Submission No 50

INQUIRY INTO IMPACT OF RENEWABLE ENERGY ZONES (REZ) ON RURAL AND REGIONAL COMMUNITIES AND INDUSTRIES IN NEW SOUTH WALES

Organisation: NSW Farmers Association

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NSW Farmers' submission to the inquiry into the impact of Renewable Energy Zones (REZ) on rural and regional communities and industries in New South Wales

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About NSW Farmers

NSW Farmers is Australia's largest state farming organisation, representing farmers on the issues that matter to them such as the environment, biosecurity, water, animal welfare, economics, trade, workforce, and rural affairs.

Agriculture is a vital sector, quite literally feeding the nation. Farming directly employs more than 75,000 people across New South Wales, and underpins rural and regional communities, producing more than $24 billion in food and fibre and making a significant contribution to the state and national economy.

Our aim is to support stronger farming businesses and reach $30 billion in output by 2030. We ensure genuine voices from the paddock identify issues and shape policies, with teams in regional NSW and Sydney. We provide specialist advice and offer partner benefits that deliver excellent value for members.

Executive summary

The construction and operation of Renewable Energy Zones (REZ) infrastructure is profoundly transforming rural and regional communities in New South Wales (NSW). Generational agricultural communities are now grappling with a dramatically altered landscape as large swathes of land are used for industrial-scale renewable energy projects. This shift, driven by the need to power NSW's major cities has introduced significant emotional and practical challenges for these regions. The NSW Government has failed to adequately address the extensive social and economic impacts, resulting in division amongst regional communities.

REZ developments have disrupted the cultural fabric of farming communities. Disputes among landholders over hosting infrastructure have created divisions, eroding social cohesion. These cultural impacts underscore the urgent need for equitable and inclusive planning approaches.

One of the most pressing issues is the uncertainty surrounding the scale and location of renewable energy projects and associated transmission lines. This uncertainty is exacerbated by inadequate community engagement from EnergyCo, Transgrid and renewable energy developers, leaving landholders and rural communities anxious about their future. The influx of large workforces during construction phases places strain on local infrastructure including housing and medical services.

Regions within REZs are facing significant impacts to agricultural productivity, particularly during construction of infrastructure. While compensation offered to landholders for hosting transmission infrastructure provides short-term benefits it does not adequately address long-term challenges with no opportunity for redress once contract periods expire. Concerns about post-payment impacts and inequitable benefit-sharing between host and neighbouring landholders remain unresolved. Further complications include the tax implications of compensation payments, the management of voluntary planning agreements, and the broader financial burden on the state economy. Additionally, the risk of fires posed by overhead transmission lines and the lack of adequate fire management protocols have deepened community concerns, highlighting the need for robust risk mitigation measures.

A critical oversight in REZ development is the lack of mandatory decommissioning bonds to ensure proper site rehabilitation at the end-of-life stage of renewable energy infrastructure. Without clear legislative requirements landholders risk bearing the long-term financial and environmental costs of project decommissioning. Legislating decommissioning bonds would ensure developers are held accountable for rehabilitating land and managing project waste.

Effective and inclusive community consultation remains a significant gap in the REZ planning and development process. Current practices often exclude landholders and communities from key decision-making stages, leading to mistrust and resistance. Transparent communication, fair benefit-sharing mechanisms, and acknowledgment of cumulative impacts are essential to rebuilding trust and achieving social license for renewable energy projects. Immediate action needs to be taken to be taken to account for the compounding impacts of the sustainable transition to renewable energy in rural NSW.

Current and projected socioeconomic, cultural, agricultural and environmental impacts of projects within renewable energy zones in New South Wales including the cumulative impacts

There exists widespread concern within REZ of these impacts; to what extent they will realise, what impacts it will have on town and village life, rural living and operations and on the primacy of agriculture as the socio-economic driver. While there are already some generation installations in place, the planned construction of gridline connections and the ultimate extent of generation installations is unknown, as is also the possible cumulative impacts of gridline, generation, road works and other associated infrastructure.

Member comment from NSW Farmers has been very focused on the lack of available information from Energy Co on the development within a REZ and the predictions of the amount and location of generation facilities is being left to imagination and private companies. This, accompanied by the current practice of speculative sourcing of sites and on-selling of development opportunities between companies, is creating anxiety for rural residents, and undermining the ability of landholders to access independent advice and properly consider Environmental Impact Statements and approaches from proponents.

For areas that have traditionally been agricultural focused the scale and type of change that is entering the REZ areas is challenging. There is benefit in the economic stimulus and on farm income diversification that the payments to particular landholders for hosting transmission and generation brings, and in the increased workforce and purchasing capacity that flows from the construction phase of the energy transition. Additionally, the proposed community benefit payments could provide additional financial stimulus and improved facilities. How these benefits are realised in the impacts on agriculture leads to complex questions around the ownership of rural land, its primary use, and on the social fabric of now disturbed regional communities where amenity, liveability, environmental impacts and the scale of land use change has to date divided many previously close communities. The lack of anticipation, realisation and planning to address these matters seems to now be rolled up into a ‘social licence’ tick box, and this is an area that requires in depth social, economic and strategic investigation and planning.

The regionalisation of energy generation to compensate for the loss of east coast fossil fuel power has been undertaken without the realisation of the community and landholder impacts in both economic and in a personal sense. The creation of the REZ in NSW has been a case of the classic drawing of opportunities on map of the most efficient and least politically impactful areas to realise the change, without recognition of the type and scale of impacts. As time has passed, the critical nature of power replacement of source seems to continue to trump a much-needed revision of priorities in development and in how the transition can be enabled without the significant regional damage it will cause, including dramatically altered landscapes and the dense concentration of large-scale infrastructure.

Within NSW Farmers membership we are experiencing the impacts of this poor planning where there are within REZ individuals unequipped to having to cope with new and significant third-party impacts to their lives, and government-imposed acquisitions that severely impact their production and businesses. Financial compensation does not address many of the impacts, and the ongoing cultural erosion through familial and neighbourhood disputes is distressing, and often avoidable if there was a proper regional approach to addressing the matters. Central to this is a lack of control of destiny, where previously a landholder family has had generations of autonomy, and this is now inexorably and suddenly removed.

There are concerns that future land use and land values are not being addressed where contracts will expire, and funding from infrastructure has expired, and disposal of infrastructure will be unavailable or unaffordable, and land will be left unmanaged and unproductive. Forward planning and security to address these issues must be prioritized.

The construction period of this transition will have significant interruption to the existing social expectations of regional people. There will be workforce demands that can damage local opportunity, while creation of jobs will require housing and social infrastructure such as medical availability and other social services. There is not current capacity in most regional areas to add these burdens, and while the transition is now in progress, the solutions are not in place.

Environmental issues are always at the forefront in managing agricultural land, and conformity to native vegetation and conservation laws preserves bioregional integrity. There are some substantial losses of environmental assets in REZ areas due to construction of generation installations and gridlines, with offsetting or payments not addressing the burden regional landholder undertake to conform. There is an unfairness to landholders, and a loss of regional natural capital that is simply seen as a byproduct to the transition, and this should be addressed through local consultation to minimise loss and respect the restrictions and contribution of local landholders to the bioregional capacity.

Current and projected considerations needed with regards to fire risk, management and containment and potential implications on insurance for land holders and/or project proponents in and around Renewable Energy Zones

REZs introduce significant fire risks, particularly in bushfire-prone regions. Overhead transmission lines present multiple ignition hazards, including electrical arcing, metal combustion, vegetation contact, and smoke conductivity. [1] These risks increase during periods of extreme fire danger, as fires ignited by electrical infrastructure tend to spread over larger areas. [2] Unlike other ignition sources, electrical faults create a linear ignition path, resulting in widespread and instantaneous fire outbreaks along extensive stretches of land. The dense concentration of transmission infrastructure within REZs further compounds this vulnerability.

Proponents of modern high-voltage transmission infrastructure frequently cite design and maintenance measures aimed at minimising fire ignition risks, insisting that powerlines pose minimal disruption to firefighting activities. [3] It is commonly argued that powerlines can be swiftly de-energised and that aerial firefighting crews are well informed of powerline locations, reducing operational concerns.

However, these assurances are not consistently reflected in practice. Many local volunteer Rural Fire Service (RFS) groups remain deeply concerned about the impact of transmission lines on firefighting operations. For example, the Victorian Country Fire Authority (CFA) advises that “CFA operational

[1] Miller C., Plucinski M., Sullivan A., Stephenson A., Huston C., Charman K., Prakash M., Dunstall S. (2017), Electrically caused wildfires in Victoria, Australia are over-represented when fire danger is elevated. Available at: Electrically caused wildfires in Victoria, Australia are over-represented when fire danger is elevated - ScienceDirect

[2] Mitchell, J. W. (2013). Power line failures and catastrophic wildfires under extreme weather conditions. *Engineering Failure Analysis*, *35*, 726–735. https://doi.org/10.1016/j.engfailanal.2013.07.006

[3] Transmission lines and fire. (n.d.). RE-Alliance. https://www.re-alliance.org.au/tx_fire_factsheet

procedures advise not to directly attack fires in transmission line easement areas and crew members should maintain a safe working distance of at least 25 metres."[4] Similarly, Transgrid's bushfire management fact sheet states that transmission lines must always be treated as live until clearance is provided by Transgrid personnel on-site.[5] These protocols impose significant operational constraints on rural firefighters, who cannot afford delays during fire emergencies. Further compounding the issue, the NSW Rural Fire Service (RFS) does not provide any specific guidance for combating fires near powerline easements leaving volunteer firefighters without clear safety protocols.

The absence of consistent, practical, and locally relevant guidance has become increasingly urgent as high-voltage transmission infrastructure expands. Rural fire volunteers, who are integral to firefighting efforts in NSW are increasingly reluctant to engage with fires near transmission infrastructure due to safety concerns. EnergyCo, ACEREZ, and Transgrid must address these issues by providing comprehensive and actionable information to RFS Bushfire Management Committees. This information must be integrated into regional Bush Fire Risk Management Plans to improve safety, preparedness, and operational confidence.[6]

Insufficient consideration has been given to underground transmission infrastructure as a highly effective alternative to overhead transmission infrastructure. Undergrounding eliminates ignition risks associated with overhead lines and ensures unimpeded aerial firefighting operations, providing a clear and practical solution to mitigate fire hazards.

Another growing concern for landholders is the impact of renewable energy infrastructure, particularly large-scale solar developments, on public liability insurance. Farming operations inherently carry risks of accidental fires such as those caused by machinery failure or haystack combustion.

The increasing density of solar developments has significantly elevated the potential consequences of a farm fire. Accidental fires now risk destroying millions of dollars' worth of equipment. NSW Farmers has investigated the insurance industry's response to these heightened risks, with most insurers dismissing concerns and claiming that existing public liability coverage is adequate. Landholders seeking increased coverage often find limited options, with few policies exceeding the standard $20 million threshold. This dismissive response leaves landholders exposed to significant financial liabilities in the event of damage to neighbouring renewable energy developments.

Despite assurances from insurers, landholders remain unconvinced that current coverage levels are sufficient or practical in real-world scenarios for which no precedents yet exist. Addressing this issue requires urgent attention through the establishment of clear insurance industry standards and legally binding protections for landholders.

[4] Fighting fires around transmission lines. (n.d.). https://www.cfa.vic.gov.au/about-us/what-we-do/fighting-fires-around-transmission-lines

[5] Transgrid. (2024, February). *Fact Sheet - Managing Bushfire Risk*. https://www.transgrid.com.au/media/dkqphjje/transgrid-managing-bushfire-fact-sheet-final.pdf

[6] Bush Fire Management committees. (n.d.). NSW Rural Fire Service. https://www.rfs.nsw.gov.au/plan-and-prepare/managing-bush-fire-risk/bush-fire-management-committees

The historical, current and projected future financial costs associated with construction and maintenance of large-scale projects within Renewable Energy Zones

The total costs of developing the REZs are still unknown, with work yet to do developing the proposals of some zones. The following table summarises information publicly available from the Australia New Zealand Infrastructure Pipeline database.[7]

Project	Year commencing	Stage	Costs
Electricity Infrastructure Roadmap	2021	Delivering	$380m to deliver roadmap including $164m over 4 years for capital works
Central-West Orana REZ	2020	Access Right Applications	$41m from NSW Government to develop REZ $128m from Transmission Acceleration Fund for public infrastructure, housing and accommodation, etc
Central-West Orana REZ Transmission	2020	Awarded	$3.2 billion capital cost as at 2023, originally modelled costs of $650m in 2020. Project delivers 90kms of 500kV lines and 150kms of 330 kV lines. $490m debt financing from Clean Energy Finance Corporation $16.2m TransGrid feasibility study (including $5m from Federal)
Hunter-Central Coast REZ	2021	Under Procurement	No information
Hunter Transmission	2022	Announced	$1.1 billion (2024) Project delivers 115kms of 500kV line.
Illawarra REZ	2022	Under Procurement	No information
New England REZ	2021	Under Procurement	$79m NSW Government $1m Federal Government for feasibility study.
New England REZ Transmission	2020	Pre-planning	$1.8 billion (2023), originally $320 million in 2020 Project delivers 560 kms of 500kV lines
South West REZ	2021	Access Right Applications	No information

Based on the experience of the Central-West Orana and New England Transmission Projects, original construction cost estimates were underestimated by approximately 500%. However, more recent analysis has been more accurate. For example, the AEMO 2022 ISP estimated that the Hunter Transmission Project would cost $0.9B, compared to $1.1B in 2024. The following table from the draft 2024 AEMO ISP projects the costs of some additional projects planned to enable the operation of REZs.

[7] *NSW Renewable Energy Zones - Infrastructure Pipeline*. (n.d.). https://infrastructurepipeline.org/project/nsw-renewable-energy-zones

Table 7 Future ISP projects in the optimal development path

Project	Optimal timing *Step Change*	Earliest feasible full capacity timing	Brief description Cost estimate in $2023
New South Wales			
Central-West Orana REZ Extension	2036-37	2030-31	Expand Elong Elong substation to enable additional Central-West Orana REZ capacity following initial Network Infrastructure Project (Anticipated project). $243 million (±50%).
Cooma-Monaro REZ Expansion	2046-47	2030-31	Enable Cooma-Monaro REZ capacity. $512 million (±50%).

Proposed compensation to regional New South Wales residents impacted by Renewable Energy Zone transmission lines:

i. adequacy of compensation currently being offered for hosting transmission lines

Compensation

The Strategic Benefits Payments Scheme pays $200,000 per km to landowners (2022 dollars, indexed to inflation) paid out in annual instalments over 20 years after the project is operational. That is, $10,000 / year / km.[8]

The Environmental Impact Statement for the Central-West Orana Transmission Project indicates that for the 250 km of transmission lines and associated infrastructure, 3,660 ha of agricultural land would be impacted during 3 years of construction. In terms of the direct impacts:

- 990 ha for New Wollar Switching Station, Merotherie Energy and Elong Elong Energy Hubs.
- 459 ha for transmission line towers
- 25 ha for the workforce accommodation
- 40 ha for switching stations
- 25 ha for brake and switch sites
- 5 ha for access roads

During operation, about 2,440 ha of agricultural land will fall within the operational area, including direct impacts of 825 ha where permanent infrastructure is located, and agricultural land uses would cease. This permanently impacted land includes:

- 300 ha for Energy hubs and Switching stations
- 240 ha for access tracks
- 240 ha for transmission line towers including required buffers
- 40 ha for 330 kV switching stations
- 5 ha for access roads

For the 250km of transmission line that make up the project, this amounts to approximately 0.96 ha per km of transmission line that is taken out of production. This roughly equates to compensation of $10,416 per ha of agricultural land, far greater than net value of farm production in this hectare.

[8] *Strategic Benefit Payments Scheme | EnergyCo*. (n.d.). EnergyCo. https://www.energyco.nsw.gov.au/community/strategic-benefit-payments-scheme#:~:text=Under%20the%20SBP%20Scheme%2C%20private%20landowners%20in%20NSW,their%20land%20for%20a%20period%20of%2020%20years.

It should be noted that most of the land located under transmission lines themselves, except for buffer zones around towers, will be able to continue being used for agricultural purposes. Based on these crude estimates, the compensation paid to farmers for the use of agricultural land is adequate for the 20 years they are being paid. However, after the 20 years, they will no longer be compensated. Beyond the 20-years, the adequacy of the compensation will largely be driven by whether the farm business has invested that money into capital or resources that continues to drive income.

Another key consideration that affects the adequacy of compensation is the role of compensation offered to landholders through the acquisition process under the *Land Acquisition (Just Terms Compensation) Act 1991* (the Just Terms Act). The Department of Planning, Housing and Infrastructure has been reviewing the Just Terms Act and the land acquisition process in NSW since late 2023, and as of January 2025, there have been no reports or outcomes from the review publicly released. The land acquisition process in NSW is heavily skewed in favour of the acquiring authorities and previous inquiries identified numerous cases of poor and unacceptable treatment of landowners by these authorities. The current process of acquisition of rural land for large-scale transmission projects does not adequately consider the unique and significant impacts that arise from the change of land use, and therefore the existing compensation provisions are not sufficient for land acquisition for transmission developments.

ii. adequacy of the shared benefits being offered to neighbours of large-scale renewable projects

According to the NSW Government Benefit-Sharing Guideline 2024, the details of any proposed benefit-sharing arrangements should be outlined in the EIS for the project.[9] For example, the Bowmans Creek Wind Farm offers the proposed annual rebates on electricity charges:

- $1,000/year for residents between 3.3-4km from a wind turbine
- $500/year for residents between 4-5km from a wind turbine

The Clean Energy Council also have a guide to Benefits Sharing Options for Renewable Energy Projects.[10] The guide provides case studies of neighbourhood benefit programs that include coordinating the bulk-purchase and installation of home solar PV. The Copabella wind farm pays approximately $5000/year for residents within 2.5km of a wind farm, and those located up to 5km away can receive up to $1500/year. The money is paid as cash and not as a rebate on electricity bills.

Overall, there is no set amount or method for projects the provide neighbourhood benefits sharing. The adequacy can only be assessed through the satisfaction of residents with the compensation offered. It is likely that the compensation for neighbourhood benefits will also be influenced by the other benefit sharing schemes being offered to the community, including sponsorship and grants, local jobs and procurement, community co-ownership, and others.

iii. financial impact of compensation on the state's economy

The initial impact of compensation on the state's economy will be the redistribution of money from either the Government or the energy companies paying to, to the farmers and residents.

[9] Department of Planning, Housing and Infrastructure. (2024). *Benefit-Sharing Guideline*. https://www.planning.nsw.gov.au/sites/default/files/2024-11/benefit-sharing-guideline.pdf
[10] *Benefit sharing for renewable energy projects | Clean Energy Council*. (n.d.). https://cleanenergycouncil.org.au/news-resources/benefit-sharing-for-renewable-energy-projects

In the case of the Orana Central-West, the amount of compensation paid per year could be in the range of $2.5 million per year to farmers, or $50m over 20 years. This comes at a direct opportunity cost to the Government and by extension the wider community of NSW. On the other hand, this economic transfer will also be spent by farmers either on consumption or investment in their business, which has a positive flow-on impact.

iv. tax implications resulting from compensation received by impacted residents

The tax implications of compensation paid to resident likely depends on the nature of the benefit and how it is paid. Any cash or cash-like payments made are likely to be fully taxable as income to the individual or the business. However, a rebate on electricity bills or renewable installations is not likely to be taxable.

The tax-status of any compensation paid is likely to be a matter for the recipients in negotiating the kind of compensation they desire. It is worth noting that while cash payments are taxable, they can also be spent in any way that the recipient deems fit, whereas a rebate or in-kind payment can only be used in the way that it is given regardless of its intrinsic value to the recipient.

Additionally, landholders hosting transmission lines are at risk of potential tax implications regarding Capital Gains Tax (CGT). If the income received from compensation causes total farm turnover to exceed the definition of a small business for tax purposes, then CGT may apply. In addition, a transmission easement along with the associated compensation could impact market value of the farm and the resulting CGT liability. As retiring farmers often sell to their children or family, these factors also have implications for succession planning. The impacts to any individual farm business are likely to rest on the size of the farm, the annual turnover, and other factors relevant for determining specific tax exemptions in relation to primary production.

v. Adequacy, and management of voluntary planning agreements and payments made to the LGAs impacted by Renewable Energy Zones

Voluntary planning agreements are those agreements between planning authorities, like a local council, and the project proponent.[11] While there is an important role for local councils in benefit sharing programs, it is equally important to consider how those most impacted by construction and operation of projects are able to participate in community-based agreements and payments. Any council-led planning agreement must be developed alongside and fully supported by the local community, with more weight afforded to those community members most impacted. Funds available within benefit-sharing programs should be principally used to mitigate impacts from the developments and deliver outcomes that are preferred by that particular community – there cannot be a one-size fits all approach. Many regional local councils are facing significant financial challenges and cost pressures in the delivery of their local government responsibilities which has been highlighted through several recent state[12] and federal[13] inquiries. Any planning agreement or benefit-

[11] Department of Planning, Housing and Infrastructure. (2024). *Benefit-Sharing Guideline*. https://www.planning.nsw.gov.au/sites/default/files/2024-11/benefit-sharing-guideline.pdf
[12] New South Wales Parliament, Legislative Council, Standing Committee on State Development. (November 2024) Report no. 52. Ability of local governments to fund infrastructure and services.
[13] Parliament of Australia, House of Representatives, Standing Committee on Regional Development, Infrastructure and Transport, Inquiry into local government sustainability www.aph.gov.au/Parliamentary_Business/Committees/House/Regional_Development_Infrastructure_and_Transport/Localgovernmentsustaina

sharing program that is council-led must ensure that funds are protected for use exclusively for community-endorsed spending, and funds should not be used to on activities that do not address impact mitigation such just general service delivery and infrastructure responsibilities.

Current and projected supply and demand levels of manufactured products, raw materials, and human resources required for completion of Renewable Energy Zones and their source

The successful development of REZs is contingent on access to specialised labour, raw materials, and manufactured products. For the Central West Orana REZ, the EIS estimates a workforce requirement of 1,800[14] for the construction phase. However, EnergyCo has acknowledged local projections of approximately 5,000 workers when those constructing generation facilities are included. This significant underestimation raises several critical concerns.

Regional housing availability is already constrained, as demonstrated during the Social Impact Assessment (SIA) of the Central West Orana EIS, which identified only two rental properties available in Dunedoo at the time. This lack of housing capacity risks displacing local residents, intensifying strain on regional housing markets, and creating social tensions.

Additionally, the existing social infrastructure in the region including medical services, education, and law enforcement is already under significant strain. Without proactive planning an influx of workers could exacerbate these challenges for regional communities. For example, by the end of 2024 even before major works have commenced in the Central-West Orana REZ, health centres in the Mudgee region are no longer accepting new patients due to a shortage of healthcare workers. Regional communities are already facing a critical shortage of healthcare professionals which will be further compounded by the arrival of thousands of workers.

Projected impact on visitation to regional areas with renewable energy zones resulting from changes to land use

REZs have the potential to significantly impact tourism in regional areas of NSW. Key concerns include the visual impact of wind turbines, solar developments, and transmission lines which compromises the natural beauty of rural landscapes that underpin the region's appeal. Research has shown that the presence of wind turbines can affect tourism demand particularly in scenic rural areas. A 2015 report from the Institute of Economic and Cultural Geography argues that the visual dominance of turbines alters visitors' perceptions of an area's natural beauty.[15]

In many parts of NSW, such as within the Hunter REZ landholders are increasingly utilising agritourism and ecotourism as valuable sources of economic diversification. These landholders have expressed serious concerns about the impacts of prolonged construction activities for transmission lines and the ongoing visual disruption to pristine rural views. Studies also suggest that renewable energy

[14] Energy Corporation of NSW. (2023). *Central-West Orana Renewable Energy Zone Transmission project Environmental Impact Statement*. https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSI-48323210%2120230926T021736.112%20GMT

[15] Broekel, T., & Alfken, C. (2015). Gone with the wind? The impact of wind turbines on tourism demand. *Energy Policy, 86*, 506–519. https://doi.org/10.1016/j.enpol.2015.08.005

developments can result in a perceived industrialisation of rural landscape which directly conflicts with the expectations of tourists seeking a tranquil rural environment.[16]

Furthermore, construction activities may restrict access to popular recreational sites. Such disruptions could have flow-on effects, not only for agritourism operators but also for the wider rural community that relies on tourism. Long-term effects of tourism decline could be compounded by reduced local spending, as the presence of renewable energy infrastructure may discourage repeat visits.[17]

The impact of reduced visitation to rural areas must be appropriately considered when determining the route of transmission lines and renewable energy developments, as part of the EIS and SIA process. Additionally, it should be established as a standard condition that agritourism and ecotourism are taken into account in compensation for income loss over the lifetime of the project.

Suitable alternatives to traditional renewable energy sources such as large-scale wind and solar

NSW Farmers policies support the extraction of gas in appropriate areas and the development of nuclear power generation in the future. While recognising the phasing out of coal fired power has been mismanaged, the use of gas as a power source, and the continued use of coal fired power will not have an impact of any significance on global climate due to the scale of use in Australia compared to the use of other developed and developing countries. Recognising the importance of being a responsible global citizen should not come at the expense of the lights going out in NSW, and the timelines for baseload power and the inherent difficulties in managing the damage to regional NSW through oversupply of renewable energy infrastructure should require investment in continued alternatives to renewable energy.

Adequacy of community consultation and engagement in the development of Renewable Energy Zones, and associated projects

Community engagement remains a fundamental yet inadequately addressed component of REZ development. Landholders and regional communities frequently report exclusion from meaningful consultation processes, particularly during key decision-making stages such as transmission line route selection and environmental impact assessments. According to The Energy Charter Better Practice Social Licence Guideline, only 18% of landholders believe that hosting transmission infrastructure provided benefits to themselves or their communities. [18] Poor consultation practices characterised by vague or contradictory information and a lack of transparency have compounded mistrust, leaving landholders uncertain about planning authorities' intentions.

This mistrust is exacerbated by an imbalance of power in the consultation process. The lack of genuine input opportunities for landholders results in a breakdown of trust and fuels hostile relationships with EnergyCo and Transgrid. Landholders and communities feel further marginalised when their attempts to negotiate route adjustments or address concerns are dismissed or inadequately resolved. Personal accounts from farmers illustrate the deeply personal impacts of

[16] Prinsloo, F. C. (2013). Impact of renewable energy structures on tourism. *Stellenbosch University*.
[17] Broekel, T., & Alfken, C. (2015). Gone with the wind? The impact of wind turbines on tourism demand. *Energy Policy*, *86*, 506–519. https://doi.org/10.1016/j.enpol.2015.08.005
[18] The Energy Charter. (2024, October 15). *Better Practice Social Licence Guideline - the Energy Charter*. https://www.theenergycharter.com.au/better-practice-social-licence-guideline/

these projects, such as the placement of transmission towers in the direct line of view from family homesteads, permanently changing the land families have cherished for generations.

Research highlights that early, transparent, and inclusive engagement is essential to achieving community acceptance of renewable energy projects. A 2016 study analysing the determinants of community acceptance of renewable energy developments highlights the importance of tailored communication that respects local cultural, economic, and environmental priorities emphasising that engagement must move beyond 'tick box' consultation to a process that fosters trust and builds collaborative solutions. However, current practices in REZ development fall well short of this standard.[19]

The consultation processes for solar and wind projects face similarly critical issues. A consistent issue is the timing of engagement with developers often presenting project plans to neighbouring landholders and the wider community as finalised or only superficially open to feedback. According to a 2024 study from the Institute of Electrical and Electronics Engineers on Best Practices for Renewable Energy Engagements and Consultations[20], best practice includes involving communities early in the planning stages to co-create project designs that address local concerns. In renewable energy developments, landholders report being excluded until after critical decisions have already been made. This reactive approach undermines the community's sense of agency and fuels perceptions of exploitation.

Compounding these issues is the failure to address cumulative impacts. 'Submission to review on improving community engagement and support for renewable energy infrastructure'[21] underscores the importance of recognising the broader, long-term disruptions caused by multiple renewable energy projects within a single region. These include the loss of agricultural land, reduced commercial opportunities, and diminished farm productivity as farmers are forced to modify their practices and may be unable to produce the most profitable crops. In additional are impacts such as increased traffic, pressure on medical services, demand for residential housing, and strains on community cohesion. Failure to consider these broader impacts risks alienating not only directly affected landholders but entire communities.

The inequity in benefit distribution further exacerbates community opposition. While developers often emphasise financial compensation for those directly hosting infrastructure, surrounding communities who may also experience significant disruptions are frequently excluded from these benefits. This imbalance fosters resentment and social divisions.[22]

Efforts to improve engagement practices, such as the release of the National Guidelines for Community Engagement and Benefits for Electricity Transmission Projects[23] and recommendations

[19] Hammami, S. M., Chtourou, S., & Triki, A. (2015). Identifying the determinants of community acceptance of renewable energy technologies: The case study of a wind energy project from Tunisia. *Renewable and Sustainable Energy Reviews*, *54*, 151–160. https://doi.org/10.1016/j.rser.2015.09.037

[20] Best practices for renewable energy engagements and consultations in Nunavut. (n.d.). IEEE Conference Publication | IEEE Xplore. https://ieeexplore.ieee.org/abstract/document/10748763

[21] Pickering, J., Chalaye, P., & Edwards, G. (2023). Submission to review on improving community engagement and support for renewable energy infrastructure. *University of Sydney*. https://www.sydney.edu.au/content/dam/corporate/documents/sydney-environment-institute/articles/2023/submission-to-review-on-community-engagement-and-support-pickering--chalaye-edwards.pdf

[22] Fernandez, R. (2021). Community Renewable Energy Projects: the future of the sustainable energy transition? *The International Spectator*, *56*(3), 87–104. https://doi.org/10.1080/03932729.2021.1959755

[23] *Energy Ministers release National Guidelines for Community Engagement and Benefits for Electricity Transmission Projects | energy.gov.au*. (2024, July 19). https://www.energy.gov.au/energy-and-climate-change-

from the Australian Energy Infrastructure Commissioner [24] have yet to resolve the widespread dissatisfaction. The guidelines emphasise the need for clear, timely and accessible communication but their implementation remains inconsistent, leaving many communities feeling overlooked and undervalued.

Genuine consultation must respect the ties to the land those in regional communities hold and provide landholders with opportunities to engage as equals. This includes granting access to all relevant information, ensuring transparency in planning processes and offering avenues for independent oversight and recourse.

To rebuild trust and achieve social license, developers must move beyond tokenistic engagement efforts. Transparent communication, inclusive benefit-sharing and a commitment to addressing cumulative impacts are essential. Without these measures landholders will continue to resist REZ developments, undermining the renewable energy transition's broader goals.

How decommissioning bonds are currently managed and should be managed as part of large-scale renewable projects

The absence of mandatory decommissioning bonds for renewable energy projects represents a significant policy gap. Without mandatory decommissioning bond, host landholders face the risk of bearing the financial responsibility for infrastructure removal and land rehabilitation, particularly when private agreements fail to sufficiently clarify liability for decommissioning. Historical agreements established prior to widespread awareness of decommissioning issues are those most at risk. The reliance on private negotiation places undue stress on landholders who are often at a disadvantage in these arrangements. Inadequate decommissioning policies can transfer long-term liabilities to landowners or local governments, undermining public support for renewable energy development.[25]

NSW Farmers strongly supports the introduction of legislated decommissioning bonds for all renewable energy projects. These bonds should be held by Australian financial institutions to mitigate risks associated with insolvency or ownership changes. Bonds must comprehensively cover the costs of infrastructure removal, land rehabilitation, and waste management. It is critical to have regulatory safeguards to ensure decommissioning responsibilities are met, avoiding liabilities that will ultimately fall to regional communities.[26]

The Renewable Energy Planning Framework aims to enhance transparency regarding the likely costs of decommissioning wind and solar developments. It includes decommissioning calculators with supporting data for both wind and solar projects. The Wind Energy Guideline indicates that decommissioning a wind project could cost approximately $480,000 per turbine.[27] While the Solar

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ministerial-council/working-groups/transmission-working-group/community-engagement-guidelines-for-transmission-projects

[24] *Community Engagement | aeic*. (n.d.). https://www.aeic.gov.au/observations-and-recommendations/community-engagement

[25] Ferrell, S. L., & DeVuyst, E. A. (2012). Decommissioning wind energy projects: An economic and political analysis. *Energy Policy, 53*, 105–113. https://doi.org/10.1016/j.enpol.2012.10.017

[26] De Jager, D. (2024). Policy instrument design to reduce financing costs in renewable energy technology projects. *www.academia.edu*. https://www.academia.edu/27812447/Policy_instrument_design_to_reduce_financing_costs_in_renewable_energy_technology_projects

[27] Department of Planning, Housing and Infrastructure. (2024b). *Wind Energy Guideline*. https://www.planning.nsw.gov.au/sites/default/files/2023-03/wind-energy-guideline.pdf

Energy Guideline does not detail specific figures, the decommissioning calculator example estimates nearly $160,000 per megawatt (MW) for a 250 MW solar project,[28] including material recovery. However, the framework heavily relies on promoting proper negotiations between applicants and host landholders to determine responsibility for and methods of project decommissioning. The lack of guarantees afforded to host landholders, or to those neighbouring projects on land owned by the applicant is a significant omission from the framework. It is strongly urged that the department urgently resolve this issue.

The Private Agreement Guideline template addresses provisions regarding decommissioning procedures.[29] It specifies that within contracts clauses relating to 'impacts' should include adverse impacts to the land caused by decommissioning and rehabilitation of the development on adjacent land at the end of its lifespan. The template also addresses the introduction of a 'Security' within a contract. Additionally, a proviso should be included within the template urging landholders to consider whether the bond will be held in a domestic or international bank account. There is greater security for a bond or bank guarantee facilitated by an Australian company.

A precedent exists for decommissioning bonds in the *Mining Act 1992*,[30] which mandates security deposits covering the full cost of rehabilitation. These deposits are regularly reviewed and adjusted to ensure adequacy, effectively preventing the transfer of financial liabilities to landholders or the public. However, it is essential to strengthen the decommissioning provisions within mining legislation and regulation before extending their application to renewable energy infrastructure. Addressing existing loopholes is critical to avoid scenarios where unused infrastructure is left in place, leading to delays in decommissioning and rehabilitation efforts. Legislation for decommissioning renewable energy infrastructure must also include sufficient contingency measures to account for the significant, largely unmanageable risks and uncertainties involved.[31]

The role and responsibility of the Net Zero Commission and Commissioner in addressing matters set out above

While rural land contributes significantly to carbon sequestration and ongoing conservation of natural capital, the Net Zero Commission has yet to engage with the rural sector. As stated above, drastic changes to emissions strategies in NSW will not have an impact on global temperature increases due to the relative volume of emissions and net sequestration in NSW. Notwithstanding that fact, farming businesses are becoming increasingly efficient in water use and in equipment and operations, and these contributions have significantly reduced emissions from agriculture.

Changes to climate and significant mitigations will be dictated by other countries, however Australia in a global marketplace and in response to international agreements undertakes a responsibility to reduce emissions; it's important that that is done is a proportionate way bearing in mind impact on climate and impact on businesses that create emissions. In balancing this, the Net Zero Commission

[28] Department of Planning, Housing and Infrastructure. (2022). *Large-Scale Solar Energy Guideline* [Guideline]. NSW Department of Planning, Housing and Infrastructure. https://www.planning.nsw.gov.au/sites/default/files/2024-11/large-scale-solar-energy-guideline.pdf
[29] Department of Planning, Housing and Infrastructure. (2024d). Private Agreement Guideline. In *NSW Department of Planning, Housing and Infrastructure Private Agreement Guideline* [Report]. https://www.planning.nsw.gov.au/sites/default/files/2024-11/private-agreement-guideline.pdf
[30] *Mining Act 1992 No 29 - NSW Legislation*. (n.d.). https://legislation.nsw.gov.au/view/html/inforce/current/act-1992-029
[31] *Mining rehabilitation security deposits*. (2020, February 10). Audit Office of New South Wales. https://www.audit.nsw.gov.au/our-work/reports/mining-rehabilitation-security-deposits

has a responsibility to understand the carbon sequestration and benefits of retained productive farming land and in supporting a viable and affordable way to continue the reduction of greenhouse gas emissions.

Any other related matters

Impact to Regional Roads and Bridges
The increased movement of construction vehicles and worker transport within REZs places substantial strain on roads not designed to accommodate heavy vehicle traffic. This raises safety concerns and disrupts rural activities, including stock transport and school bus routes. The lack of detailed traffic management plans in the EIS process compounds these risks, potentially resulting in unsafe road conditions.

A critical issue is the transportation of wind turbine components. Modern wind turbine blades now exceed 80 meters in length with towers reaching heights of up to 135 meters and total tip heights surpassing 240 meters. The combined weight of a single turbine and its blades exceeds 700 tonnes. Transporting such massive infrastructure along narrow rural roads risks significant damage and demands thorough planning and road upgrades to ensure safe and efficient delivery.

NSW Farmers acknowledges the benefits of the $128.5 million investment allocated to upgrade roads in regions from Newcastle to Dubbo and surrounding areas, facilitating the transportation of renewable energy infrastructure.[32] However, it is imperative that similar investments and upgrades are urgently extended to other REZs and regions with concentrated renewable energy infrastructure, including along the VNI and Humelink routes. The upgrade of rural roads is essential to address significant transportation challenges however, it is equally important to ensure that these improvements do not disrupt natural landscape water flow, a common issue resulting from insufficient planning in regional road development.

Developments outside of REZs
While REZs were initially designed to concentrate large-scale renewable projects in areas with existing transmission infrastructure, a growing number of developments are occurring outside these zones. Many developers are leveraging the transmission infrastructure connecting the Central-West Orana, New England, and Hunter REZs, particularly in areas such as Merriwa, Nundle, Bathurst, Oberon, and Orange. Despite being affected by energy developments, landholders outside REZs do not receive the same structured community payments available within these zones, creating disparities in government compensation and support. A more equitable approach is needed to account for long-term economic impacts, ensures meaningful community engagement and fair compensation for all affected landholders both inside and outside REZs.

The establishment of REZs has been criticized for prioritizing 'least-cost' connection models. These zones were selected based on proximity to existing power infrastructure rather than a holistic consideration of economic, environmental, and social factors such as tourism impacts, visual amenity, and land use. The current placement of REZs has generated significant opposition to renewable projects undermining social cohesion and ultimately delaying the energy transition. NSW Farmers has observed a growing willingness among landholders in certain parts of the state to host renewable energy projects, particularly in areas where larger properties reduce the impact on neighbouring landholders.

[32] *NSW Budget delivers road upgrades to support renewables boom | EnergyCo*. (n.d.). EnergyCo. https://www.energyco.nsw.gov.au/news/nsw-budget-delivers-road-upgrades-support-renewables-boom

Furthermore, transmission infrastructure could have been better aligned with existing easements to minimise land acquisition requirements. These challenges highlight the need to reassess energy infrastructure planning beyond the limitations of the current REZ framework. If REZs were strategically located in areas with lower environmental, agricultural, and regional community impacts it could not only mitigate these issues but potentially accelerate the energy transition.