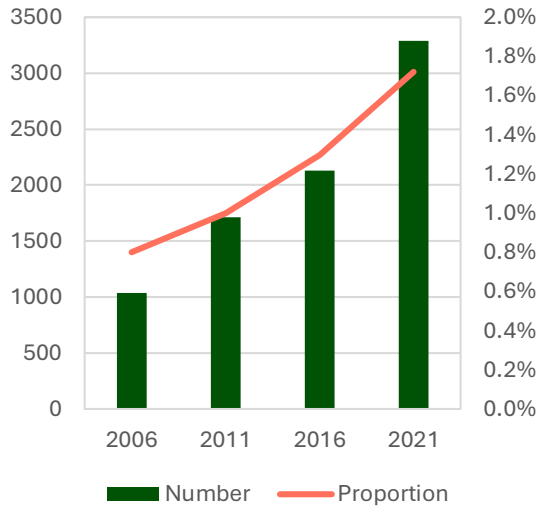
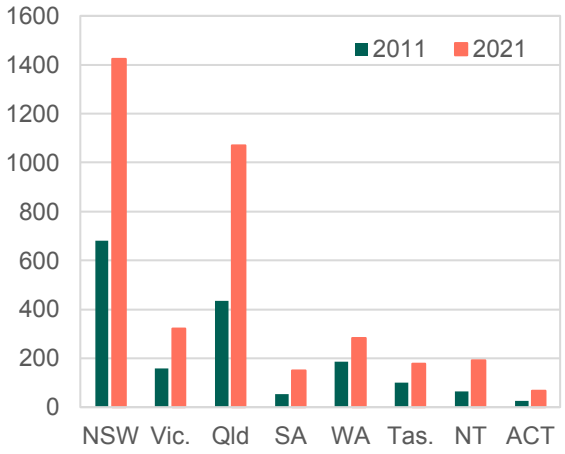


Figure 2b: Number of First Nations workers by state and territory, energy sector



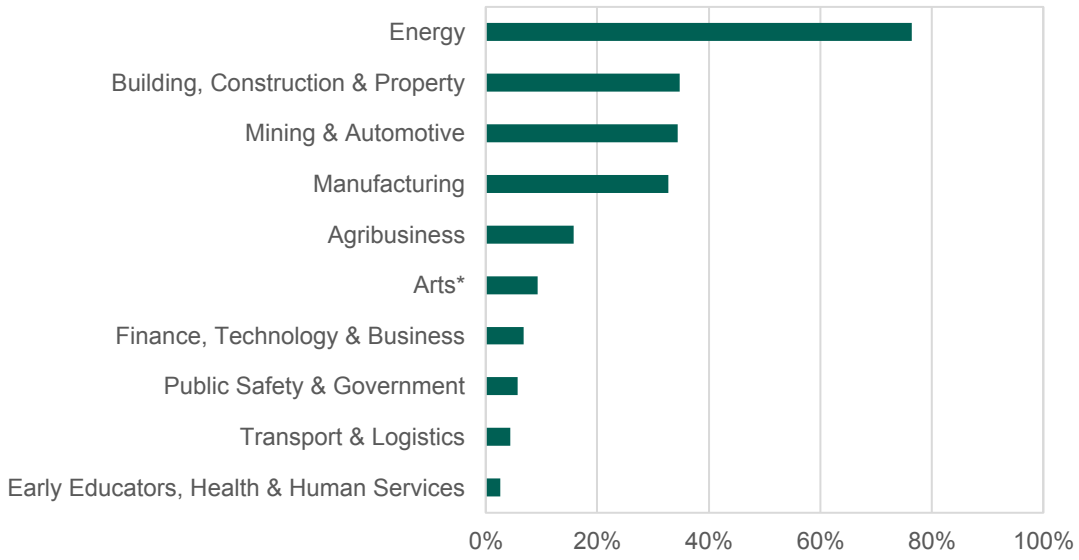
Source: Australian Bureau of Statistics (2021). Census of Population and Housing.

[9] Australian Bureau of Statistics (2021). Census of Population and Housing.
[10] Jobs and Skills Australia (2022). First Nations People Workforce Analysis.

Indicator #2. Three quarters of First Nations people in energy are in technician and trade roles

- The energy sector is one of the most technically skilled sectors operating in the Australian economy – with an estimated 60% of the workforce in technician and trade orientated roles (most of which require a formal VET qualification). The average prevalence of these technical skills across the Australia economy as-a-whole is only 13%.
- Promisingly, the proportion of First Nations workers in the energy sector in these technician and trade roles is even higher than the average across the whole sector – PSO analysis finds a remarkable 76% (or three in four) First Nations people are in these roles.
- This is by far the highest of any sector in the economy for First Nations people. It's more than double the next closest sectors (Building, Construction and Property at 35% and Mining and Automotive at 34%) (see Figure 3).
- This highlights the fundamental dependence of this workforce on a healthy and supportive VET system for skills formation. The VET sector will be critical to the clean energy workforce, including for First Nations participants.

Figure 3: Proportion of First Nations people in technician and trades worker roles, by sector



Source: Australian Bureau of Statistics (2021). Census of Population and Housing. By Jobs and Skills Council ANZSIC codes. 'Technician and Trade Worker' roles are ANZSCO Major Group. Proportion is as a % of all First Nations workers in each respective sector. *Arts, Personal Services, Retail, Tourism and Hospitality

- The majority of these First Nations technician and trades workers in the energy sector are qualified Electricians. A stunning 50%. On average, every second First Nations person in the sector is an Electrician. This is slightly higher than for non-Indigenous people working in the energy sector at 42% of the workforce (see Figure 4).
  - Electricians are an occupation in particularly high demand for the clean energy transition, and are considered a critical occupation to the transition by Jobs and Skills Australia[11] – this baseline indicator shows a strong starting point to further grow First Nations people in this critical occupation and aid First Nations inclusion in the transition.
  - PSO analysis also finds that Electricians is amongst the top 20 most common occupations for First Nations people across the Australian economy as-a-whole, and the fifth most common occupation for First Nations men in Australia.

[11] Jobs and Skills Australia (2023). The Clean Energy Generation. Workforce needs for a net zero economy.

Figure 4: Top ten occupations in the energy sector by headcount

Occupation	First Nations people			Non-Indigenous people		
	No.	%	Rank	No.	%	Rank
Electricians	1,634	50%	1	79,216	42%	1
Electrical Distribution Trades Workers	251	8%	2	5,137	5%	3
AC and Refrigeration Mechanics	220	7%	3	8,247	8%	2
Electrotechnology Trades Workers nfd	120	4%	4	3,550	4%	7
General Clerks	64	2%	5	3,681	4%	6
Office Managers	58	2%	6	3,422	4%	8
Electrical Engineering Draftspersons	51	2%	7	3,073	4%	9
Contract Administrators	44	1%	8	4,604	5%	4
Electrical Engineers	24	1%	9	3,940	4%	5
Construction Managers	19	1%	10	2,298	3%	10

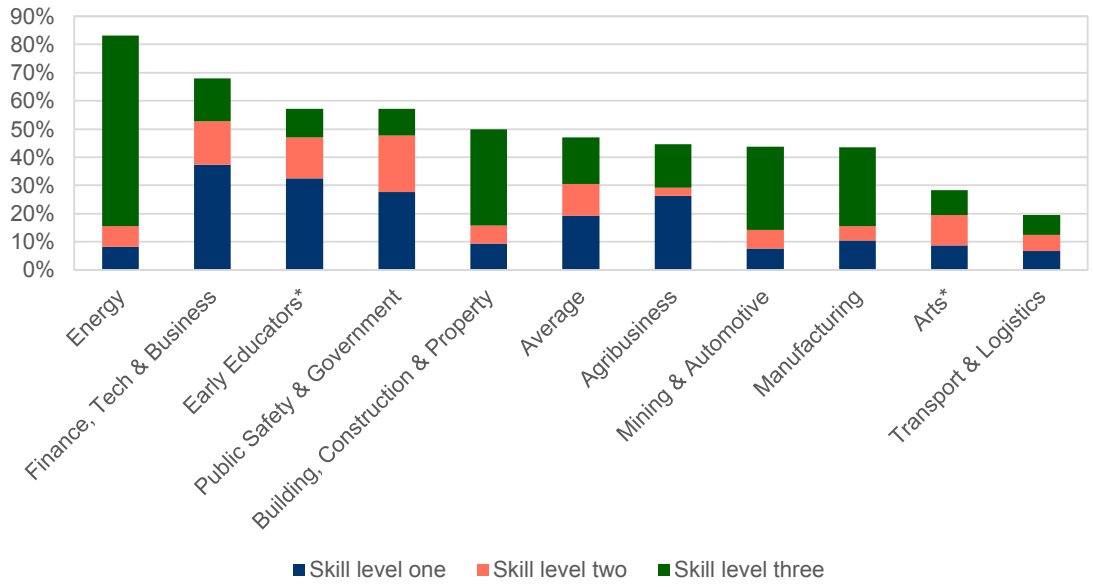
Source: Australian Bureau of Statistics (2021). Census of Population and Housing.

Indicator #3. Energy has amongst the highest rate of skilled First Nations workers

- Due in large part to the remarkable proportion of First Nations people in technician and trade roles, the energy sector boasts amongst the highest proportion of highly skilled First Nations workers of any sector in the country (see Figure 5).
- Under the Australian and New Zealand Standard Classification of Occupations (ANZSCO), all occupations in the Australian economy are assigned a skill level. This skill level is defined as a function of the range and complexity of the set of tasks performed in that particular occupation. The greater the range and complexity of the set of tasks, the greater the skill level of an occupation.[12]
    - There are five skill levels, which in ascending order signify higher levels of skill requirement to be performed by each occupation. These include:
        - Skill level 1 - Bachelor Degree or higher qualification
        - Skill level 2 - Associate Degree, Advanced Diploma or Diploma
        - Skill level 3 - Certificate IV or Certificate III including at least two years of on-the-job training
        - Skill level 4 - Certificate II or III
        - Skill level 5 - Certificate I or secondary education
- PSO has grouped First Nations people across all sectors by the highest three skill levels (1 to 3). This analysis indicates the leadership of the energy sector, with over 80% of First Nations people at one of these three skill levels (mainly skill level 3) (see Figure 5).
    - The average for First Nations people across the economy in these skill levels is just below 50% (at 48%). First Nations people have also traditionally had lower levels of skill development than their non-Indigenous peers across the Australian economy (for skill levels 1 to 3: 48% vs 61% respectively).[13]
- This means the energy sector is already a prime location for skills formation for First Nations people and this can be leveraged for the clean energy workforce of the future.

[12] Australian Bureau of Statistics (2009). Australian and New Zealand Standard Classification of Occupations, First Edition, Revision.
[13] Australian Bureau of Statistics (2021). Census of Population and Housing.

Figure 5: Proportion of First Nations workers in Skill Level 1 to 3 roles by sector



Source: Australian Bureau of Statistics (2021). Census of Population and Housing. By Jobs and Skills Council ANZSIC codes. *Early Educators, Health and Human Services *Arts, Personal Services, Retail, Tourism and Hospitality

Indicator #4. Most First Nations people in energy already work in regional Australia

- Although the First Nations workforce in the energy sector is much smaller than the non-Indigenous workforce, a higher share of this First Nations workforce live and work outside capital city areas.
  - PSO analysis indicates more than half of the current First Nations energy sector workforce (54%) work in regional and remote Australia. This is compared to only 32% of non-Indigenous people working in the sector (see Figure 6a).
  - This regional presence becomes more pronounced as the area gets more and more remote (see Figure 6b).
- This is important information from a clean energy workforce development point of view. According to the Clean Energy Council most renewable energy jobs in future will be located in regional areas, likely accounting for 70% of jobs.[14] Moreover, part of the top reason First Nations people reported barriers to employment in the past was because there were 'No jobs in local area' (see more in Challenge #3 below). Merging the opportunities of regional employment with First Nations people's propensity to live regionally will be a core inclusion point for clean energy workforce development.

[14] Clean Energy Council (2020). Clean Energy at Work.

Figure 6a: Proportion of energy sector workers by region

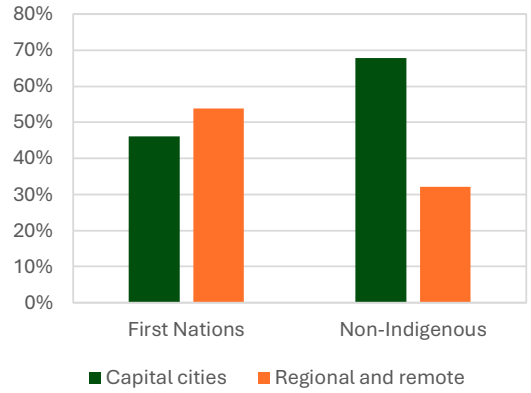
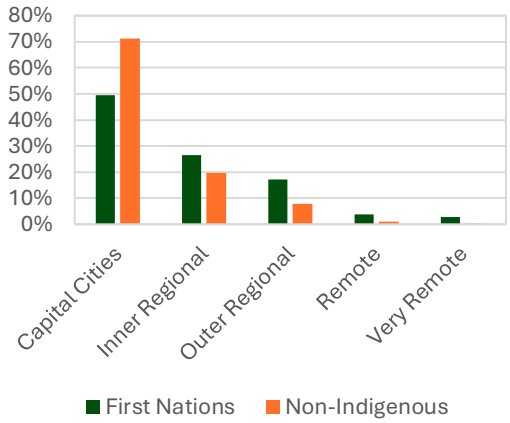


Figure 6b: Proportion of energy sector workers by detailed region



Source: Australian Bureau of Statistics (2021). Census of Population and Housing.

Indicator #5. Energy has high rates of full-time employment and earnings for First Nations people

- When compared to other sectors, First Nations people working in the energy sector have close to the highest proportion working full-time (84%). This is compared to the average across sectors for First Nations people of around 70% (see Figure 7a).
- In the energy sector, First Nations people also earn the third highest compared to other sectors, with an estimated 39% earning $78k or more per annum. On average across all sectors only 26% earn $78k or more per annum (see Figure 7b).
- First Nations people working in the energy sector are substantially younger than non-Indigenous workers on average (33 years old vs 39 years old, respectively).
- First Nations people in the energy sector are also young compared to other sectors – the second youngest after the Arts, Personal Services, Retail, Tourism and Hospitality sector.

Figure 7a: Proportion of full-time First Nations workers, by sector

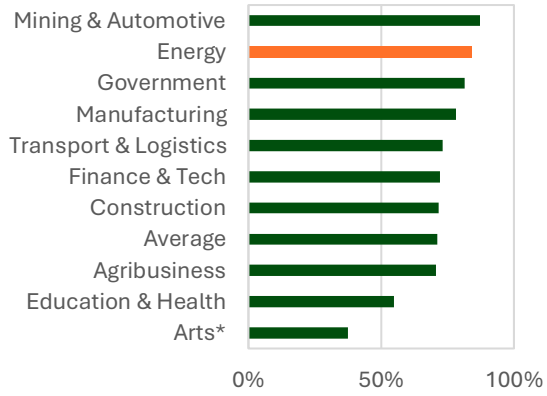
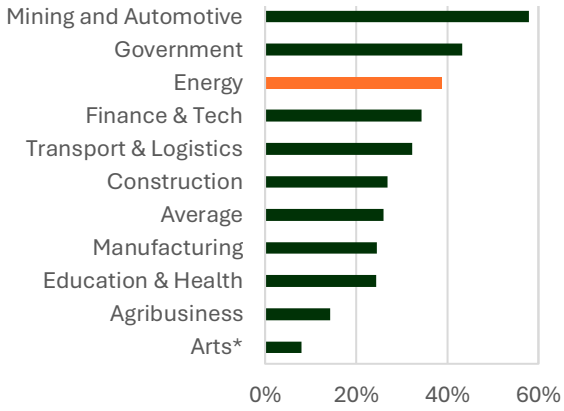


Figure 7b: Proportion of First Nations workers earning $78k or more per year, by sector



Source: Australian Bureau of Statistics (2021). Census of Population and Housing. By Jobs and Skills Council ANZSIC codes. *Arts, Personal Services, Retail, Tourism and Hospitality

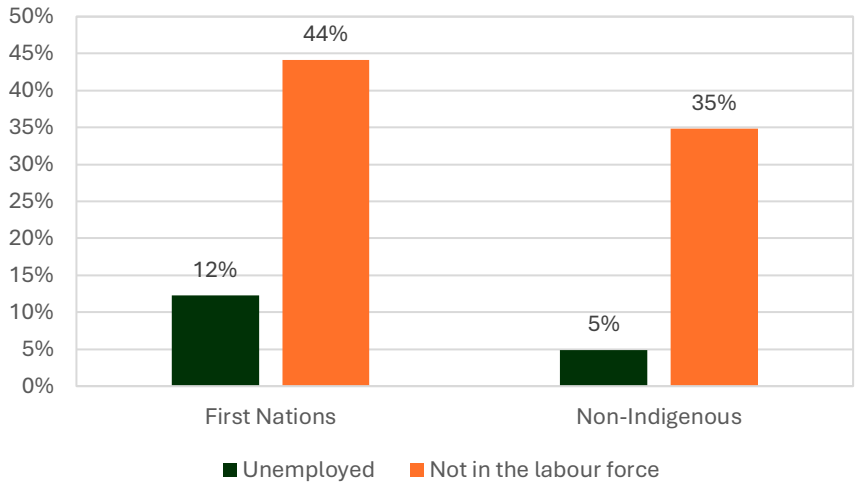
Identifying challenges to developing the First Nations clean energy workforce

- It's already reported that First Nations people are facing significant challenges entering the clean energy workforce.[15] In reality, growing a First Nations clean energy workforce isn't as straightforward as just building on the existing growth and trends seen in the broader energy sector workforce.
- Rather, the development of a First Nations clean energy workforce must address various challenges and find innovative solutions to persistent issues from the past. The next section of this paper explores some of these challenges in more detail.

Challenge #1. The employment gap for First Nations people remains unchanged

- First Nations people experience higher unemployment and lower labour force participation compared to non-Indigenous Australians.
  - In 2021, for instance, the unemployment rate for First Nations people was 12%, while for non-Indigenous people it was 5% (see Figure 8). This gap has remained largely unchanged over the past 30 years.[16]
  - While there has been some progress toward meeting Close the Gap targets in education and training (notably an increase in the proportion of First Nations completing Year 12 and obtaining a Certificate III qualification), employment outcomes for First Nations people have seen little improvement. In short, while the gap in educational attainment is narrowing, an employment gap persists.[17]
- The stagnation in First Nations employment outcomes, despite gains in education, underscores deep structural disadvantages both outside the labour market and within it (see Challenge #3 for more information).[18]

Figure 8: Proportion of First Nations and non-Indigenous people by labour force status



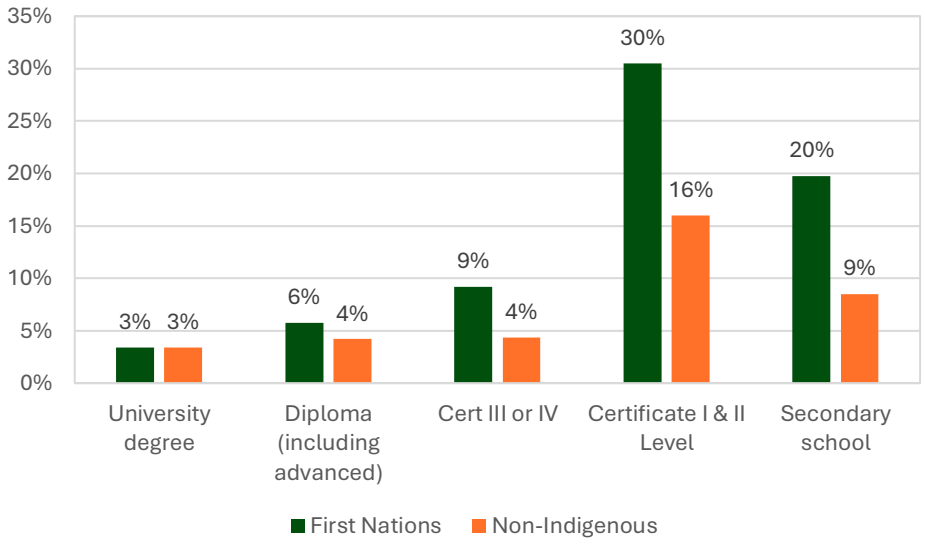
Source: Australian Bureau of Statistics (2021). Census of Population and Housing.

[15] Clean Energy Council (2024). Leading Practice Principles: First Nations and Renewable Energy Projects. A leading practice guide for engaging with Australia's First Nations peoples on renewable energy projects.
[16] Commonwealth of Australia (2023). Working Future: the Australian Government's White Paper on Jobs and Opportunities.
[17] Productivity Commission (2023). Review of the National Agreement on Closing the Gap, Draft Report.
[18] First Nations Clean Energy Network (2024). Powering First Nations Jobs in Clean Energy.

Challenge #2. First Nations employment and training programs have had mixed outcomes

- Over the past few decades, various First Nations employment and training programs have been introduced to improve employment outcomes. While some have seen success, they have faced common criticisms, including:
  - "Training for training's sake", which led to First Nations people accumulating Certificate I and II qualifications that did little to enhance their employment prospects.
    - For example, the unemployment rate for First Nations people with Certificate I and II level is 30%, around twice as high as the non-Indigenous population (see Figure 9).
  - Employment outcomes primarily consisting of short-term, low-skill, and entry-level jobs, often focused on meeting a 26-week performance indicator in industries like mining. [19]
  - After this initial target-setting during the approval and construction phases, there is often a lack of further commitments to increase or sustain employment throughout the project lifecycle. [19]
  - Employment programs often neglect to emphasise culturally safe recruitment, cultural competency training for staff and managers, career development pathways, retention strategies, and ensuring First Nations representation in senior leadership roles.[20]
- Ultimately, these realities have fostered skepticism in many First Nations communities regarding the effectiveness of training and employment programs. The clean energy sector must tackle this issue by ensuring that job commitments are both made and fulfilled.
- Long-term employment following skills formation ("careers, not just temporary jobs and qualifications") is a crucial component to genuinely developing and including a First Nations workforce in the clean energy transition.[19]

Figure 9: Unemployment rate by highest level of educational attainment



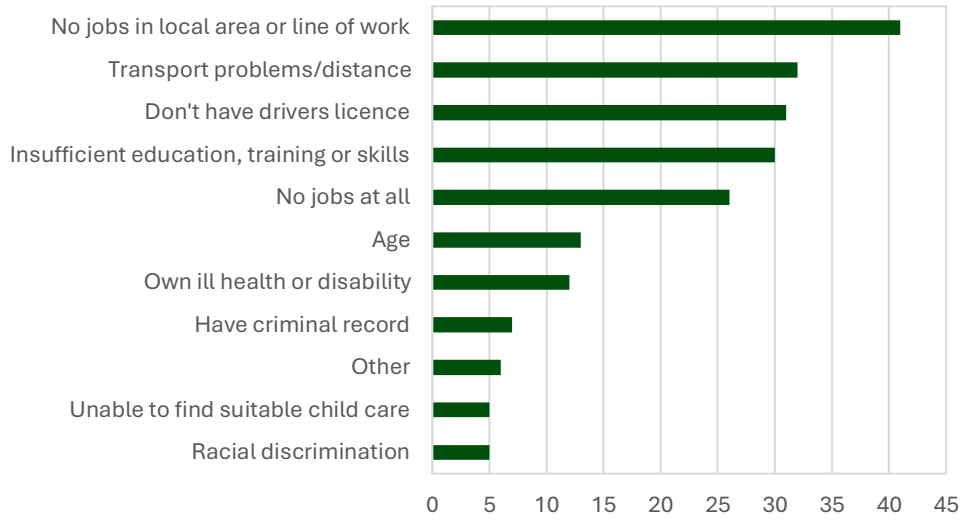
Source: Australian Bureau of Statistics (2021). Census of Population and Housing.

[19] First Nations Clean Energy Network (2024). Powering First Nations Jobs in Clean Energy.
[20] Clean Energy Council (2024). Leading Practice Principles: First Nations and Renewable Energy Projects. A leading practice guide for engaging with Australia's First Nations peoples on renewable energy projects.

Challenge #3. First Nations people face unique difficulties seeking training and employment

- The key barriers to developing the First Nations clean energy workforce are tied to general systemic disadvantage, and likely reflect many of the general challenges faced by First Nations job seekers across Australia.[21]
- Fundamental barriers stemming from long-term structural inequality include First Nations workers often having problems with limited jobs in their local area or line of work combined with transport problems (including with requisite identification cards like a driver licence) (see Figure 10).
    - Other common barriers include lack of access to computers (including internet access), low literacy and numeracy skills and work-welfare disincentives (the potential loss of government support for jobs that may lack stability discourages individuals from participating in the workforce).[21]
- Tailored labour market programs, along with initiatives that tackle structural barriers to employment, will be essential – particularly to disrupt the cycle of programs that only lead to short-term, low-skill jobs.
- Those working on developing the First Nations clean energy workforce will need to think creatively to overcome these longstanding intergenerational challenges.

Figure 10: Main difficulties finding work for unemployed First Nations people (%)



Source: National Aboriginal and Torres Strait Islander Social Survey 2014–15.

[21] First Nations Clean Energy Network (2024). Powering First Nations Jobs in Clean Energy.

Challenge #4. Existing energy qualifications for First Nations communities not being used

- Two energy qualifications have been designed for use by remote First Nations communities:
  - Certificate II in Remote Area Power Supply Maintenance (UEE21420)
  - Certificate III in Electricity Supply Industry – Very Remote Community Utilities (UET30921)
- These qualifications were developed in consultation with First Nations groups. The intent was to provide accredited training and skills for the unique energy needs present in remote communities.
- However, analysis and engagement by PSO indicates these two qualifications:
  - Have had zero enrolments and / or completions since 2018
  - There are no Registered Training Organisations (RTOs) with the Certificate II on scope
  - There is only one RTO with the Certificate III on scope
    - But engagement indicates the primary reason for no enrolments is because there is a deleted unit from the core qualification offering (and that unit is critical to the utility of the qualification making it unworkable in its current form)
- For both qualifications a lack of awareness of these training options were also raised as a reason for their lack of uptake by stakeholders, community groups and RTOs.

Challenge #5. Industry engagement with First Nations on clean energy is in its infancy

- The clean energy industry often prioritises employment in its engagement with First Nations people. However, reports indicate First Nations people face considerable challenges in accessing the clean energy workforce.[22]
- Engagement with First Nations people in clean energy projects is currently seen as inexperienced and not meeting community expectations. While there is variation across the industry, no companies are fully meeting leading practice standards for First Nations engagement, and overall industry engagement has been limited.[22]
- Several barriers to more meaningful engagement with First Nations people on clean energy projects have been identified, including:[22]
    - The clean energy industry, particularly international proponents, often lacks cultural awareness, which hinders relationship-building, tailored engagement, and inclusion in employment opportunities.
    - Engagement is often conducted merely for compliance, involving communities too late in the project lifecycle and limiting their participation, especially in employment opportunities.
    - Identifying all appropriate First Nations communities can be a challenge, with developers and project owners sometimes engaging with only a limited number of individuals, particularly when multiple communities have interests in the land.
    - Changes in project ownership often result in unmet commitments to communities, as different companies become involved throughout the planning, construction, and operational stages.
    - The legacy of past extractive industry practices, such as mining and gas, has fostered distrust between communities and clean energy companies, as communities have experienced land exploitation and broken promises.
- Given these shortcomings, the clean energy industry identified the need for a best practice guide on how to engage and develop truly cooperative relationships with First Nations people. Leading Practice Principles: First Nations and Renewable Energy Projects, released by the Clean Energy Council (CEC), is the first comprehensive national guide on this important topic. It contains minimum and leading practice standards across ten engagement principles.
- The guide was based on the CEC's work with the First Nations Clean Energy Network to transform their existing Aboriginal and Torres Strait Islander Best Practice Principles for Clean Energy Projects into a handbook for the clean energy industry to follow.

[22] Clean Energy Council (2024). Leading Practice Principles: First Nations and Renewable Energy Projects. A leading practice guide for engaging with Australia's First Nations peoples on renewable energy projects.

Training the next generation has already begun – but has room to grow

A record number of First Nations people are doing energy apprenticeships

- Given the high share of First Nations technician and trade workers in the energy sector, apprenticeships delivered through the VET system are the critical skills pipeline for the sector, and will be critical to development the clean energy workforce of the future.
- Promisingly, a pathway to success is already being blazed by First Nations people in this area.
  - In 2024 a record-breaking number of First Nations people were in training for an energy apprenticeship, with more than 2,100 people in training (Figure 11a).[23] This is two thirds (66%) higher than the number in training only five years ago in 2020.
    - This grew three times as fast as the non-Indigenous rate over the same period (albeit off a lower base).
  - This record-breaking growth for First Nations energy apprentices is occurring in both major cities and regional and remote areas simultaneously (Figure 11b). Moreover, around 50% of First Nations electrical apprentices are training in regional or remote areas – this compares to only 32% of non-Indigenous energy apprentices.

Figure 11a: First Nations people in-training for energy apprenticeships

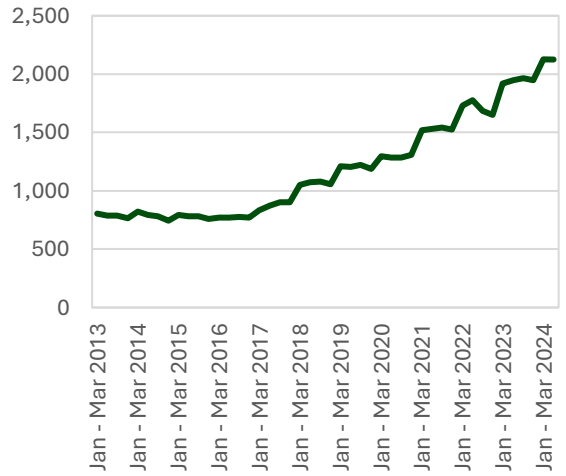
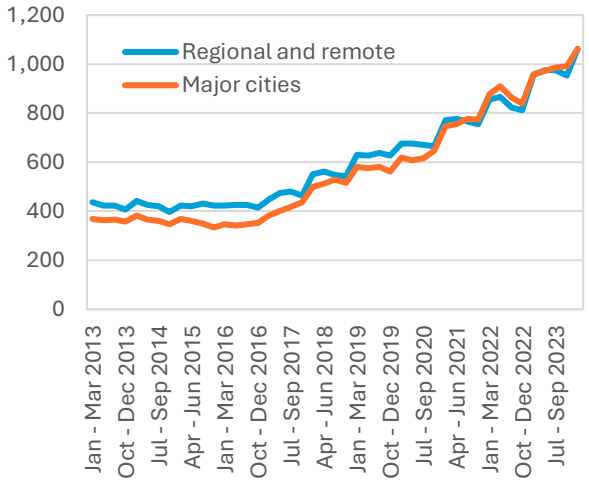


Figure 11b: First Nations people in-training for energy apprenticeships, by region

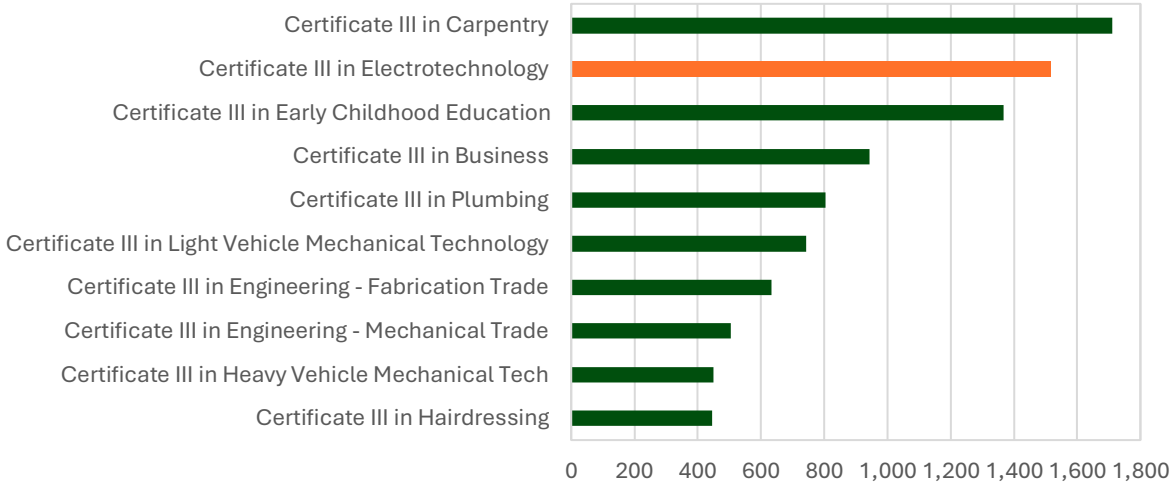


Source: National Centre for Vocational Education and Research (2025). Apprentices and Trainees Database – 2024.

- These trends mean the Certificate III in Electrotechnology (the main pathway to become a qualified Electrician in Australia) is now the second most common apprentice qualification in the VET system amongst First Nations people (coming after the Certificate III in Carpentry) (see Figure 12).

[23] 'Energy apprenticeships' are defined as the four VET training packages in PSO's remit – UEE, UET, UEP, UEG.

Figure 12: First Nations people in-training for apprenticeships, by most common qualification



Source: National Centre for Vocational Education and Research (2025). Apprentices and Trainees Database – 2024.

Completion rates still lag behind non-Indigenous apprentices

- Despite these positive gains in apprentice enrolments, completion rates for First Nations people doing apprenticeships remain consistently lower than their non-Indigenous peers. This remains the case for both trade and non-trade occupational groups.
- This manifests in a persistent 9% VET completions gap between non-Indigenous and First Nations apprenticeship completions in trade roles, which include energy apprenticeships.[24]
- While a complex issue to solve, PSO's roadshows in 2024 asked around 300 stakeholders in the energy industry how First Nations completion rates could be improved. Some suggestions included:
  - Increase the number of First Nations mentors for apprentices
  - Cultural training to supervisors of First Nations apprentices
  - Language and numeracy support programs delivered by culturally appropriate training providers
  - Increasing the number of First Nations trainers and assessors in the VET system – in particular in the electrical trades.

[24] Jobs and Skills Australia (2022). First Nations People Workforce Analysis.

For further information, please contact:
info@poweringskills.com.au.

Powering Skills Organisation Ltd

JSC Jobs and Skills Council
Energy, Gas and Renewables
An Australian Government Initiative