

Clean Economy Workforce Development Strategy 2023–2033



© State of Victoria (Department of Jobs, Skills, Industry and Regions) 2023



Clean Economy Workforce Development Strategy 2023–2033 is provided under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria (Department of Jobs, Skills, Industry and Regions), indicate if changes were made and comply with the other licence terms, see: Creative Commons Attribution 4.0 International.

The licence does not apply to:

- any images, photographs, trademarks or branding, including the Victorian Government logo and the Department of Jobs, Skills, Industry and Regions logo; and
- content supplied by third parties.

Copyright queries may be directed to copyright@ecodev.vic.gov.au

ISBN 978-1-76090-638-2 (pdf/online/MS word)



We respectfully acknowledge the Traditional Owners of country throughout Victoria and pay respect to the ongoing living cultures of First Peoples.

Contents

Foreword by the Minister for Training and Skills, Minister for Higher Education.....	4
The Clean Economy Workforce Development Strategy	5
Vision and Objectives.....	6
A Challenge and an Opportunity.....	7
The Strategy in Context.....	8
What the Clean Economy Means for Victoria’s Workforce.....	9
What the Clean Economy Means for Victoria’s Workforce.....	10
What the Clean Economy Means for Regional Victoria	14
What the Clean Economy Means for Education and Training.....	16
Strategic Priority 1: Reimagined skills model.....	17
Strategic Priority 2: Flexible education and training product design.....	18
Strategic Priority 3: Timely provision of education and training.....	19
Strategic Priority 4: Enhanced workforce planning and attraction.....	20
Strategic Priority 5: Stewardship of the skills transition.....	21
Next steps	22

A message from the Minister

Victoria's Strategy for a Clean Economy Workforce

Victoria is a world leader on climate action. We've cut emissions by more than any other Australian state, tripled the amount of renewable energy and created thousands of jobs – with almost 30 per cent of Australia's renewable energy jobs based right here. We've also set some of the most ambitious renewable energy, emissions reduction and storage targets in the country.

And we won't stop there. We're bringing back the State Electricity Commission to drive down power bills, reduce emissions and help create up to 59,000 jobs in renewable energy – with at least 6,000 for apprentices and trainees. An initial \$1 billion investment in the SEC will help deliver 4.5 gigawatts of power – the equivalent replacement capacity of Loy Yang A – through government-owned renewable energy projects.

While we've laid the foundations for effective, long-lasting change, we've also put workers front and centre. A clean economy will create enormous opportunities for government, industry, the education and training sector and workforces across the state. As we transition to a clean economy, we want to make sure Victorian workers are well-placed to reap the rewards.

That's why we've developed the *Clean Economy Workforce Development Strategy* (the Strategy), a 10-year framework to guide government, industry and the workforce as Victoria works towards net-zero emissions by 2045. Developed in close consultation with education and training providers – as well as industry and business – it'll inform our planning and investment in skills and training for Victorian workers, locking in their pathways towards the clean energy jobs of the future.

As the industry expands rapidly and renewable energy uptake booms, the demand for skilled energy workers will only increase. This presents huge opportunities for Victorians to reskill, upskill and move into new sectors where their qualifications are highly sought after. It also presents significant opportunities for greater workforce inclusion across the community, including among First Nations peoples, women, young people and workers in transition.

The Victorian Government has already started work to support the next generation of energy tradespeople. We'll establish the SEC Centre of Training Excellence to coordinate and accredit courses in clean energy, connecting with our TAFEs, RTOs, unions and the industry. We'll open two new clean energy worker training centres – one for hydrogen and one for wind – to prepare Victorian workers for our emerging industries.

And we'll establish a TAFE Clean Energy Fund, with the first investments to open new facilities at Gippsland TAFE, South West TAFE and Federation TAFE focused on renewable energy jobs.

Victoria's Clean Economy Workforce Development Strategy is the next step in our journey to net-zero emissions and a clean economy, and our important work continues.



The Hon Gayle Tierney MP
Minister for Training and Skills
Minister for Higher Education

The Clean Economy Workforce Development Strategy

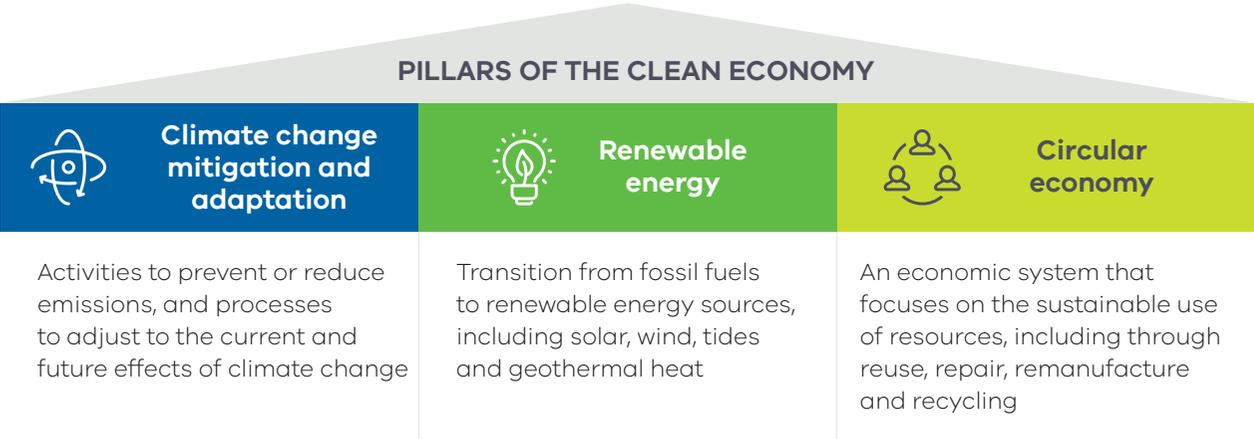
Victoria needs the right people and the right skills in place to support the state's transition to a clean economy.

This Strategy is a 10-year framework to inform government planning and investment in the skills and training Victoria requires to reach net-zero emissions.

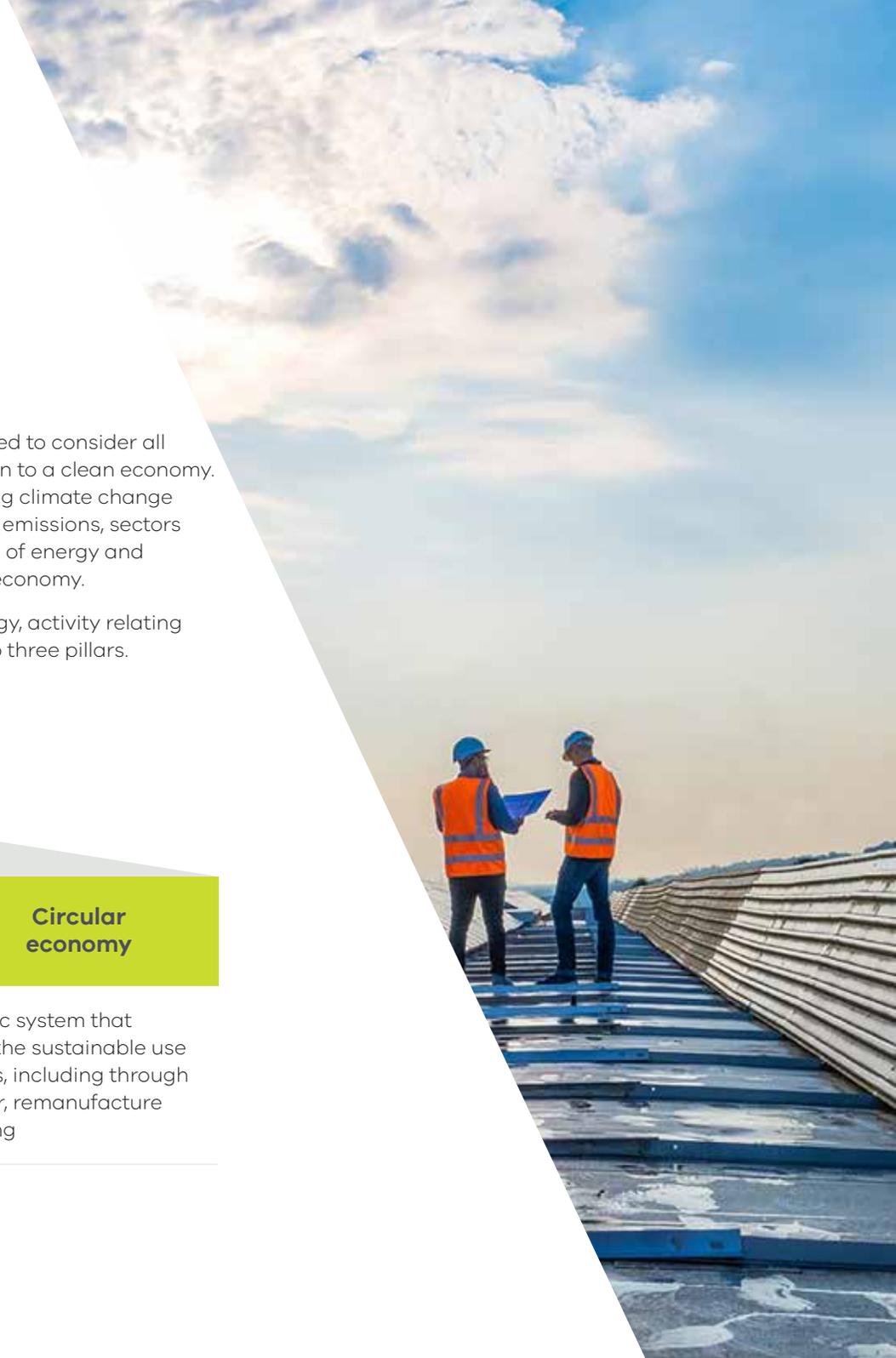
It is the blueprint to guide government, industry, business, educational institutions, and employers through this profound transformation, which will have implications for our whole economy. As we work to meet our renewable energy and emissions reductions targets, we'll bring these stakeholders together to support an agile and responsive system for workforce development.

The Strategy has been designed to consider all sectors that drive our transition to a clean economy. This includes sectors mitigating climate change risk through activity to reduce emissions, sectors developing renewable sources of energy and sectors supporting a circular economy.

For the purposes of the Strategy, activity relating to the clean economy falls into three pillars.



Source: ACIL Allen, 2022.



The Clean Economy Workforce Development Strategy

VISION

Victoria has a responsive training system and a skilled clean economy workforce to support and take advantage of climate action and the transition to net-zero emissions by 2045.

OBJECTIVES

- Inform planning and investment in the training system to deliver a skilled and responsive clean economy workforce in Victoria.
- Meet expectations that Victorian Government and market led clean economy programs are delivered by appropriately qualified and skilled workforces.
- Support conditions that elevate the status of clean economy career pathways and jobs.

The Strategy was developed in close consultation with industry and the education and training sector to explore current activities, challenges and developments as a springboard for the strategy.

The engagement and analysis confirmed that there is already significant clean economy skilling and knowledge transfer in place, however, a clear framework was required to drive systemic change. This has been the basis of developing the five strategic priorities.

THE STRATEGY CONTAINS FIVE STRATEGIC PRIORITIES:

1. **Reimagined skills model**
2. **Flexible education and training product design**
3. **Timely provision of education and training**
4. **Enhanced workforce planning and attraction**
5. **Stewardship of the skills transition**

Underpinning each **strategic priority** is a series of **key actions** to address the workforce support and skills development required. These provide a guiding overlay for activities that will be led by the Victorian Government to support industry in transitioning its workforce.





Challenge

The Victorian Government's work to achieve net-zero emissions by 2045 will create new demand for jobs and enormous reskilling opportunities.

Projections on the renewable energy transition estimate around 10,000 additional jobs per year from now until 2030. Occupations in high demand will include architectural, building and surveying technicians, building and plumbing labourers, civil engineering draftspersons and technicians, electricians, electrical engineers and mechanics.

New specialist occupations will also be created in areas such as battery storage, offshore wind sector, renewable hydrogen, circular design, energy auditing, home and business electrification and energy efficiency, resource recovery and sustainability.

The expansion of renewable energy sources delivered by the revival of the State Electricity Commission (SEC) will create significant opportunities. Growth of new sectors and development of emerging technologies will deliver new jobs and upskilling of almost 500,000 workers. The Victorian Government places a high priority on inclusive employment. Our Strategy will ensure that workers in industries in decline or under-represented cohorts such as women, people with a disability, culturally diverse and Aboriginal Victorians will have access to these opportunities.

The Opportunity

Working towards a clean economy in a planned way will assist industries to manage the transition of their workforce.

Partnerships across industry, unions and the training sector are important in supporting the skilling and supply of workers in the right locations. New ways of working are needed as clean economy sectors develop. Transferable and new technical skills are required as technologies and work practices evolve.

The transition to net-zero emissions will require significant investment in renewable energy, across solar, wind, renewable hydrogen, storage and other technologies. Coordinated workforce planning between government, industry, unions and the broader sector is required to deliver the transition. This will be supported through existing government work, including the revival of the SEC, the SEC Centre of Training Excellence, the Hydrogen Worker Training Centre, and the Wind Worker Training Centre.

The Victorian skills and training system has the foundations in place to support the transformation required, with current reforms aimed at supporting innovative approaches and new ways of working.

Supporting the growth and success of the renewable energy sector, new production processes and the ongoing development of the circular economy will also rely heavily on research and development from our universities. New knowledge and skills, critical for professionals, can be gained via clean economy and theory upskilling offered through higher education. Closer links between schools, VET and Higher Education will allow Victorian workers to gain the capabilities they need as they progress through the Victorian education system.

The Strategy in Context

As a world leader on climate action, Victoria has stepped up to the challenge with new legislation, policy, strategy and initiatives across a range of industry and sectors.

Significant industry activity is underway to support the uptake of new technologies, movement into new markets and transition to new ways of working.

Bodies such as the Victorian Skills Authority, Office of TAFE Co-ordination and Delivery, Apprenticeships Victoria and Group Training Organisations are key delivery agents for the strategy. They will continue to develop strong collaborative relationships with clean economy industry sectors, government agencies and higher education and training providers, to co-deliver Victoria's clean economy workforce. Victoria's school system is also playing an important role preparing clean economy workers of the future.

THE CLEAN ECONOMY WORKFORCE DEVELOPMENT STRATEGY AND ITS STAKEHOLDERS

TIER 1

Key stakeholders that have high influence and ability to support the development

TIER 2

Stakeholders that have some influence and are able to contribute to the development

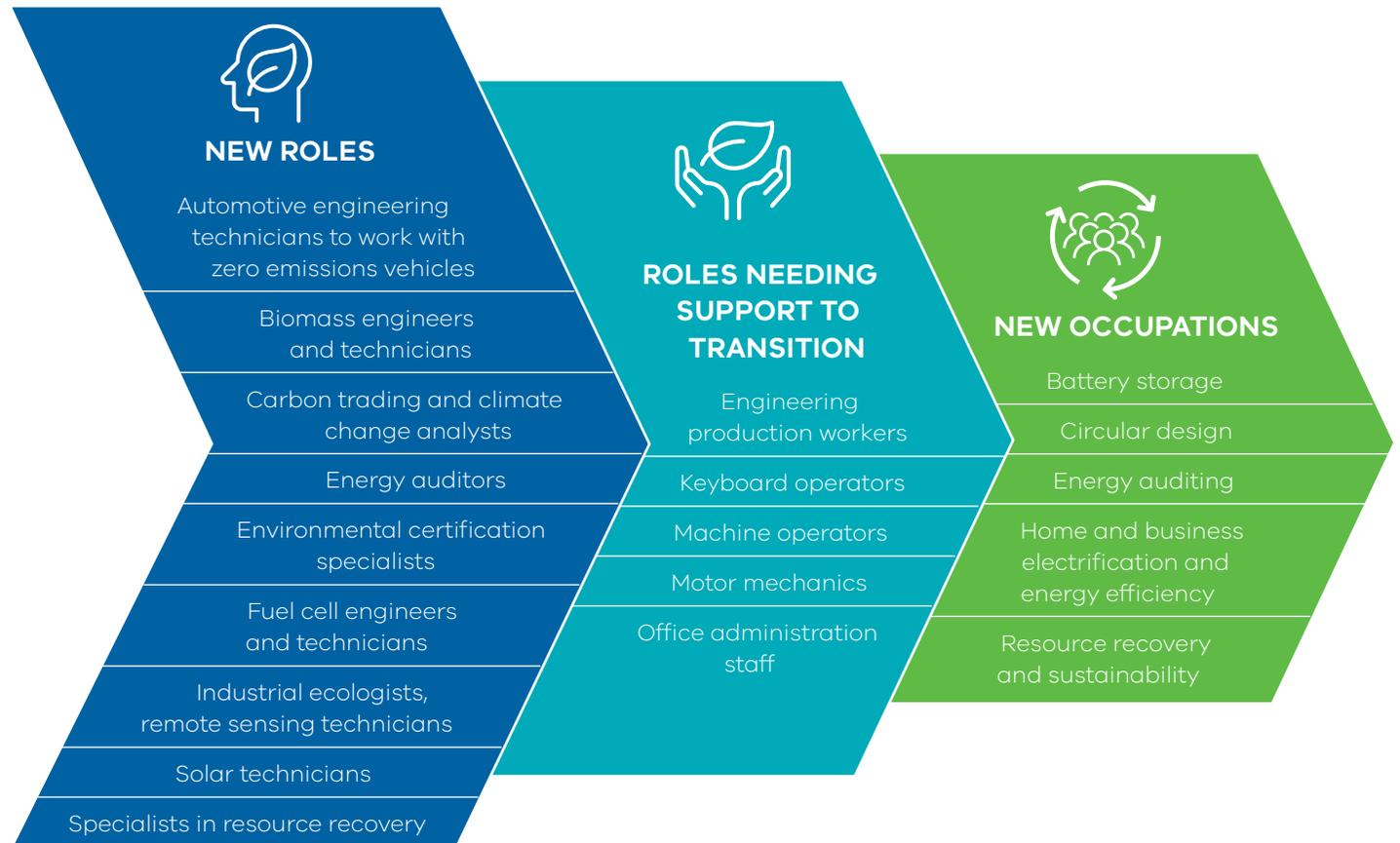


What the Clean Economy Means for Victoria's Workforce



Projections on the renewable energy transition estimate around 10,000 additional jobs per year from now until 2030.⁴

Changing technologies and work practices as Victoria transitions to renewable energy, circular resource use and climate resilient practices will create new jobs, increase demand for existing occupations and provide opportunities to upskill existing workforces. Meeting the existing skills shortages in these new industries is a key challenge to be managed.



4. ACIL Allen, 2022. Clean economy data model.



What the Clean Economy Means for Victoria's Workforce

Beyond the whole-of-economy opportunities, there are at least 13 clean economy sectors directly affected by the transition. As illustrated, each sector includes activities where skills and occupations will be transformed at some level.

Almost 500,000 existing Victorian jobs will be adapted for the clean economy.

Just Transitions

The workforce needed to support Victoria's clean economy targets will create strong demand for new skilled workers. A strong focus of the strategy is to set up clear and accessible processes for all Victorians, especially those in transitioning industries. As we move from fossil fuels to renewables, we will assist affected workers to retrain for these new opportunities. The skills system and its funding needs to be adjusted and adapted to encourage and support upskilling.

UPSKILLING GIPPSLAND FOR ENERGY WORKFORCE TRANSITIONS

A clear plan to transition and train Gippsland workers for jobs in offshore wind is being developed with local industry backing and a \$1 million Victorian Government Clean Economy Workforce Capacity Building Fund grant. TAFE Gippsland, Federation University, Energy Australia Yallourn and Star of the South are working together to identify transition opportunities for local workers and training requirements to build a renewable energy workforce in Gippsland.

While Victoria's offshore wind industry is still developing, Star of the South is its most advanced project. It has the potential to supply up to 20 per cent of Victoria's electricity needs, while creating around 760 Gippsland jobs during construction and 200 ongoing jobs during operations in the region.

The project is currently in the early stages and will identify existing roles with transferable skills, transition opportunities, and the new skills, qualifications or training needed to work in offshore wind. It's a first step to position Gippsland as a centre of excellence for renewable energy education and training.

CLEAN ECONOMY IMPACTS ON KEY SECTORS

	Buildings and energy efficiency	<ul style="list-style-type: none"> • Building electrification (Residential) 	<ul style="list-style-type: none"> • Commercial / industrial electrification 	<ul style="list-style-type: none"> • Energy efficient design 	<ul style="list-style-type: none"> • Retrofitting for energy efficiency
	Construction and infrastructure	<ul style="list-style-type: none"> • Building construction (Commercial / Residential) 	<ul style="list-style-type: none"> • Ports 	<ul style="list-style-type: none"> • Public transport infrastructure 	<ul style="list-style-type: none"> • Urban spaces
	Emergency services	<ul style="list-style-type: none"> • Ambulance 	<ul style="list-style-type: none"> • Fire services 	<ul style="list-style-type: none"> • Police 	<ul style="list-style-type: none"> • State emergency service
	Energy generation and storage	<ul style="list-style-type: none"> • Bioenergy / biomass • Distributed solar • Geothermal energy 	<ul style="list-style-type: none"> • Household batteries • Hydroelectric energy • Off-shore wind 	<ul style="list-style-type: none"> • On-shore wind • Tidal and wave energy • Utility batteries 	<ul style="list-style-type: none"> • Utility solar • Waste-to-energy
	Energy transmission and distribution	<ul style="list-style-type: none"> • Community energy • Demand management 	<ul style="list-style-type: none"> • Electricity distribution • Electricity transmission 	<ul style="list-style-type: none"> • Microgrids 	
	Food and agriculture	<ul style="list-style-type: none"> • Food waste reduction 	<ul style="list-style-type: none"> • Methane reduction 	<ul style="list-style-type: none"> • Precision agriculture 	<ul style="list-style-type: none"> • Sustainable fisheries
H₂	Renewable hydrogen	<ul style="list-style-type: none"> • Renewable hydrogen – production, distribution, transmission 		<ul style="list-style-type: none"> • Renewable hydrogen vehicle infrastructure 	
	Land and marine management	<ul style="list-style-type: none"> • Bushfire management • Carbon farming 	<ul style="list-style-type: none"> • Coastal and wetlands management (including blue carbon) 	<ul style="list-style-type: none"> • Eco-tourism • Forestry plantations • Disease and pest control 	<ul style="list-style-type: none"> • Land management practices • Nature park conservation
	Manufacturing / remanufacturing	<ul style="list-style-type: none"> • Green aluminium • Green steel • Eco-concrete / cement 	<ul style="list-style-type: none"> • Manufacturing of batteries / fuel cells • Manufacturing Electric Vehicles (EVs) 	<ul style="list-style-type: none"> • Refurbishing of products • Remanufacturing 	<ul style="list-style-type: none"> • Solar components manufacturing • Wind components manufacturing
	Private transport	<ul style="list-style-type: none"> • Zero Emission Vehicle (ZEV) charging stations 		<ul style="list-style-type: none"> • ZEV maintenance and repair 	
	Public transport	<ul style="list-style-type: none"> • ZEV buses integration 	<ul style="list-style-type: none"> • Public transport operation 		
	Textiles	<ul style="list-style-type: none"> • Textile collection and sorting 	<ul style="list-style-type: none"> • Textiles repair 	<ul style="list-style-type: none"> • Textiles resale 	
	Waste management	<ul style="list-style-type: none"> • Recycling 	<ul style="list-style-type: none"> • Sewage treatment and remediation 		

A range of existing occupations and roles are critical to the success of the clean economy and require support to ensure adequate supply to meet growing demand.

Many of these occupations may require support to ensure that challenges for workers in achieving the necessary skill level and education and training required are met. This may be due to the time and experience required for the new role, or the need for assistance in accessing appropriate education and training.

KEY CLEAN ECONOMY OCCUPATIONS ALREADY IN HIGH DEMAND	
ROLE	CONTEXT
 Data analysts	<p>The transition toward a 'smart' digital economy brings increasing need for data analysts who can use data effectively to improve programs, processes and business outcomes.</p> <p>There is strong competition for these roles due to the growing demand for data skills across all industries and sectors.</p>
 Electricians	<p>There is continued and increasing demand for electricians, driven by the shift to renewable energy sources, increasing electrification and industrial process re-engineering.</p> <p>Existing electricians are also required to upskill to support renewable energy uptake and energy efficient practices in residential and commercial environments, including the installation of solar PV, storage batteries, and energy efficient appliances.</p>
 Energy assessors	<p>A significant increase in energy assessors is required to support building (residential and commercial) upgrades, retrofitting for energy efficiency, distributed solar activities, and integration of battery storage systems.</p>
 Engineers	<p>Engineers are needed to research, design and construct ways to improve practices across a range of sectors, to deliver renewable energy, other climate mitigation and adaptation solutions, and more circular practices.</p> <p>Key specialisations impacted include electrical engineers, civil engineers, chemical engineers, environmental engineers and mechanical engineers.</p>
 Labourers	<p>There are existing shortages of labourers impacting the construction sector, both for residential and commercial projects.</p> <p>Demand is likely to increase further with additional investment initiatives for the clean economy across renewable energy projects, climate mitigation and adaptation programs, and circular practices in product manufacturing / re-manufacturing.</p>
 Plumbers	<p>As with labourers, there are existing shortages of plumbers which will continue to grow. Key drivers for increased plumbing demand include new installations and retrofitting associated with energy efficiency, electrification activities, and biogas and renewable hydrogen investment.</p>
 Project managers	<p>Project managers are needed across all industries to support the transition to net-zero emissions, with significant investment in the planning and construction of new facilities in the renewable energy sector and delivery of climate adaptation solutions.</p> <p>There is existing competition from other industries and priorities (for example, due to Victoria's Big Build and other infrastructure investment). There is particular demand for Construction Managers.</p>



New roles and occupations will continue to emerge as the clean economy develops.

Most of these jobs will involve new skills for existing roles rather than new occupations.

However, there are specific cases in which new roles will emerge in a combination of low skilled, semi-skilled and highly skilled occupations.

The exact nature of these roles will become clear over the lifetime of the Strategy, reinforcing the need to monitor workforce developments during the transition to the clean economy through mechanisms including the annual *Victorian Skills Plan*.

EMERGING OCCUPATIONS

SEMI-SKILLED OCCUPATIONS AND ROLES

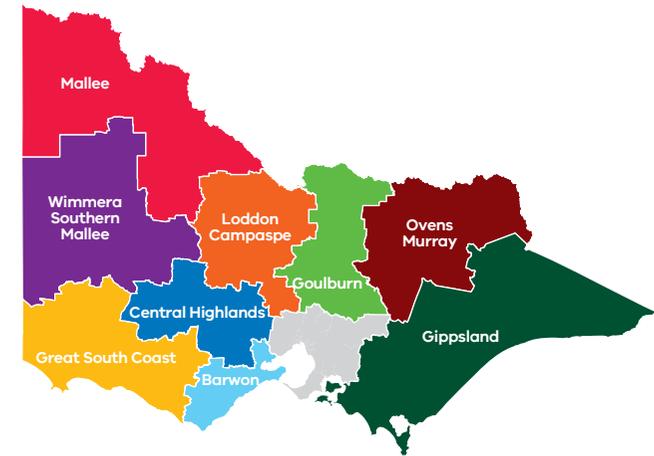
- Battery and cell manufacturers
- Battery storage technicians
- Bioenergy / biofuels / bioplastic feedstock producers
- Community climate change educators
- Community transition coordinators
- Electric vehicle repair technicians
- Energy auditors
- Energy efficiency retrofit specialists
- Energy managers for buildings
- Grid optimisation technicians and specialists
- Home sustainability assessors
- Household electrification advisors
- Household energy assessors
- Microgrid markets managers
- Specialists in resource recovery and sustainability
- Zero carbon facilities managers

HIGHLY SKILLED OCCUPATIONS AND ROLES

- 3D printer operators
- Carbon sector specialists
- Carbon managers / Emissions reduction managers
- Circular designers
- Demand management programmers
- Embodied carbon assessors
- Energy efficiency engineers
- Geothermal technicians
- Machine learning programmers
- Passive building designers
- Robotics mechanic and programmers
- Synthetic biology plant technicians

What the Clean Economy Means for Regional Victoria

Victorian regions have their own unique environments, advantages, economic conditions and communities as recognised in Victoria’s Regional Economic Development Strategies, which identify economic opportunities in the transition to a clean economy.



KEY REGIONAL OPPORTUNITIES IN THE CLEAN ECONOMY TRANSITION

	 Agriculture	 Construction	 H ₂ Renewable hydrogen	 Manufacturing	 Solar	 Transport	 Waste	 Wind
Barwon		●	●	●	●	●	●	●
Central Highlands	●	●	●	●	●	●	●	●
Gippsland	●	●	●	●	●	●	●	●
Goulburn	●	●	●	●	●	●	●	
Great South Coast	●	●	●	●	●	●	●	●
Loddon Campaspe	●	●	●	●	●	●	●	
Mallee	●	●	●	●	●	●	●	
Ovens Murray	●	●	●	●	●	●	●	
Wimmera Southern Mallee	●	●	●	●	●	●	●	●

The impact and opportunities of the transition to net-zero emissions will differ across regions in Victoria, depending on project proposals, composition of local industries, employment and local advantages.

Regional communities will play an important role in enabling the transition to a clean economy through their support for, and involvement in, various programs and initiatives.

The annual *Victorian Skills Plan* will be a key mechanism for addressing regional opportunities for skills and training through avenues including the Regional Skills Demand Profiles.

Many of the roles required to support the transition to the clean economy are in sectors which are not region-specific and will be widely distributed across Victoria.

However, some sectors will see a concentration of change and opportunity in specific areas.



What the Clean Economy Means for Education and Training

The education and training sector will play a vital role in preparing the clean economy workforce.

There is a wide range of clean economy-related offerings currently available across the higher education, vocational education and training sectors.

While many degrees and certificates do not focus explicitly on clean economy skills, existing content can be leveraged to increase the capability of Victoria's current and emerging workforces.

Education and training needs to be able to adapt to the changing nature of many existing roles and address gaps in course content to align with the needs of the clean economy. This includes tailored responses that improve opportunities for local communities.

There is an opportunity for the education and training system to lead the transition by becoming more flexible, responsive and relevant to the economic opportunities provided by the pathway to net-zero emissions. This includes fostering the cross-cutting capabilities that will underpin a range of roles in the clean economy.

As a key pillar of the clean economy, significant investments in skills and training in the renewable energy sector will be needed for a skilled workforce to support the energy transition to net-zero emissions and for the re-establishment of the SEC.

TO BE POSITIONED FOR THIS ROLE, THE EDUCATION AND TRAINING SYSTEM WILL REQUIRE:

- Coordination of workforce planning across the breadth of policy and initiatives to understand and plan for competing supply issues in key occupations and skills
- Re-alignment of the existing skills model to meet clean economy skill needs, with current education and training products not able to accommodate the increasing demand for multi-disciplinary skills
- Streamlining of processes for developing, accrediting and delivering education and training to match the pace and nature of workforce demand.

Victoria's education and training system has the foundations in place to support the transformation to a clean economy.

These foundations include senior secondary education pathways to vocational training, recognition of the importance of, and annual planning for, clean economy jobs in the Victorian Skills Plan and swift, state-based accreditation of courses through the Victorian Registration and Qualifications Authority (VRQA).

The Strategy's priorities acknowledge these foundations and build on them.



Develop a new skilling approach that supports the development of transferable and technical skills required by the clean economy in parallel to the emergence of technologies and workforce demands.

The change to the economy will outpace the current education and training system, meaning transformation will be needed to support flexible and responsive skills development.

KEY ACTIONS

Establish alliances between industry partners and supply chains to support clean and circular advances and co-develop the required education and training.

Create new pathways for occupational roles to transition to clean economy roles, including the required cross-skilling of occupations and continuing professional development for professions critical for the transition.



Ensure training products can support multi-disciplinary and cross-cutting clean economy skills.

Training products are currently defined by occupational models and approaches, with funding provided for full qualifications and content aligned to traditional occupational classifications.

Training product design and content will need to focus on multi-disciplinary and cross-cutting clean economy skills in order to support the nature and timing of the skills required for a net-zero emissions workforce.

The VRQA will play an important role in quickly supporting the accreditation of short courses and qualifications to meet immediate or evolving skill needs in the clean economy. Apprenticeships Victoria can work to improve the relevance of apprenticeships and traineeships to clean economy skill needs. This will include developing a pipeline of apprenticeships and traineeships to support new skills in trades including electricians, technicians, machine operators and mechanics.

KEY ACTIONS

Skill and upskill workers where there are proven and emerging needs.

Embed cross-cutting skills within current training products to support innovative thinking required by the clean economy.

Incorporate specialisations into apprenticeships to support the new skills required by trades.



Increase the capacity and capability of clean economy education and training for both known and emerging skills.

Varied patterns of industry make it challenging for providers to identify, anticipate and position skills development ahead of demand. Rapid, two-way exchanges between industry and education and training will be needed so training and higher education providers can address known and emerging clean economy skills. Universities are critical partners in anticipating and responding to future workforce needs via their research and education contribution.

TAFE and industry providers are central to the clean economy adaptation. Their collaboration is critical to helping produce a skilled workforce that meets the needs of Victoria's employers and industries. Together they provide a quality skills system, aligning training and re-training to clean economy needs, collaborating with industry and underpinned by a strong TAFE network that provides pathways to training, jobs and rewarding careers for all Victorians.

The Office of TAFE Coordination and Delivery (OTCD) is driving a stronger, more unified and effective TAFE network. This will allow TAFEs to enhance the quality of their courses and align their training to ensure Victorians have access to the best training for the jobs being created.

Apprenticeships Victoria will work with partners to respond to the current and emerging needs for clean economy training, to deliver apprenticeships and traineeships focused on real world skills.

The Victorian Government has also announced the Building Better TAFEs Fund of up to \$170 million to build new and improve existing TAFE campuses, including a \$50 million Clean Energy Fund.

KEY ACTIONS

Increase the attractiveness of educator and training roles in the tertiary education and training system to grow supply.

Recruit international experts in clean economy fields to assist with workforce experience and capability development.

Integrate cross-disciplinary approaches into education and training to support increasing demand for transferable skills.

Promote supply of education and training to provide economic and workforce benefits to local communities.

Actively plan for and support supply of critical roles across the clean economy.

All parts of the Victorian clean economy are accelerating rapidly, with growing demands at a state, national and international level. Victoria will compete with other jurisdictions for energy workers of the future.

There is a need to consider technical and transferable skills from a coordinated, place-based perspective.

This approach requires planning and support for the supply of critical roles across the clean economy, leveraging established mechanisms such as:

- Secondary schooling reforms supporting improved access to pathways for students to gain skills in Victoria's clean economy.
- Skills and Job Centres supporting people to make informed choices about courses and employment pathways.
- The Victorian Skills Gateway providing guidance on the link between training and careers and highlight occupations in demand and local learning pathways.
- Adult community education providers offering improved access to further vocational training and clean economy employment.

KEY ACTIONS

Embed requirements for workforce planning and attraction in new policy and industry development proposals to support skilling needs and manage competing demands.

Develop workforce plans for industries identified as undergoing transition to provide consistent employment for regional workforces.

Encourage alternative sources of workforce where local supply is inadequate to support the delivery of clean economy initiatives.

Build awareness of clean economy at the school level to support the long-term supply pipeline of workers.

Establish pathways for new and under-represented cohorts to improve representation and attract workers into in the clean economy workforce.



Drive the technical and cultural transformation of the skills system through whole-of-government coordination and monitoring.

The breadth and speed of development in the emerging clean economy means different sectors of the Victorian economy are investing in technology, approaches and change independently. Some clean economy initiatives will effectively be competing with each other for similar workforces.

Government and industry initiatives need to be connected and guided to drive the whole-of-economy shift toward a clean economy.

This can include using government policies and procurement processes to develop local workforces, including through the Local Jobs First policy, (which includes the Major Projects Skills Guarantee), and the Social Procurement Policy. Stewardship should also support deeper consideration of place-based skill needs and education and training solutions.

KEY ACTIONS

Ensure the transition to the clean economy is overseen by a governance structure with the breadth of representation and authority to influence actions by industry, government, agencies and the tertiary education and training system.

Monitor workforce demand and supply information to meet both known and anticipated clean economy workforce needs.

Promote clean economy workforce data to encourage market responses to the clean economy.



Next steps

The transition to a clean economy is already underway in Victoria.

Implementing the Strategy will require a coordinated approach to ensure known skill needs are being met while preparing for emerging clean economy developments.

The first step will be establishing appropriate governance, ensuring a breadth of representation and authority to influence actions by industry, government, agencies and the tertiary education and training system.

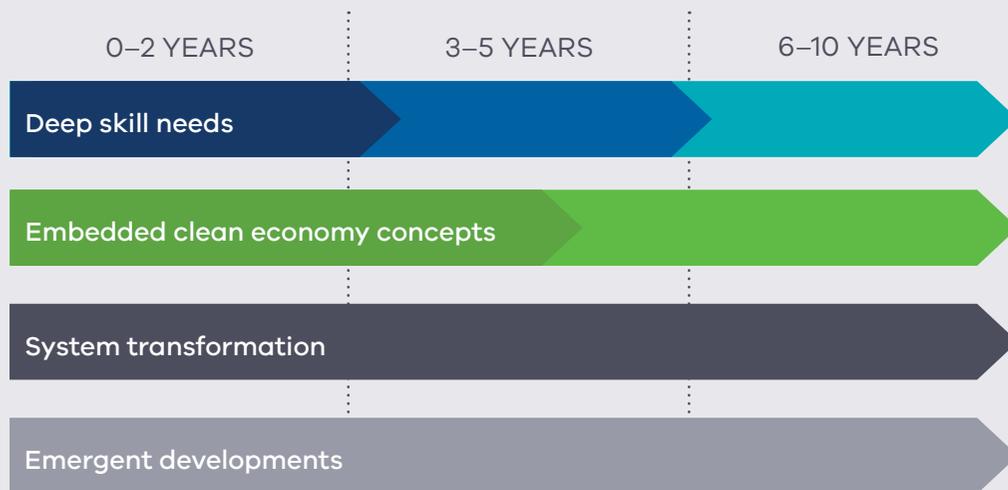
As clean economy technologies, practices and skills needs will change over time, the Strategy will evolve throughout its 10-year implementation.

- **Deep skill needs** – high priority known clean economy skills
- **Embedded clean economy concepts** – clean economy skills that enable the transition
- **System transformation** – changes to build the skills and training system to quickly respond to clean economy technology and policy change
- **Emergent developments** – monitoring of clean economy areas where further information is required before activity can be prioritised.

Mechanisms to embed clean economy workforce considerations in planning processes will include the annual *Victorian Skills Plan*.

The success of the Strategy will rest with the ability of all key stakeholders to work collaboratively to deliver a responsive training system and skilled workforce that meets Victoria's clean economy ambitions.

TIMELINE



Source: ACIL Allen, 2022.





Jobs, Skills,
Industry
and Regions