



Increasing the energy workforce pipeline

Deep dive discussion
pre-reading pack

11 June 2026, 3-4pm AEST

About this CPD roundtable (online)

To achieve current policy goals, Australia needs to accelerate the deployment of renewable generation 6x faster, transmission 5x faster, and we need to build out 10x the 2025 levels of utility-scale storage. These changes require a fundamental shift in how things are done.

This deep dive discussion builds on our first roundtable discussion on *building energy infrastructure at warp speed*, and is focused on the main question, **how can Australia increase its energy workforce pipeline to meet the demand and targets?**

The conversation will be held under the Chatham house rule, where ideas may be shared freely beyond the space, but not be attributed to any individual or organisation.

You can join the meeting [via this link](#).

CPD is an independent, not-for-profit policy institute with staff in Sydney, Melbourne, Canberra and Jakarta.

Our vision is a fair, sustainable society and wellbeing economy that serves current and future generations in Australia and Southeast Asia.

Our mission is to help create transformative systems change through practical solutions to complex policy challenges.

The energy system transition is more important than ever

Meeting Australia's climate and energy transition targets

Planning scenarios like AEMO's "step change" assumes significant inflection points to accelerate the deployment of key infrastructure, which are not on track to happen under current policy settings and trajectories.

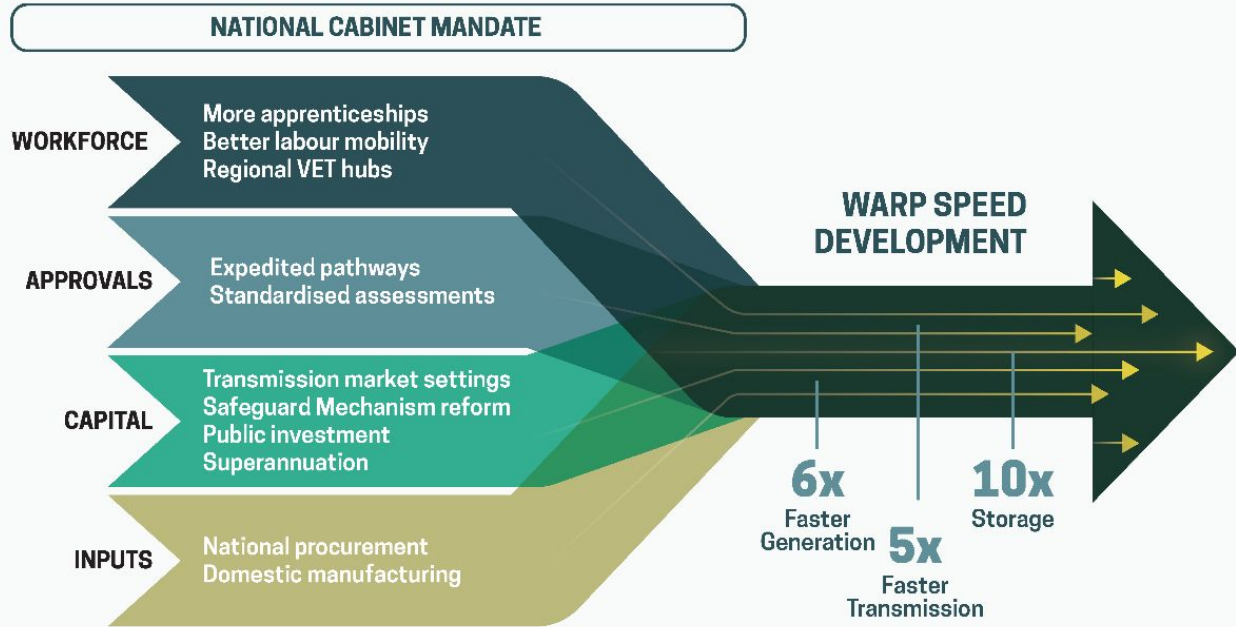
Decarbonising the economy and developing new green industries

Establishing clean energy infrastructure and data centres is energy intensive, along with an economy-wide decarbonisation. These are likely to lead to increased demand at least in line with projections, if not moreso.

Strengthening energy security and easing the cost of living

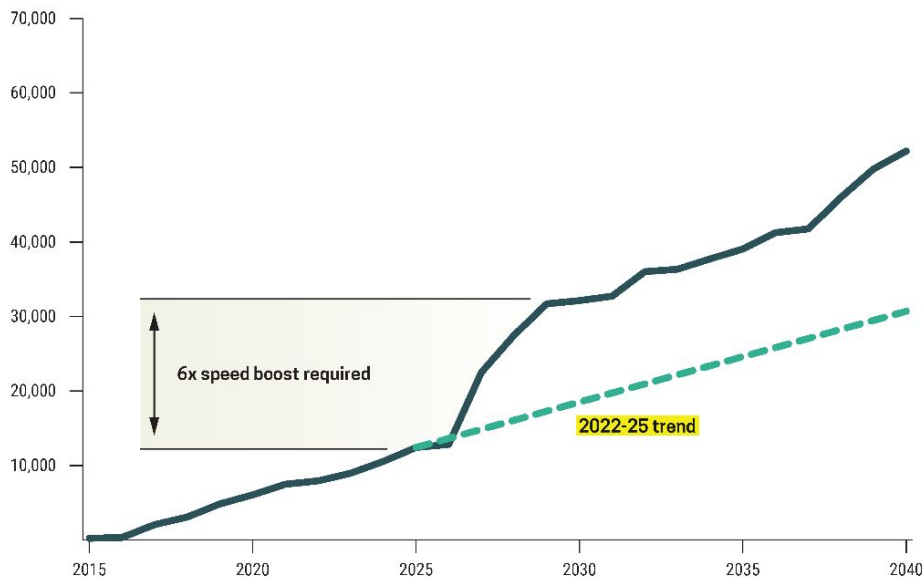
The energy crisis globally is disrupting supply chains and exposing Australians to price shocks, and pushing for a greater shift to energy independence with clean and renewable sources.

CPD proposal: four areas of policy reform to speed up deployment at warp speed

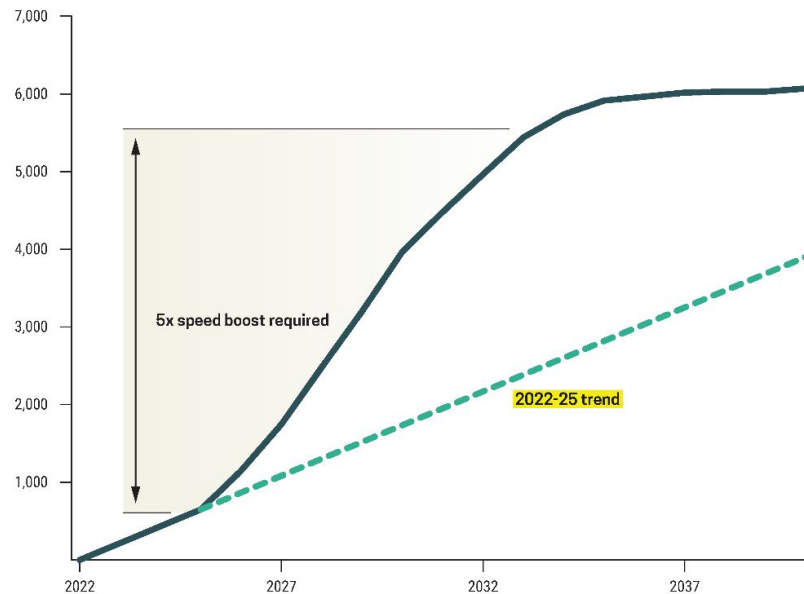


Australia must facilitate a six-fold increase in the build-out of generation and a five-fold acceleration of transmission

Utility solar capacity (MW)



Cumulative total new transmission (km)



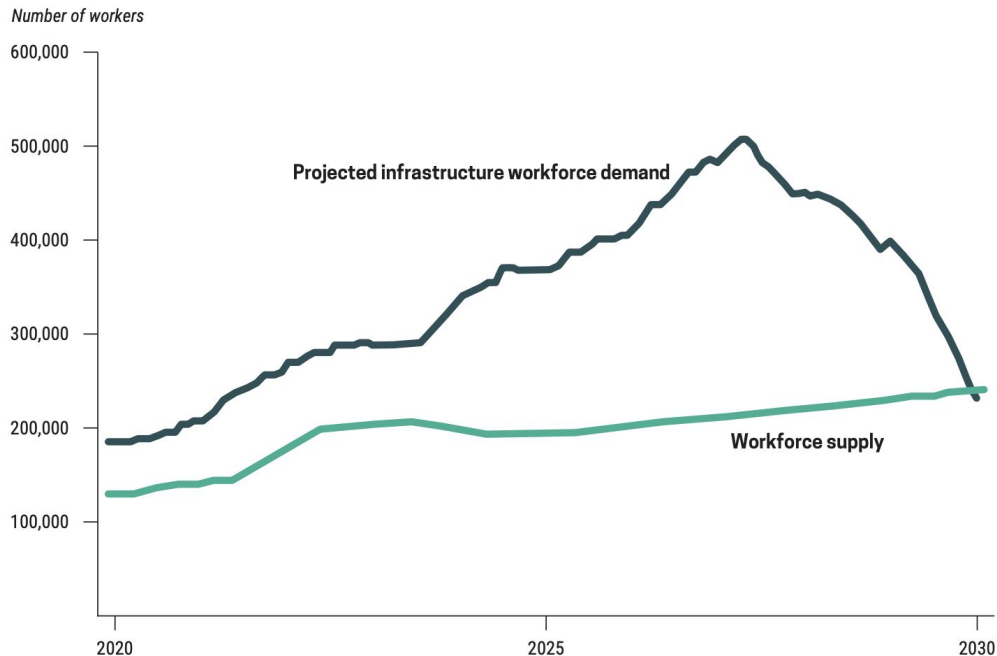
Source: CPD calculations based on AEMO (2026) Draft 2026 ISP chart data

Labour is the most critical delivery risk to Australia's infrastructure plans

Labour is one of the most critical delivery risk to Australia's infrastructure plans.

Infrastructure workforce shortages could reach 300,000 workers by 2027, with regional areas hardest hit as shortages there rise four-fold, driven by energy projects.

SOURCE:
Infrastructure
Australia (2025)
Market Capacity
Report



Key constraints to increasing the workforce pipeline

Low apprenticeships rates and institutional/employer capacity for training

The sector requires an uplift of approximately 40% in electrical apprenticeships.

Apprenticeship rates have fallen over the last few years, especially in the electrical sector.

Rising demand for energy sector training is outpacing the volume of trainers and capacity of existing training infrastructure.

Labour mobility across different sectors and Australian jurisdictions

Competing demand across other infrastructure sectors so the sector is “fishing from the same pond” for talent.

Challenges with skills transfer and boom–bust cycles in the energy sector are deterring new entrants who worry about job security.

Labour shortages in regions

Regional areas will be most affected by labour shortages in the energy transition, because they must host most of the new utility-scale generation, storage and transmission.

[‘Infrastructure Market Capacity - 2025 Report’](#), Infrastructure Australia, 2025.

Report recommendations (on workforce)

Doubling the energy workforce pipeline	
Expand the institutional capacity for training and apprenticeships	Recommendation 2: State and territory governments should establish recurring capital grant programs that invest in training infrastructure and equipment.
	Recommendation 3: The Commonwealth Government should ensure there are enough placements for apprentices, for instance by imposing quotas for larger businesses to employ first and second-year apprentices and mature-aged apprentices.
	Recommendation 4: The Commonwealth Government should expand the Australian Skills Guarantee to cover all major projects in the energy sector receiving public finance, and extend the Guarantee to other occupations in the energy sector beyond construction.

Report recommendations (on workforce)

Increase labour mobility across different sectors and Australian jurisdictions	Recommendation 5: The Commonwealth, through National Cabinet, should harmonise interstate licensing for critical clean-energy occupations including the electrical trades.
	Recommendation 6: The Commonwealth Government should boost labour mobility by creating a national digital skills passport, a single mandatory platform for advertising energy jobs and apprenticeships, and scaling the CERT program nationally.
Address labour shortages in regions through VET hubs and skilled migration	Recommendation 7: The Commonwealth and state governments should expand funding for dedicated VET hubs in REZs/near major projects, offering pre-apprenticeships, apprenticeships and short courses linked to those projects, with a clear pipeline into local jobs.
	Recommendation 8: The Commonwealth Government should cut the financial and administrative cost of visas for energy-relevant “Skills in Demand” roles, ensuring that there are clear pathways for skills recognition.
	Recommendation 9: Where migrant workers are used to meet workforce shortages, they should have a clear pathway to permanent residency.



Discussion questions

How do you perceive the workforce challenge in the energy sector?

Which solutions do you identify as having the most impact?

How easy is it to implement?

Warp Speed

Accelerating renewable
energy infrastructure
deployment



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