25 November 2026

Planning and Assessment
Department of Planning, Housing and Infrastructure
Locked Bag 5022 Parramatta NSW 2124

Submission - New England REZ Transmission Project - SSI-74175972

To whom it may concern,

Thank you for the opportunity to provide a submission into the New England REZ Transmission Project - SSI-74175972 and taking the time to consider our submission.

This is a submission supporting the New England REZ Transmission Project - SSI-74175972.

Executive Summary

The Clean Energy Association of Newcastle and Surrounds (CLEANaS) strongly supports the proposed **New England REZ Transmission Project (SSI-74175972)** and recognises its strategic importance in enabling New South Wales and Australia to achieve their emissions reduction commitments, maintain electricity reliability, and facilitate the transition to a low-emissions economy.

Climate change poses significant environmental, social and economic risks for Australia. Rising temperatures, more frequent extreme weather events, prolonged droughts, increased bushfire risk and changing rainfall patterns are already affecting communities, ecosystems and industries. These impacts are expected to intensify unless greenhouse gas emissions are reduced rapidly and substantially.

Australia has committed to reducing emissions by 43% below 2005 levels by 2030 and achieving net zero emissions by 2050, while New South Wales has legislated targets of at least 50% emissions reduction by 2030, 70% by 2035 and net zero by 2050. Despite progress, current emissions trends indicate that further action is required if these targets are to be achieved.

The electricity sector remains Australia's largest source of emissions and presents one of the greatest opportunities for rapid emissions reduction. As coal-fired generation progressively

retires over the coming decades, significant investment in renewable energy generation, storage and transmission infrastructure is essential to maintain a secure, reliable and affordable electricity system. The Australian Energy Market Operator has identified transmission expansion as a critical component of the least-cost pathway to decarbonisation.

The New England REZ Transmission Project will provide the network capacity necessary to connect large-scale renewable energy resources in northern New South Wales to major electricity demand centres across the National Electricity Market. As such, the project represents a key enabling investment that supports emissions reduction, energy security and long-term economic development.

CLEANaS has been engaged with the project since 2023 and has first-hand experience of both the challenges and opportunities associated with transmission development. Through constructive engagement between EnergyCo and affected landholders, route refinements were ultimately achieved that reduced impacts on productive agricultural land, community initiatives and heritage values. This experience demonstrates the importance of ongoing consultation, responsive planning and careful route selection.

Many stakeholders support the transition to renewable energy but question whether communities hosting major transmission infrastructure will receive a fair share of its benefits. A recurring concern raised during consultation was that the New England region will host transmission infrastructure carrying large volumes of electricity while having limited opportunity to access that energy for local industry, employment and economic development.

To strengthen social licence and deliver on EnergyCo's stated commitment to community benefits, we recommend investigating opportunities to enable future industrial and community use of the electricity network along the corridor. This includes assessing demand from regional industries, preserving future connection options at hubs and substations, upgrading local distribution networks where constraints limit economic development, and supporting industrial precinct planning in host communities.

We also recommend that EnergyCo consider legacy uses for temporary workforce accommodation, establish "enabling local industry and energy use" as a dedicated community benefit category, and commit to fair compensation arrangements for neighbouring landowners experiencing significant visual impacts.

These recommendations do not seek immediate infrastructure commitments but rather investigation and planning to ensure host communities have a realistic opportunity to benefit from

the energy transition they are helping to enable. By creating pathways for local industry, jobs, investment and energy access, EnergyCo can strengthen community support and leave a lasting economic legacy beyond the construction phase of the project.

While CLEANaS supports the project, it also recognises that the project has the potential to result in significant biodiversity impacts, including impacts on native vegetation, threatened species and endangered ecological communities. Additional measures should be implemented to further avoid, minimise and mitigate these impacts.

In particular, CLEANaS recommends:

- Greater use of selective clearing and integrated vegetation management approaches to retain compatible native shrubs, grasses and understorey habitat beneath transmission lines wherever practicable.
- Additional efforts to avoid impacts on high-value native vegetation and threatened ecological communities, including Box-Gum Grassy Woodland and New England Peppermint Woodland.
- Rehabilitation of temporarily disturbed areas using locally sourced native species, supported by long-term management and monitoring commitments.
- Protection and enhancement of habitat connectivity corridors across the project area.
- Effective mitigation measures for threatened species, particularly gliders, microbats and other fauna vulnerable to habitat fragmentation.
- Long-term monitoring, independent evaluation and adaptive management of biodiversity outcomes to ensure mitigation measures remain effective over time.

CLEANaS believes that Australia's transition to a clean energy future requires both the rapid deployment of renewable energy infrastructure and the protection of biodiversity and community values. These objectives are not mutually exclusive and can be achieved through careful planning, continued stakeholder engagement and the application of best-practice environmental management.

Accordingly, CLEANaS supports approval of the New England REZ Transmission Project, subject to strong commitments to avoiding, minimising and managing biodiversity impacts throughout the construction, operation and rehabilitation phases of the project. The project is a critical component of New South Wales' clean energy transition and will play an important role in helping the State achieve its legislated climate and emissions reduction objectives.

Introduction

CLEANaS is the Clean Energy Association of Newcastle and Surrounds, a not-for-profit association formed in 2012 by a group of locals passionate about clean energy.[1] CLEANaS is dedicated to driving the uptake of clean energy so that our region can transition from its current dependency on fossil fuels to a more competitive and sustainable local economy. We achieve this by working with our partners to demonstrate profitable community-led and community-owned clean energy projects; raise the profile of clean energy in the local economy through education and awareness raising; and by improving access to financing mechanisms and affordable technologies so that investment and activity grow. Our initiatives must deliver a win-win for local community investors, local enterprise and, of course, our environment.

CLEANaS involvement in the transmission project goes back to 2023. In 2023 CLEANaS was in the midst of planning the development of a small community solar farm near Gundy, in the Hunter Valley. This was a crucial time for our project. A Solar Energy Development license had been secured with the landowner, a preliminary response was obtained from AUSGRID on the connection, contractual discussions were underway with a developer to design the solar farm, and pro-bono legal advice secured. In August 2023 the landholder was notified by Energy Co on the proposed Gundy HV Easement that would cross the property and site of the solar farm precluding the use of the land for the solar farm. This was devastating to CLEANaS members that had invested some much time and social capital into the community solar project. For the landholder, the proposed HV easement crossed over some of the most productive land including an organic garlic farm and organic olive grove. It was also close to the heritage listed homestead where the landholder resided. The easement was also adjacent to an aboriginal heritage site. This contravened the NSW's own guidelines for HV easements.

Over the next six months we worked with the landholder and the landholder with neighbouring impacted landholders on the HV Easement proposal trying to find an equitable solution including proposing an alternative route. Finally in March 2024, Energy Co agreed to move the easement. Unfortunately it was too late for CLEANaS and our Community Energy project has not gone ahead.

It should be stated that we (CLEANaS) and the local landholders had no objection to the establishment of the easement but where it was initially proposed.

Climate Change Impacts

The impacts of climate change on the environment are significant and severe. The present scientific consensus is that the earth's climate is warming due to human activity, and the

[1] http://www.cleanas.org.au/

negative impacts of increased greenhouse gas emissions are measurable globally and nationally.[2]

Australia's climate has warmed on average by 1.51 ± 0.23 °C since national records began in 1910, which has led to an increase in the frequency of extreme heat events.[3] The Bureau of Meteorology and CSIRO reported that there has been an increase in extreme fire weather, and in the length of the fire season, across large parts of the country since the 1950s, as evidenced by the catastrophic bushfires in the summer of 2019/2020. They also noted changes in rainfall, with decreases in the southeast and southwest of Australia as shown by the devastating drought in 2019. Oceans around Australia they stated are acidifying and have warmed by about 1.08°C since 1910 bringing longer and more frequent marine heatwaves.

Economic risks

Deloitte Access Economics noted that some of the most significant risks to Australia's economic growth trajectory are from the physical risks associated with a changing climate and the unplanned economic transition risk from the world's response to this changing climate.[4]

Their analysis showed that the Australian industries hardest hit by the Covid 19 pandemic would also be the most vulnerable to the effects of a warming world and climate change. Australia's agriculture, construction, manufacturing, tourism related industries and mining sectors all featured consistently in the top industries exposed to the risks of covid, climate change and the unplanned economic transition as the world responds. Deloitte Access Economics estimated that by 2055 Australia will experience economic losses on par with Covid 19.[10]

The government is responsible for the environment, the health and wellbeing of its citizens, and the financial security of the nation. As we see the impact of increased carbon emissions, we also find evidence of the deleterious impact on Australian native wildlife, the Australian people and the wealth of the nation.

Net Zero Emissions by 2050

The IPCC stated that global emissions need to reach net zero by 2050 to be consistent to limiting warming to 1.5 °C.[14] Modelling has shown that moving towards a net zero emissions economy would unlock financial prospects in sectors including manufacturing and

---

[2] NASA (n.d.) Scientific Consensus: Earth's Climate is Warming. https://climate.nasa.gov/scientific-consensus/

[3] BOM (2024) State of the Climate 2024. https://www.csiro.au/en/research/environmental-impacts/climate-change/state-of-the-climate

[4] Deloitte Access Economics (2020, November) A new choice: Australia's climate for growth. https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-dae-new-choice-climate-growth-051120.pdf?nc=1

renewables triggering a $63 billion investment boom.[5] Deloitte Access Economics estimates such a new growth recovery could grow Australia's economy by $680 billion (present value terms) and increase GDP by 2.6% in 2070 – adding over 250,000 jobs to the Australian economy by 2070.[10]

The Australian Government has now committed to a 2050 Net Zero plan and 2035 emission reduction targets consistent with Australia's international and domestic commitments.[6]

Emission goals

To address the issue of dangerous climate change, Australia, along with 196 other parties, is a signatory to the Paris Agreement, which entered into force on 4 November 2016. The Paris Agreement aims to strengthen the global response to the threat of climate change, by:

Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognising that this would significantly reduce the risks and impacts of climate change.[7]

Australia has a target to achieve net zero emissions by 2050. Furthermore, in 2022, The Australian Government increased the ambition of its 2030 target in 2022, committing in legislation to reduce greenhouse gas emissions 43% below 2005 levels by 2030[8].

Supporting this NSW through the Climate Change (Net Zero Future) Act 2023 (NSW) has legislated emissions reduction targets of at least 50% by 2030, 70% by 2035, and net zero by 2050.[9]

---

[5] Cox, L. (2020, Oct 12). *Net zero emissions target for Australia could launch $63bn investment boom*. https://www.theguardian.com/australia-news/2020/oct/12/net-zero-emissions-target-for-australia-could-launch-63bn-investment-boom

[6] Department of Climate Change, Energy, the Environment and Water (DCCEEW). (2023). *Net Zero, Australian Government Department of Climate Change, Energy, the Environment and Water*. https://www.dcceew.gov.au/climate-change/emissions-reduction/net-zero

[7] IPCC (2018). Global Warming of 1.5°C: An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, Intergovernmental Panel on Climate Change. https://www.ipcc.ch/sr15/

[8] Australian Government. (2022). *Australia's Nationally Determined Contribution: Communication 2022*. UNFCCC Nationally Determined Contributions Registry. Retrieved 24 March 2023, from https://unfccc.int/sites/default/files/NDC/2022-06/Australias%20NDC%20June%202022%20Update%20%283%29.pdf

[9] *Climate Change (Net Zero Future) Act 2023* (NSW). https://legislation.nsw.gov.au/view/html/inforce/current/act-2023-048

Australia's current emissions and trends

Australia's emissions for the year to March 2026 have declined by 25.0% since 2005. At the current rate of decline, Australia is expected to miss the legislated target for 2030. Australia's emissions for the year to March 2026 were approximately 455.6 Mt CO2-e, which is a decrease of 1.6% (7.5 Mt CO2-e).

The electricity sector is the highest emission sector with 31.6% of Australia's emissions. Electricity emissions have decreased 31.9% (67.4 Mt CO2-e) since June 2005. Over the year to March 2026 GHG emissions from electricity generation decreased by 3.7% in actual terms, compared with the previous year. This was driven by a 13% increase in renewable energy generation in the National Electricity Market (NEM) (with wind generation a record 20.3% increase). This directly contributed to a decline in fossil fuel generation with decreases in coal generation (4.1%) and gas generation (17.1%) over the period. Renewables accounted for 44.2% of electricity generation in the NEM over the year to March 2026.[10]

Australia needs real and rapid reductions in CO2 emissions. The Australian government is at risk of not achieving its legislated target to reduce greenhouse gas emissions 43% below 2005 levels by 2030. Urgent action is required to address this issue.

Deliver steep reductions early

Early and deep emission reductions are essential in meeting the agreed temperature goal of *holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels*.[13] Moving fast on emission reduction in sectors where technologies are advanced (such as electricity generation and transport) allows more time to deal with sectors that are harder to decarbonise whilst still meeting the ultimate temperature goal. This needs to be considered with policies and measures to reduce emissions.[51]

[10] Department of Climate Change, Energy, the Environment and Water. (2026). *Quarterly update of Australia's national greenhouse gas inventory: March 2026: Incorporating preliminary emissions up to June 2026*. Australian Government. https://www.dcceew.gov.au/climate-change/publications/national-greenhouse-gas-inventory-quarterly-updates

Majority of remaining coal fleet expected to retire by 2035

Nearly two-thirds of the National Electricity Market's remaining coal-fired generation fleet is projected to retire by 2035, with complete coal retirement expected by 2050. Since 2012, ten major coal generators have already closed, and most remaining coal plant owners have announced retirement dates. While coal currently supports both electricity supply and system security, replacement renewable generation, storage and firming technologies are being deployed. Retirements may occur even earlier than forecast due to rising operating and maintenance costs, fuel supply challenges, and increasing competition from renewable energy.[11]

Electricity Network enhancements

AEMO in their 2026 Integrated System Plan stated that Renewable energy supported by transmission, distribution, storage and flexible gas generation is identified as the lowest-cost pathway for maintaining a secure and reliable electricity system as coal-fired power stations retire and emissions reduction policies are implemented. Transmission infrastructure is critical because it enables electricity from geographically dispersed renewable energy resources to be shared across the NEM, improving reliability and reducing the need for additional local generation and storage investments. While planners maximise the use of existing transmission and distribution networks, further transmission development is required to deliver electricity efficiently and at least cost. The successful delivery of these projects depends on effective planning, community engagement and maintaining public confidence in the energy transition.[12]

There are currently eight transmission projects totaling 3,500km of new transmission network AEMO stated as highly likely to proceed (either committed or anticipated) across the NEM to be delivered over the next eight years. AEMO recently updated the New England REZ Network Infrastructure Project project status to anticipated.[13]

New England REZ Network Infrastructure Project

The New England REZ has moderate to good wind and solar resources in close proximity to an existing 330 kV network. Interest in the area includes large scale solar and wind generation as well as pumped hydro generation. The REZ has an intended 8,000 MW of additional transmission network capacity to be constructed in the New England region of the state. To access increased renewable generation in northern New South Wales this new capacity will be supported by the New England REZ Network Infrastructure Project. This

---

[11] Australian Energy Market Operator. (2026). *2026 Integrated system plan for the National Electricity Market: A roadmap for the energy transition*. Australian Energy Market Operator. https://www.aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp/2026-integrated-system-plan-isp

[12] Australian Energy Market Operator. (2026), above n 11

[13] Australian Energy Market Operator. (2026), above n 11

project will consist of two 500 kV double-circuit transmission lines and associated 330 kV circuits connecting Bayswater and the New England REZ consisting of 692 km new HV lines with an expected completion date of Jan 2034.

Strengthening Social Licence Through Regional Energy and Industry Development Opportunities

EnergyCo's *Delivering community benefits: New England Renewable Energy Zone* (July 2024) lists actions for gaining social licence, including:

- Creating local employment through training and skills programs or infrastructure (p.5).
- Supporting regional economic development through tourism and legacy projects with enduring benefits for host communities (p.5).
- Paying host landholders, and considering payments to neighbouring landowners for significant residual visual impacts (p.6).[14]

The p.5 list of eligible projects also includes local or regional energy programs or infrastructure. We suggest this is the natural place to address a concern we have heard: the region hosts the infrastructure but cannot use the power.

A landholder in the corridor told us they were disappointed that regional industry could not connect to the power running overhead. They described the project as resource extraction from New England for the benefit of Newcastle, Sydney and Wollongong. The concern applies along the whole corridor. Further south, the route passes close to regional communities before reaching the existing grid. Communities living near large transmission towers may be more supportive if the project also opens opportunities for electrified industry in their own regional centres and towns, where they want it.

We recognise that 500 kV and 330 kV lines cannot be tapped directly, and that there are two different connection challenges. Large loads need connection at hubs or substations, which involves EnergyCo and the transmission network operator. Smaller businesses connect through the local distribution network, which is owned by different distribution network operators along the corridor. We ask EnergyCo to investigate the following, in coordination with those operators and the NSW Government where needed.

Large loads:

1. Running an expression-of-interest process with councils and industry along the corridor to gauge demand for connection (for example food and fibre processing, timber, manufacturing, cold storage and community energy), before any capacity is committed.
2. Designing future connection capability into the project, including space and spare bays at hubs and switching points near towns, villages and industrial land, so large

[14] EnergyCo. (2024, July). Delivering community benefits: New England Renewable Energy Zone. https://www.energyco.nsw.gov.au/sites/default/files/2024-07/240731-NEREZ-communitybenefits.pdf

loads can connect later at lower cost than retrofitting. Publish where connections are possible and what capacity is available.

3. Working with the transmission and distribution network operators to reserve connection capacity at existing substations near regional centres along the corridor.

Smaller businesses and communities:

4. Working with the distribution network operators and the NSW Government to upgrade local distribution where weak supply limits small enterprise in villages and towns along the southern corridor.

Legacy and benefit sharing:

5. Examining whether the proposed workforce accommodation camps could be reused after construction for housing, training or small industry.
6. Adding "enabling local industry and energy use" as an explicit category in the community and employment benefit program, and funding industrial precinct planning in host towns and villages.
7. Committing firmly to payments for neighbouring landowners, rather than leaving them to guidelines still in development. Fairness to those who bear the visual impact is part of the same social licence.

These are requests for investigation. We acknowledge that the engineering and cost implications are for EnergyCo and the relevant network operators to assess.

Biodiversity Impacts of Project

CLEANaS is in support of this project and understands that such a large project will have impacts. However, the project has the potential to cause considerable impacts to native vegetation, threatened species, and ecological communities.

The EIS indicates that approximately 3203 Ha of native vegetation will be impacted, with 2784 Ha of complete removal and 418 Ha where partial clearing would be undertaken.[15] This includes 146.75 Ha of the critically endangered New England Peppermint (Eucalyptus nova-anglica) Woodland on Basalts and Sediments in the New England Tableland Bioregion and 1216.62 Ha of the critically endangered White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.[16] [17] [18] Additional measures are needed to avoid impacts on these high-value habitats and threatened ecological communities.

[15] EnergyCo. (2026). New England REZ Network Infrastructure Project *Environmental Impact Statement*. EnergyCo.
[16] EnergyCo. (2026). New England REZ Network Infrastructure Project *Biodiversity development assessment report*. EnergyCo.
[17] NSW Office of Environment & Heritage (2026, June 11). New England Peppermint (Eucalyptus nova-anglica) Woodland on Basalts and Sediments in the New England Tableland Bioregion - profile. NSW Government. https://threatenedspecies.bionet.nsw.gov.au/profile?id=10558
[18] NSW Office of Environment & Heritage (2022, April 6). White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland - profile. NSW Government. https://threatenedspecies.bionet.nsw.gov.au/profile?id=20392

To help minimise biodiversity impacts, implement greater use of selective clearing to retain native shrubs, grasses and habitat beneath transmission lines wherever practicable. Research has shown that transmission corridors managed through targeted vegetation management can retain and enhance flowering plants, native vegetation and habitat for pollinators rather than relying on broad-scale clearing. Evidence from international transmission corridors indicates that integrated vegetation management can retain understorey habitat and enhance floral and insect diversity while maintaining the safety, reliability and operational performance of transmission lines.[19]

Other measures to be undertaken to minimise impacts of temporarily disturbed areas include restoration of temporarily disturbed areas through revegetation with locally sourced native species and implementation of long-term management measures to support ecological recovery.

The project should minimise habitat fragmentation and maintain ecological connectivity across the landscape. Although habitat corridors and mitigation structures have been proposed, their effectiveness should be demonstrated through ongoing monitoring and adaptive management. In particular, this should include the implementation of effective mitigation measures for threatened species, particularly gliders, microbats and other fauna susceptible to habitat fragmentation and barriers to movement.

Summary

The New England REZ Transmission Project provides a mechanism to enable electricity from large scale solar and wind generation in the New England REZ to be available to large population centres and electricity users of NSW. This will support the shift to a low emissions electricity generation in NSW to help NSW reach the legislated emissions reduction targets of at least 50% by 2030, 70% by 2035, and net zero by 2050.

The Clean Energy Association of Newcastle and Surrounds (CLEANaS) strongly supports the New England REZ Transmission Project with the caveat that additional actions are required to avoid and minimise biodiversity impacts.

CLEANaS is dedicated to driving the uptake of clean energy in our region, reducing our dependence on fossil fuels to a more competitive and sustainable local economy. Clean

[19] Kimmel, C. B., de Bem Oliveira, I., Campbell, J. W., Khazan, E., Bremer, J. S., Rossetti, K., Standridge, M., Shaw, T. J., Epstein, S., Tsalickis, A., & Daniels, J. C. (2024). *Integrated vegetation management within electrical transmission landscapes promotes floral resource and flower-visiting insect diversity*. PLOS ONE, 19(8), e0308263. https://doi.org/10.1371/journal.pone.0308263

energy initiatives must be a win-win for our local community and business, and of course the environment. The New England REZ Transmission Project aligns with the vision and goals of CLEANaS.

Thank you for considering our submission,

Sincerely,

Alec Roberts
CLEANaS Chair on behalf of CLEANaS