

QUEENSLAND'S CLEAN ENERGY WORKFORCE ROADMAP

Delivering the workforce for our energy transformation

» OVERVIEW





Queensland is well positioned to lead the clean energy revolution, taking advantage of our public assets and natural resources. *Queensland's Clean Energy Workforce Roadmap* provides direction to further develop Queensland's highly skilled workforce to support the continued growth of the state's clean energy industry.

– The Hon. Anastacia Palaszczuk MP

The \$30 million investment through this Roadmap will build on our strong skills and training base, to ensure there are the right pathways and support available in the right locations to deliver the clean energy workforce.

– The Hon. Di Farmer MP



The Roadmap builds on the activities of our publicly owned energy businesses such as Stanwell's \$100 million Future Energy Innovation and Training Hub, Powerlink's \$90 million transmission training hubs, and Energy Queensland's investments in engineering scholarships and partnerships with TAFE Queensland to deliver trade training in electrotechnology.

– The Hon. Mick de Brenni MP

Acknowledgement

The Queensland Government respectfully acknowledges the First Nations peoples in the state of Queensland, and acknowledges the cultural and spiritual connection that Aboriginal and Torres Strait Islander people have with the land and sea.

We respectfully acknowledge Aboriginal people and Torres Strait Islander people as two unique and diverse peoples, with their own rich and distinct cultures, resilience and strengths. We specifically acknowledge the unique history and cultural heritage of Aboriginal and Torres Strait Islander people as the First Peoples of Australia.

We pay our respects to Elders past and present. We are dedicated to the inclusion of cultural knowledge and values as critical factors in the development, implementation and evaluation of strategies and actions to support First Nations people.

OUR STRONG FOUNDATION

This **\$30M** Roadmap is built on a solid foundation of investment in our people and the clean energy workforce.



\$1.2B

annual Queensland Government investment in skills and training

\$150M

Job Security Guarantee to support affected energy workers at Queensland's publicly owned coal-fired power stations and associated mines

\$90M

under the *Queensland Energy and Jobs Plan* to develop two new *SuperGrid Training Centre and Transmission Hubs*

>\$70M

in workforce actions under the *Good people. Good jobs: Queensland Workforce Strategy 2022-2032*

>\$50M

in state-of-the-art hydrogen and renewable energy training facilities across the state

\$100M

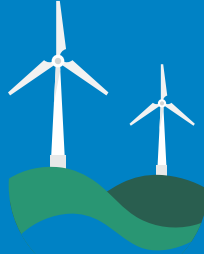
for Stanwell to build the *Future Energy Innovation and Training Hub*

OUR APPROACH



Build our future workforce

Providing real world learning opportunities to students and delivering high quality training to build the pipeline of skilled and capable clean energy workers.



Partner with industry to mobilise our existing talent

Empowering Queensland's highly skilled workforce to access opportunities within the clean energy industry; building a diverse, inclusive clean energy workforce.



Prepare our regions for growth

Workforce planning and coordination for the regions; building supply chain capability and supporting small business.

VISION ➤ A skilled, ready workforce delivering Queensland's clean energy transformation across the state

FUTURE ENERGY JOBS GUIDE

The key occupations that will deliver Queensland's clean energy transformation are presented in the Queensland Government's *Future Energy Jobs Guide* (Jobs Guide).

The Jobs Guide is designed to assist school leavers and existing skilled workers to explore career opportunities in the clean energy sector and identify the education and training pathways to get there.

The Jobs Guide has been developed in partnership with stakeholders, including industry, education and training providers and worker representatives, to reflect industry needs and real world job opportunities.



The clean energy workforce opportunity across Queensland

Queensland’s pipeline of renewable energy infrastructure projects is driving demand for skilled workers across the state. The energy transformation will support around 100,000 jobs by 2040, with the majority of employment opportunities in regional areas.

OUR STRONG BASE AND PIPELINE OF SKILLED WORKERS:

- ▶ Over **45,400** Queensland students enrolled in energy and/or construction related vocational training courses.
- ▶ Over **19,200** students studying an engineering related higher education qualification in 2021.
- ▶ Over **34,000** Queenslanders currently working in electricity, gas and waste service
- ▶ Over **275,000** Queenslanders currently working in construction



The Queensland Government has outlined the optimal infrastructure pathway in the Queensland SuperGrid Infrastructure Blueprint, and the co-ordination of renewable energy development in the draft Queensland Renewable Energy Zone Roadmap.

64,000

direct and indirect jobs across construction, manufacturing and operations to 2040

Queensland Energy and Jobs Plan

36,000

more jobs in green growth opportunities, including renewable hydrogen, battery manufacturing, resource mining and metal refining

Queensland Energy and Jobs Plan

UP TO 26,700

additional construction workers from the early 2020s to 2050 could be required to realise Queensland's renewables boom

Construction Skills Queensland

Building our future workforce

KEY ACTIONS

- ▶ Establish a Renewable Energy Gateway to Industry School Program targeting over 30 schools and 2000 students across Queensland.

- ▶ Develop online resources for Queensland teachers to deliver clean energy content with an emphasis on career pathways.

- ▶ Tripartite approach including industry, unions, and government, working closely with the higher education sector, to identify clean energy professional and paraprofessional skills gaps and address these in higher education delivery for the clean energy sector.

- ▶ Energex and Ergon Energy Network will increase their apprentice intake by 10 percent each year out to 2030, as part of the *Queensland Energy and Jobs Plan*.

- ▶ Stanwell to build the Future Energy Innovation and Training Hub to provide hands on-training with new and emerging clean energy technologies.

- ▶ Invest up to \$10 million to uplift state owned training infrastructure to support the skills needs of the clean energy workforce.

- ▶ Expand the VET Emerging Industries initiative to develop renewable energy industry training solutions.

- ▶ Government to work with the new Energy Industry Council and Renewable Energy Jobs Advocate once appointed to understand further priorities for growing the clean energy workforce in Queensland.

SCHOOL TO INDUSTRY ENGAGEMENT

The Queensland Government's Gateway to Industry Schools Program (GISP) includes a dedicated hydrogen program that connects Queensland school students to industry partners to help students gain valuable skills and experience relevant to the clean energy sector, and explore career opportunities before they leave the classroom.

Across Queensland, **32 schools** have signed Memorandums of Understanding to be a part of the program and over **2,000 school students** will be engaged between November 2022 and January 2026.

STANWELL FUTURE ENERGY INNOVATION AND TRAINING HUB

To begin the transformation of Stanwell Power Station in Rockhampton to a Clean Energy Hub, publicly owned energy company Stanwell Corporation will build the Future Energy Innovation and Training Hub (FEITH) valued at up to \$100 million.

The hub will provide the sandbox to test out innovative new energy technology including wind, solar, hydrogen and battery storage.

It will also provide a real-life, hands-on training environment for Queensland energy employees to develop the skills needed to work on renewable energy technologies.

The project is proposed to be delivered in phases, starting with the establishment of common infrastructure and civil works in late 2023.



Partnering with industry to mobilise our existing talent

KEY ACTIONS

- ▶ Pilot Mobile Regional Energy Jobs Hubs, facilitated by Regional Project Coordinators, within the Queensland REZ regions.
- ▶ Implement a digital energy skills passport app to enable workers to move more efficiently between roles.
- ▶ Endorse the Equal by 30 campaign principles to work towards equal pay, leadership, and opportunities for women in the clean energy sector, and explore options for the Queensland Government to become an official signatory to the campaign.
- ▶ Co-fund up to 20 places in Engineers Australia Global Engineering Talent Pilot Program for clean energy related positions.

QUEENSLAND'S WORLD-FIRST COMMITMENT TO WORKERS IN TRADITIONAL POWER GENERATION REGIONS

Alongside release of the *Queensland Energy and Jobs Plan*, the Queensland Government, publicly owned energy businesses and unions signed a landmark agreement to support affected energy workers - the Queensland Energy Workers' Charter. This Charter is a commitment to engage with and support affected workers in Queensland's publicly owned coal-fired power stations as Queensland's energy system transforms.

The Charter is backed up by a \$150 million Job Security Guarantee that ensures workers in Queensland's publicly owned coal-fired power stations and associated mines have a secure future, choices, and clear employment pathways.

Preparing our regions for growth

KEY ACTIONS

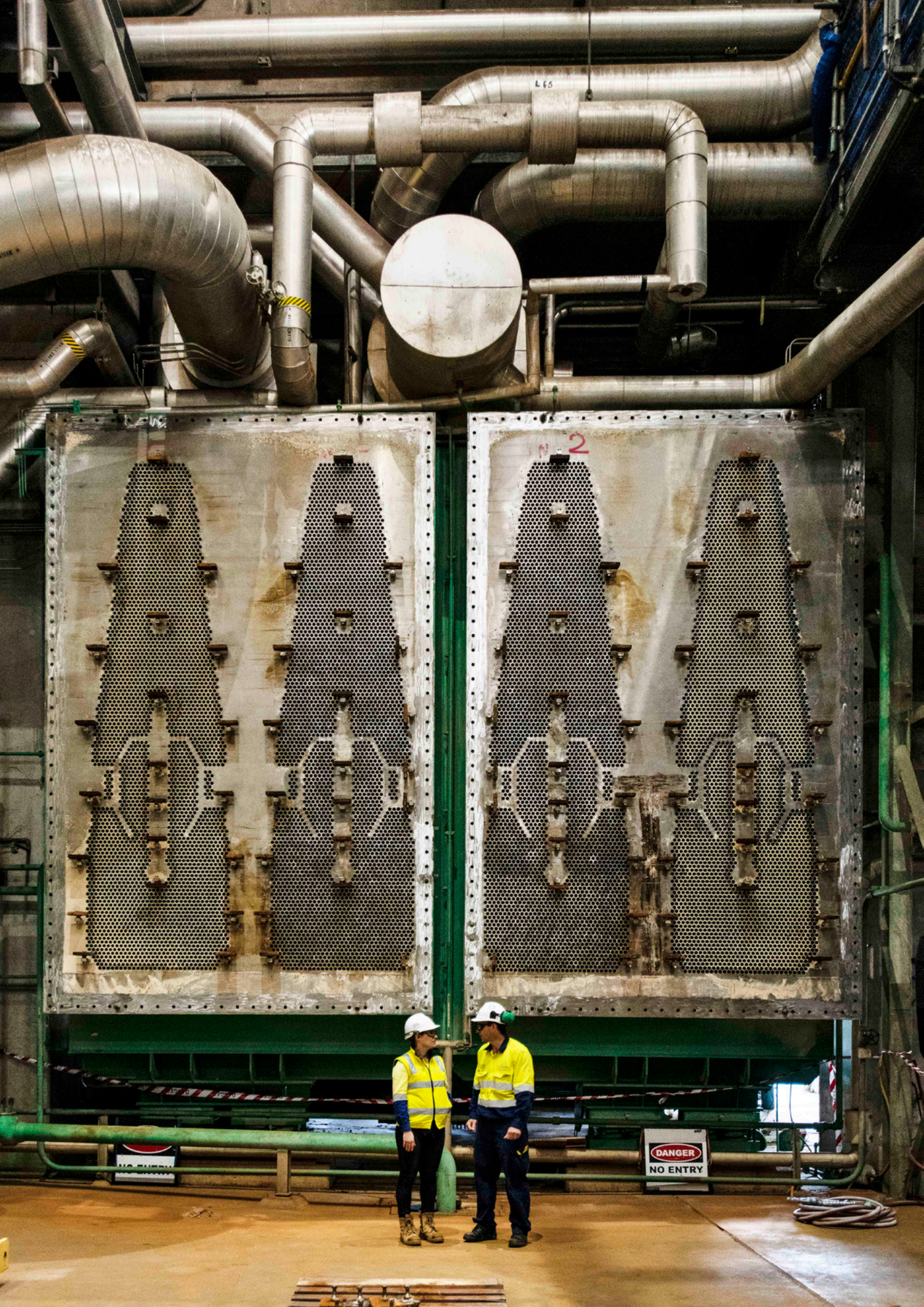
- ▶ Deliver region specific future energy resources, including skills supply and demand analysis and jobs opportunity guides aligned with Queensland REZ regions.
- ▶ Appoint a dedicated Renewables Project Officer for Manufacturing Skills Queensland to work with local manufacturing businesses to build workforce capacity and access clean energy supply chain opportunities.
- ▶ Government to partner with Construction Skills Queensland to map construction workforce needs in Queensland REZ regions.

SUPERGRID TRAINING CENTRE AND TRANSMISSION HUBS

The *Queensland Energy and Jobs Plan* (QEJP) sets out a plan to deliver the Queensland SuperGrid to enable the reliable generation, storage and transport of cleaner electricity across the state. Building Queensland's SuperGrid will require a skilled workforce with specific capabilities to work on the high voltage transmission network that forms the backbone of Queensland's future energy system.

Under the Queensland Energy and Jobs Plan, the Queensland Government is investing \$90 million and will work with Powerlink, the Queensland Government Owned Corporation responsible for managing the state's transmission network, to establish new SuperGrid Training Centre and Transmission Hubs to upskill energy workers in a range of areas, including high voltage (HV) technical training.

Powerlink is delivering Copperstring 2032, a new high voltage transmission line to connect the North west Minerals Province and Mount Isa to the Queensland SuperGrid. The project will support 800 jobs with construction to begin in 2024. Powerlink has also opened a new SuperGrid Training Centre and Transmission Hub in Townsville where workers will be trained in the specialist high voltage skills required to build, operate and maintain the northernmost reaches of Australia's electricity network.



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DANGER
NO ENTRY

