



Name: Electrical Trades Union of Australia (ETU)

Submission date: 6/06/2025

1. Reduce the cost of meeting carbon targets

1. What could be done to improve the cost-effectiveness and alignment of policies to reduce emissions across the industrial, electricity and transport sectors?

The participant did not respond to this question.

2. Are there gaps in the emissions-reduction policies in the industrial, electricity and transport sectors which should be addressed?

The participant did not respond to this question.

3. Are there any duplicative emissions-reduction policies in the industrial, electricity and transport sectors which could be streamlined?

The participant did not respond to this question.

2. Speed up approvals for new energy infrastructure

1. Are planning and approvals processes for large energy infrastructure taking too long? If so, what causes the most delay?

The Climate Change Authority (CCA) has identified environmental and planning approvals as a key barrier to the timely development of utility scale generation and storage. Current timeframes are negatively impacting Australia's ability to replace coal-fired power generation and meet renewable energy and emissions reduction targets.²

Furthermore, not only are planning and assessment processes taking too long, timelines are also incredibly variable and unpredictable.³ A 2024 report by the Clean Energy Investor Group (CEIG) found both lengthy and unpredictable assessment timelines across different jurisdictions:

Victoria: planning permit applications for energy generation facilities took an average of 376 days in the 2023 financial year (334 days average so far in 2024). However, at 19 April 2024, one wind farm permit application lodged in 2018 had reached 2,045 days without a decision being made.

Queensland: seven wind farms took an average of 190 days for planning approval in 2019- 2021. Furthermore, with solar, wind and storage projects each assessed by different state and local authorities, CEIG found that they couldn't readily find comparable data on approvals timeframes.

NSW: over the five years till 30 November 2023 average approval timeframes were 746 days for wind, solar and battery projects, and 492 days for hydro and transmission projects.⁴

Even once renewable energy and storage projects receive planning and environmental

approvals, they may also face delays in gaining grid connection approvals from AEMO.⁵

Similarly, ETU analysis of project data in the RenewMap database found that there are currently 377 projects in the pipeline waiting for either the DA or EPBC assessment process to be finalised. These projects have waited 23 months on average since their initial application or referral. The ten projects with the longest wait times have all been waiting over 70 months.

2. How can planning and approvals processes be sped up without unduly compromising regulatory standards?

While there are numerous factors that are leading to planning and approval delays, a significant factor is the lack of coordination (leading to duplication) between jurisdictions, and a lack of clarity regarding assessment criteria.

A lack of coordination between departments and jurisdictions has also been identified as a key impediment to the timely rollout of the transmission infrastructure necessary to connect new renewable generation and storage projects to the grid. For example, the current NSW Planning Review Options Paper identified:

"... seven different bodies are now involved in planning and approving major new transmission projects in NSW (without including environmental and planning approvals). The respective roles and responsibilities of these bodies are not always clear and there are limited mechanisms to ensure effective coordination between them. These bodies also prepare at least six different regular reports directly relevant to transmission planning."⁶

A key driver of this complexity was reforms introduced by the NSW state government to speed up planning and approvals processes in the context of then federal government inaction on energy policy, and the need for NSW to address urgent energy reliability challenges ahead of the closure of ageing coal fired power stations.⁷

As the NSW transmission example shows, any reform to the current planning and approvals processes and systems must take a cross-jurisdictional and cross-departmental approach to identify duplicative and contradictory processes in the existing system, while at the same time, avoiding accidentally introducing further complexity and contradictions in the planning and assessment processes.

3. Should clean energy projects be treated differently to other projects for the purpose of environmental and other approvals? If so, how?

For Australia to meet its emissions targets, it must necessarily decarbonise the electricity and energy sector. This sector represents 35% of Australia's emissions, and the decarbonisation of this sector facilitates the decarbonisation pathways of other sectors, including industry and transport.⁸ However, current environmental assessment processes cannot consider the cumulative impacts of emissions reductions from the shift from fossil fuel to renewable generation.

The ETU supports environmental assessments considering the positive impact that renewable energy generation and storage projects have on emissions.

Environmental approvals processes should also be reformed to drive more strategic and systemic approaches to renewable approvals. The Samuel Review argued that:

Pursuing strategic opportunities to improve outcomes for Australia has become discretionary, particularly when resources are constrained. The Commonwealth has retreated to process-driven project-level transactions, rather than leading strategically in the national interest. Decisions that determine environmental outcomes are generally made on a project-by-project basis, only when impacts exceed a certain size and only for those parts of the environment protected under the EPBC Act. This means that cumulative impacts on the environment are not systematically considered. This puts pressure on individual projects to deliver sustainable development, rather than being implemented within an integrated system of environmental management that operates at multiple scales.⁹

The ETU supports the Samuel Review recommendation to introduce a regional planning approach that identifies areas of high and low biodiversity value, taking into consideration the proposed generation capacity of that region. To be effective and timely, these regional plans must be produced at the right scale to allow for a relatively fine-grained approach to nature and community impacts in a timely fashion. For example, the CEIG propose the REZ as a suitable scale for regional assessments.¹⁰

Finally, the ETU supports the introduction of additional support and resourcing to renewable energy proponents to manage and expedite the approvals process. We note that the federal government introduce the National Renewable Energy Priority List to “provide coordinated support for regulatory planning and environmental approval processes for identified priority renewable energy projects across Australia”.¹¹ The Productivity Commission should review these processes and consider the impact that this coordinated support is having on overall approval timelines, and on minimising application and compliance burden for proponents and developers.

4. What can be done to build local community support for new energy infrastructure projects?

The employment and quality training of apprentices is a significant way of building local community support for new infrastructure and projects, irrespective of the industry. The training of apprentices delivers a longer-term skills dividend for communities and builds up a local workforce that can be employed longer term in the construction and maintenance of projects, including new energy infrastructure projects, in communities.

However, the ETU has seen too many examples of new energy infrastructure projects that fail to employ any apprentices, instead relying on bringing in substantial numbers of workers from outside the community. This undermines community investment in new energy projects.

Investment in apprentices has the potential to deliver deeper and more long-lasting change to communities than that which is delivered through community benefit funds. However, as we discuss below, the training of apprentices requires predictable and coordinated project timelines. This coordination is made more difficult by the unpredictability of the current planning and approvals regime.

The employment and training of apprentices does not alleviate the need for reforms of current community consultation processes or of direct payments to communities and

landowners hosting renewable energy projects. It is one part of a suite of measures that will increase community investment in the transition over the short and long term.

5. Please outline any evidence showing the productivity benefits of faster approvals for energy projects.

The backlog in environmental approvals ties up investment in affected projects for extended periods. This delays the availability of capital for other projects that can be approved. For projects that are approved, the delay in approval extends the timeline to realise a return on investment and so adversely affects the productivity of capital invested. This affects the ability of large-scale construction in the REZ, including transmission and renewable energy projects, to compete for and secure investment.

The complexity and unpredictability of assessment timeframes and processes also exacerbates tight labour market conditions and negatively impacts the employment and training of apprentices at the necessary scale required to meet current and projected shortfalls in the workforce needed for the energy transition.

According to Jobs and Skills Australia (JSA)'s 2023 Clean Energy Generation Report, Australia is currently facing a shortfall of 42,500 electricians by 2030.¹² More recent research by Race for 2030 detail the risks of this ongoing skills shortage, which includes risks of delays, increased project costs (wage inflation, recruitment costs and liquidated damages), and increase the cost of capital for future projects to reflect increased risk.¹³

The current skills shortage is a global problem that can only be solved by training more workers in the necessary skills for the energy transition. As the International Energy Agency (IEA) notes:

Labour and skills shortages are already translating into project delays, raising concerns that clean energy solutions will be unable to keep pace with demand to meet net zero targets.¹⁴

A “smoother” pipeline of work can help alleviate some labour market constraints by reducing peaks and troughs in demand for labour. However, despite the State and Federal government having clear targets for renewable generation, and identifying priority areas for project development, the unpredictability of planning and environmental assessment timeframes makes it difficult to coordinate and sequence project start times reduce unnecessary peaks and has the potential to great jobs pipeline in each REZ.

Infrastructure Australia's Market Capacity Report 2024 notes that steps taken by government to actively manage infrastructure project pipelines to align demand more closely to current workforce demand, coupled with the softening of demand, has resulted in a 20% decrease in the volume of workers required on the Major Public Infrastructure Pipeline.¹⁵ The Productivity Commission should consider how a similar smoothing of renewable energy pipelines can alleviate regional labour market capacity issues, and the role of more predictable planning and approvals processes in allowing for better project coordination.

This uncertainty also impedes the employment and training of apprentices. A typical apprenticeship takes four years, while renewable infrastructure projects may only take 12 – 18 months. Furthermore, a typical renewable generation or storage project does not

provide the range of experience required to be demonstrated to complete the electrical apprenticeship. For this reason, the ETU has proposed that group training organisations (GTOs) be appointed to REZs. Inconsistent demand for skilled electrical labour within renewable energy zones (REZ) can disincentive the employment of apprentices, and where apprentices are employed, may result in interrupting their on-the-job training over the course of an apprenticeship, increasing the risk of non-completion.

Each non-completion of an electrical apprenticeship represents a significant productivity drain, as individuals will be unable to use the skills they have learnt on the job unless they have completed the apprenticeship and received an electrical licence. This is a drain on training centre resources, as well as a productivity drain on on-the-job supervisors who have invested in training apprentices who have not gone on to qualify.

Finally, the ISP notes that the current timelines to deliver renewable energy generation, transmission and storage before ageing coal-fired power stations retire is tight.¹⁶ There are significant physical limits to the keeping these power stations open longer than schedule. If sufficient renewable generation, storage and transmission is not delivered in time to keep the lights on, this will have significant, whole-of-economy productivity impacts.

3. Encourage adaptation by addressing barriers to private investment

1. What are the barriers and enablers impacting decisions by owner-occupiers, landlords and developers about how housing is built and updated over time so that it is resilient to the effects of climate change?

The participant did not respond to this question.

2. What information do people need to make decisions about where to live, how to build and how to upgrade their homes to appropriately factor in climate change?

The participant did not respond to this question.

3. What are the most cost-effective retrofitting options for improving the resilience of Australia's existing housing stock? What are their costs and benefits?

The participant did not respond to this question.

4. What role might minimum standards play in ensuring the resilience of Australia's housing stock?

The participant did not respond to this question.

5. The impacts of climate change are being factored into the regulation of where and how houses are built in different ways around Australia. What does leading practice look like? Where is there room for improvement? Are there lessons we can learn from other countries?

The participant did not respond to this question.

Cover sheet: Supporting document #1



Electrical Trades Union

Speed up Approvals for New Energy Infrastructure

May 2025

6 June 2025

About the ETU

The Electrical Trades Union of Australia ('the ETU')¹ is the principal union for electrical and electrotechnology tradespeople and apprentices in Australia, representing well over sixty-thousand workers around the country.

ETU members make up a critical pillar of the licensed electrical workforce responsible for delivering the Australian Government's commitments on providing a more efficient, affordable, and secure emissions-free energy network, including building renewable generation and storage projects and transmission projects. The timing of construction start on renewable energy is critical to the development and retention of a workforce capable of delivering the energy transition at the scale envisaged by the Government.

Acknowledgement

In the spirit of reconciliation, the ETU 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 all First Nations peoples today.

Pillar 5: Speed up approvals for new energy infrastructure

Are planning and approvals processes for large energy infrastructure taking too long? If so, what causes the most delay?

How can planning and approvals processes be sped up without unduly compromising regulatory standards?

The Climate Change Authority (CCA) has identified environmental and planning approvals as a key barrier to the timely development of utility scale generation and storage. Current timeframes are negatively impacting Australia's ability to replace coal-fired power generation and meet renewable energy and emissions reduction targets.²

Furthermore, not only are planning and assessment processes taking too long, timelines are also incredibly variable and unpredictable.³ A 2024 report by the Clean Energy Investor Group (CEIG) found both lengthy and unpredictable assessment timelines across different jurisdictions:

Victoria: planning permit applications for energy generation facilities took an average of 376 days in the 2023 financial year (334 days average so far in 2024). However, at 19 April 2024, one wind farm permit application lodged in 2018 had reached 2,045 days without a decision being made.

Queensland: seven wind farms took an average of 190 days for planning approval in 2019- 2021. Furthermore, with solar, wind and storage projects each assessed by different state and local authorities, CEIG found that they couldn't readily find comparable data on approvals timeframes.

NSW: over the five years till 30 November 2023 average approval timeframes were 746 days for wind, solar and battery projects, and 492 days for hydro and transmission

¹ Being a division of the CEPU, a trade union registered under the *Fair Work (Registered Organisations) Act 2009* (Cth).

² <https://www.climatechangeauthority.gov.au/sites/default/files/documents/2024-11/2024AnnualProgressReport.pdf>, p. 60

³ <https://www.climatechangeauthority.gov.au/sites/default/files/documents/2024-11/2024AnnualProgressReport.pdf>, p. 60

projects.⁴

Even once renewable energy and storage projects receive planning and environmental approvals, they may also face delays in gaining grid connection approvals from AEMO.⁵

Similarly, ETU analysis of project data in the RenewMap database found that there are currently 377 projects in the pipeline waiting for either the DA or EPBC assessment process to be finalised. These projects have waited 23 months on average since their initial application or referral. The ten projects with the longest wait times have all been waiting over 70 months.

Project Name	Technology	Wait Time (months)
Mt Fyans Wind Farm	Onshore Wind	94
Sundown Solar Farm	Solar PV	90
Sundown Solar Farm (BESS)	Battery	90
Aurora Energy Project (VS1, Solar PV)	Solar PV	87
Twin Creek Wind Farm	Onshore Wind	84
Twin Creek Wind Farm (BESS)	Battery	84
Willatook Wind Farm	Onshore Wind	73
Willatook Wind Farm (BESS)	Battery	73
Shoalhaven Hydro Expansion Project	Pumped Hydro	73

What the above table elides over is the time spent in preparing the various applications, necessarily occasioning further delay.

While there are numerous factors that are leading to planning and approval delays, a significant factor is the lack of coordination (leading to duplication) between jurisdictions, and a lack of clarity regarding assessment criteria.

A lack of coordination between departments and jurisdictions has also been identified as a key impediment to the timely rollout of the transmission infrastructure necessary to connect new renewable generation and storage projects to the grid. For example, the current NSW Planning Review Options Paper identified:

... seven different bodies are now involved in planning and approving major new transmission projects in NSW (without including environmental and planning approvals). The respective roles and responsibilities of these bodies are not always clear and there are limited mechanisms to ensure effective coordination between

⁴ https://www.ceig.org.au/wp-content/uploads/2024/04/CEIG_-_Media-release_Delivering-major-clean-energy-projects-in-QLD-and-VIC.pdf; see also <https://www.climatechangeauthority.gov.au/sites/default/files/documents/2024-11/2024AnnualProgressReport.pdf>, p. 61

⁵ <https://www.climatechangeauthority.gov.au/sites/default/files/documents/2024-11/2024AnnualProgressReport.pdf>, p. 62

them. These bodies also prepare at least six different regular reports directly relevant to transmission planning.⁶

A key driver of this complexity was reforms introduced by the NSW state government to speed up planning and approvals processes in the context of then federal government inaction on energy policy, and the need for NSW to address urgent energy reliability challenges ahead of the closure of ageing coal fired power stations.⁷

As the NSW transmission example shows, any reform to the current planning and approvals processes and systems *must* take a cross-jurisdictional and cross-departmental approach to identify duplicative and contradictory processes in the existing system, while at the same time, avoiding accidentally introducing further complexity and contradictions in the planning and assessment processes.

Should clean energy projects be treated differently to other projects for the purpose of environmental and other approvals? If so, how?

For Australia to meet its emissions targets, it must necessarily decarbonise the electricity and energy sector. This sector represents 35% of Australia's emissions, and the decarbonisation of this sector facilitates the decarbonisation pathways of other sectors, including industry and transport.⁸ However, current environmental assessment processes cannot consider the cumulative impacts of emissions reductions from the shift from fossil fuel to renewable generation.

The ETU supports environmental assessments considering the positive impact that renewable energy generation and storage projects have on emissions.

Environmental approvals processes should also be reformed to drive more strategic and systemic approaches to renewable approvals. The Samuel Review argued that:

Pursuing strategic opportunities to improve outcomes for Australia has become discretionary, particularly when resources are constrained. The Commonwealth has retreated to process-driven project-level transactions, rather than leading strategically in the national interest. Decisions that determine environmental outcomes are generally made on a project-by-project basis, only when impacts exceed a certain size and only for those parts of the environment protected under the EPBC Act. This means that cumulative impacts on the environment are not systematically considered. This puts pressure on individual projects to deliver sustainable development, rather than being implemented within an integrated system of environmental management that operates at multiple scales.⁹

The ETU supports the Samuel Review recommendation to introduce a regional planning approach that identifies areas of high and low biodiversity value, taking into consideration the proposed generation capacity of that region. To be effective and timely, these regional plans must be produced at the right scale to allow for a relatively fine-grained approach to nature and community impacts in a timely fashion. For example, the CEIG propose the REZ as a suitable scale for regional assessments.¹⁰

Finally, the ETU supports the introduction of additional support and resourcing to renewable energy

⁶ <https://www.energy.nsw.gov.au/sites/default/files/2025-04/NSW-transmission-planning-review-Options-Paper-v2.pdf>, p. 2

⁷ <https://www.energy.nsw.gov.au/sites/default/files/2025-04/NSW-transmission-planning-review-Options-Paper-v2.pdf>, p. 2

⁸ <https://www.climatechangeauthority.gov.au/sites/default/files/documents/2024-09/2024SectorPathwaysReviewElectricityandEnergy.pdf>, p. 2.

⁹ <https://www.dccew.gov.au/sites/default/files/documents/epbc-act-review-final-report-october-2020.pdf>, p. 42

¹⁰ <https://www.ceig.org.au/wp-content/uploads/2024/12/HSF-x-CEIG-EPBC-Act-Report.pdf>

proponents to manage and expedite the approvals process. We note that the federal government introduce the National Renewable Energy Priority List to “provide coordinated support for regulatory planning and environmental approval processes for identified priority renewable energy projects across Australia”.¹¹ The Productivity Commission should review these processes and consider the impact that this coordinated support is having on overall approval timelines, and on minimising application and compliance burden for proponents and developers.

What can be done to build local community support for new energy infrastructure projects?

The employment and quality training of apprentices is a significant way of building local community support for new infrastructure and projects, irrespective of the industry. The training of apprentices delivers a longer-term skills dividend for communities and builds up a local workforce that can be employed longer term in the construction and maintenance of projects, including new energy infrastructure projects, in communities.

However, the ETU has seen too many examples of new energy infrastructure projects that fail to employ any apprentices, instead relying on bringing in substantial numbers of workers from outside the community. This undermines community investment in new energy projects.

Investment in apprentices has the potential to deliver deeper and more long-lasting change to communities than that which is delivered through community benefit funds. However, as we discuss below, the training of apprentices requires predictable and coordinated project timelines. This coordination is made more difficult by the unpredictability of the current planning and approvals regime.

The employment and training of apprentices does not alleviate the need for reforms of current community consultation processes or of direct payments to communities and landowners hosting renewable energy projects. It is one part of a suite of measures that will increase community investment in the transition over the short and long term.

Please outline any evidence showing the productivity benefits of faster approvals for energy projects.

The backlog in environmental approvals ties up investment in affected projects for extended periods. This delays the availability of capital for other projects that can be approved. For projects that are approved, the delay in approval extends the timeline to realise a return on investment and so adversely affects the productivity of capital invested. This affects the ability of large-scale construction in the REZ, including transmission and renewable energy projects, to compete for and secure investment.

The complexity and unpredictability of assessment timeframes and processes also exacerbates tight labour market conditions and negatively impacts the employment and training of apprentices at the necessary scale required to meet current and projected shortfalls in the workforce needed for the energy transition.

According to Jobs and Skills Australia (JSA)’s 2023 *Clean Energy Generation Report*, Australia is currently facing a shortfall of 42,500 electricians by 2030.¹² More recent research by Race for 2030 detail the risks of this ongoing skills shortage, which includes risks of delays, increased project costs (wage inflation, recruitment costs and liquidated damages), and increase the cost of capital for future projects to reflect

¹¹ <https://www.dcceew.gov.au/energy/renewable/priority-list>

¹² <https://www.jobsandskills.gov.au/download/19313/clean-energy-generation/2383/supplementary-report/docx>, p. 17.

increased risk.¹³

The current skills shortage is a global problem that can only be solved by training more workers in the necessary skills for the energy transition. As the International Energy Agency (IEA) notes:

Labour and skills shortages are already translating into project delays, raising concerns that clean energy solutions will be unable to keep pace with demand to meet net zero targets.¹⁴

A “smoother” pipeline of work can help alleviate some labour market constraints by reducing peaks and troughs in demand for labour. However, despite the State and Federal government having clear targets for renewable generation, and identifying priority areas for project development, the unpredictability of planning and environmental assessment timeframes makes it difficult to coordinate and sequence project start times reduce unnecessary peaks and has the potential to great jobs pipeline in each REZ.

Infrastructure Australia’s *Market Capacity Report 2024* notes that steps taken by government to actively manage infrastructure project pipelines to align demand more closely to current workforce demand, coupled with the softening of demand, has resulted in a 20% decrease in the volume of workers required on the Major Public Infrastructure Pipeline.¹⁵ The Productivity Commission should consider how a similar smoothing of renewable energy pipelines can alleviate regional labour market capacity issues, and the role of more predictable planning and approvals processes in allowing for better project coordination.

This uncertainty also impedes the employment and training of apprentices. A typical apprenticeship takes four years, while renewable infrastructure projects may only take 12 – 18 months. Furthermore, a typical renewable generation or storage project does not provide the range of experience required to be demonstrated to complete the electrical apprenticeship. For this reason, the ETU has proposed that group training organisations (GTOs) be appointed to REZs. Inconsistent demand for skilled electrical labour within renewable energy zones (REZ) can disincentive the employment of apprentices, and where apprentices are employed, may result in interrupting their on-the-job training over the course of an apprenticeship, increasing the risk of non-completion.

Each non-completion of an electrical apprenticeship represents a significant productivity drain, as individuals will be unable to use the skills they have learnt on the job unless they have completed the apprenticeship and received an electrical licence. This is a drain on training centre resources, as well as a productivity drain on on-the-job supervisors who have invested in training apprentices who have not gone on to qualify.

Finally, the ISP notes that the current timelines to deliver renewable energy generation, transmission and storage before ageing coal-fired power stations retire is tight.¹⁶ There are significant physical limits to the keeping these power stations open longer than schedule. If sufficient renewable generation, storage and transmission is not delivered in time to keep the lights on, this will have significant, whole-of-economy productivity impacts.

¹³ https://www.racefor2030.com.au/content/uploads/NEM-2024-Workforce_Policybrief.pdf, p. 8

¹⁴ https://iea.blob.core.windows.net/assets/ba1eab3e-8e4c-490c-9983-80601fa9d736/World_Energy_Employment_2023.pdf, p. 9

¹⁵ https://www.infrastructureaustralia.gov.au/sites/default/files/2025-05/IA24_Market%20Capacity%20Report_05-25.pdf, p. 6.

¹⁶ <https://www.racefor2030.com.au/project/australian-electricity-workforce-for-the-2024-integrated-system-plan/>, p. 8.

Cover sheet: Supporting document #2

About the ETU

The Electrical Trades Union of Australia ('the ETU') is the principal union for electrical and electrotechnology tradespeople and apprentices in Australia, representing well over sixty-thousand workers around the country.

The ETU welcomes the opportunity to make submissions on the role of Standards Australia and the process of the development of Australian Standards and adoption of international standards inclusive of the review and editing of international standards to the Australian context particularly in relation to electrotechnology.

ETU members make up a critical pillar of the licensed electrical workforce responsible for the installation and compliance of electrical installations and infrastructure. Strong Australian Standards, including the adoption of International Standards that reflect the Australian context, our legislation and wiring systems are critical to maintain the safety and compliance of electrical installations, the generation facilities, transmission and distribution networks.

Acknowledgement

In the spirit of reconciliation, the ETU 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 all First Nations peoples today.

Australian Standards

Standards Australia, with input from the ETU and other technical experts from across the electrotechnology industry, plays an essential role in the development of Australian Standards that meet our context and wiring systems. The governing document in electrotechnology is AS/NZS 3000 the wiring rules. This document has been developed over many years and is referenced in state and territory legislation. The wiring rules have been developed, reviewed and edited over many interactions relevant to the Australian wiring systems and considering emerging technologies and international standards.

Standards Australia assesses international standards for relevance and suitability in the Australian context. This process benefits industry, regulators, technological advancement and safety outcomes. Standards Australia actively participates, through technical experts, in the International Electrotechnology Commission (IEC) and other international bodies to bring world leading international standards to Australia. This engagement ensures that Australian standards and/or international standards adapted or directly adopted bring the latest safety, technological advancement and efficiency in fields such as electric vehicles infrastructure, renewable energy and energy storage.

The assessment of international standards for the Australian context (our unique physical and regulatory environment) ensures that international standards are not used unsafely or inappropriately and take into account how a standard should be adapted to suit our:

- Climatic conditions and bushfire risk
- Electrical safety regulatory regime
- High temperatures and UV exposure

Standards Australia operates a transparent, consensus-based process involving industry experts, regulators, engineers, employer associations, unions and consumer groups. Regular reviews of standards ensure consistency with technological advancement, latest safety knowledge and regulations.

The Standards Australia assessment process of international standards provides a National reference point for regulators who often adopt reference to standards in legislation and facilitates safe technological adoption providing clear regulatory pathways for manufacturers and installers.

Example:

AS/NZS 4777.2 (Grid connection of energy systems via inverters) ensures that home solar systems interact safely with the grid. This standard has adopted international content and is relevant to the Australian context.

Overseas standards may be technically sound, but they are developed in different legal, environmental, and policy contexts. Automatically adopting them could mean ceding Australia's sovereign right to assess what works best for our economy, environment, and safety systems — despite the Australian Government formally recognising Standards Australia as the nation's peak standards body.

Standards Australia is rightly held to high expectations of transparency, consensus, and open public consultation. We support this approach. However, if overseas-developed standards are allowed into regulation without equivalent governance or review, it creates a two-tiered system that favours speed over scrutiny, and undermines trust in the regulatory process, and places quality and the safety of Australians at risk.

International standards are not just technical documents, they are instruments of geopolitical influence. As global rulemaking accelerates in critical sectors like AI, clean energy, and infrastructure, Australia must preserve its ability to contribute, shape, and selectively adopt global standards that align with our national interest. Weakening our domestic standards process risks weakening our global voice, and potentially our national security.

What reform should look like

1.Strengthening domestic harmonisation first National alignment of regulated standards across states and territories should be the priority. The biggest inefficiencies lie in internal fragmentation, not in whether a standard is international or local.

2.Maintaining expert oversight and validation Australia already has a strong rate of international standards adoption following an assessment of their appropriateness for local conditions, safety and quality requirements. This assessment is based on input from technical experts and affected stakeholders. That process should not be bypassed.

3. Applying consistent rules to all standards If other standards bodies (including overseas Standards Development Organisations) are to have their content adopted into regulation, their documents must meet the same transparency, consultation, and scrutiny as standards developed or adopted through Standards Australia committees.

4. Ensure affordability of Australian Standards to those that rely on them such as electrical workers Standards are prohibitively expensive and amendments to standards and republishing after review dictate the need to repurchase the whole standard in many cases.

Examples:

AS/NZS 60079.14:2022

Explosive atmospheres, Part 14: Design selection, erection and initial inspection (IEC 60079-14:2013 (ED.5.0) MOD) \$772.00

AS/NZS 60079.14:2022 adopts IEC 60079 14, setting out the specific requirements for the design, selection, erection and initial inspection of electrical installations in, or associated with, explosive atmospheres. Applies to all electrical equipment including fixed, portable, transportable and personal, and installations, permanent or temporary. Single Price \$306.

AS/NZS 60079.17:2017

Explosive atmospheres, Part 17: Electrical installations inspection and maintenance (IEC 60079-17:2013 (ED.5.0) MOD). Single Price \$204.

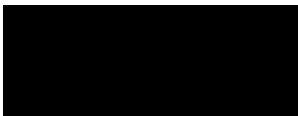
AS/NZS 3012:2019

Electrical installations - Construction and demolition sites. Single Price \$203.

AS/NZS 3000:2018

Electrical installations (known as the Australian/New Zealand Wiring Rules). Single Price \$250.

The ETU recommends that any Australian Standards that are required by regulation, building codes, or otherwise represent an enforceable outcome should be freely accessible to those trades/vocations required to apply them.



Vanessa Garbett
National Technical Officer
Electrical Trades Union